

## TRANSBOUNDARY WILDLIFE TRADE ISSUES

*Ms. FAHMEEDA HANFEE*

I am not here to make a formal presentation but to express my views and to learn from the experiences you all have on this subject. I work for TRAFFIC-India, the trade monitoring division of WWF. To begin with, I would like to bring to your attention some trade realities from both the global and the Indian scenario.

The global trade in wildlife is estimated to be worth US\$ 20 million annually. According to Interpol statistics, this is second only to the narcotics' trade. The global trade includes at least 40,000 primates, of which the USA is the main consumer. Hunting, poaching, and the wildlife trade are banned in India. Still tigers, other cat species, elephants, rhinos, musk deer, bears, and many other animals are being poached for various uses. Commercial activities with these poached animals are trade, pets, wildlife derivatives, souvenirs, medicine, and timber. On the other hand, we have laws and treaties. These are the Wildlife Protection Act, the Export and Import Control, the Cus-

toms Act, and so on. These laws and treaties are enforced by certain agencies involved with the Directorate of Wildlife Conservation which comes under the Ministry of Environment. These are the State Forest and Wildlife Department, Indian Customs, Indian Police, Paramilitary Forces (Coast Guards, Border Security Forces), and intelligence services such as the CBI (Central Bureau of Investigation) and Revenue Intelligence.

Before I speak about the wildlife trade, I would like to say a few words about TRAFFIC. TRAFFIC - India was established in January 1982 as a division of WWF, India, and part of it works for the largest wildlife trade monitoring programme in traffic network. Its mission is to improve, in accordance with the principles of World Conservation Strategies, the conservation of biological diversity in India, monitoring trade and other forms of mutilation of animals and plants and the derivatives that are contributing to biodiversity composition. Our aim is to identify ar-

eas of use which may be detrimental to any species and to facilitate the control in trade of such species. Our main objectives are investigations; monitoring; reporting wildlife trade activities, especially those which are illegal; to be a source of accurate and objective information; to provide a technical basis for the establishment of policies and programmes of wildlife trade; education; training programmes for agencies and teachers' training; and maintaining a wildlife-related database. These are some of our major involvements.

Not only TRAFFIC, but also conservationists all over the world, consider illegal poaching and trade in wildlife to be a major concern. Unless we are able to protect the biodiversity which exists in our protected areas and national parks, the whole concept of a protected area is not achieved. There must be an emphasis on anti-poaching and an awareness drive among the local people for an effective management pattern for protected areas. Many times, effective implementation of anti-poaching activities and conservation activities becomes difficult when transboundary issues emerge. The forest policies of adjoining countries may differ from one another, and it is the same with law and order. Yesterday we had a very good example of the Blue Sheep (*Pseudois nayaur*). Licences were issued for hunting in Nepal, whereas in India we cannot even think about it. Blue Sheep are a very good indicator species for snow leopard (*Panthera uncia*) existence, as it is a major prey species for the animal. Many times, involvement of foreign nationals makes it difficult for a country to take action against them, and this makes the border areas more sensitive to illegal wildlife trade activities, e.g., the Royal Manas National Park of Bhutan has a village inside. The economy of this village depends largely

on orange orchards. These oranges are transported for sale through the Indian Manas. The newly constructed road is used for transportation purposes. The road goes from the Indian Manas to Panbang village in the Royal Manas-Bhutan. This has already raised concerns among conservation.

I would like to bring to your attention that there was a Rhino (*Rhinoceros unicornis*) horn seizure two weeks ago in Thimphu. The person who was caught revealed, during interrogation, that the rhino horn was obtained from India. This will help all of us to focus on the possibility of poaching and transportation in the Manas area.

Besides wildlife trade, which is my main focus, there are other issues that need to be addressed, e.g., grazing, eco-tourism, siltation, and encroachment. The Director of the KNP (Kanchanjunga National Park-India) mentioned that there was a possibility of shepherds being involved in the wildlife trade. In our musk trade study we found this to be so in the case of the U.P. (Uttar Pradesh) Himalayas.

Overgrazing, construction, and similar activities on one side of the border result in a loss of forests on the other side. This problem is prevalent in Valmiki and Dudhwa Tiger (*Panthera tigris tigris*) Reserves where a whole belt of dying Sal (*Shorea robusta*) trees was observed. Some cases of encroachment along the Dudhwa-Nepal strip have been noticed but, thanks to the Nepalese authorities, some of these have been removed recently. In Valmiki also, it has been reported that about 5,400 acres of forest land have been encroached upon because the boundary is not well defined. This shows how porous our borders are. Another example is, if we take a close look at the government data about wildlife seizures in the recent past, that between

1994-1996 there were approximately 20 seizures of various items, mostly tiger and leopard skins and bones and ivory, in and around Dudhwa (Indo-Nepal border) and one in Silguri.

If the management of National Parks which share a common boundary could be carried out jointly by the countries involved, many issues would be solved. Unless a cooperative approach is adopted by the concerned officials of the respective countries, this trade will continue to flourish. As trade routes involve different countries, information sharing among the countries would have to be facilitated. Now the decision about how we can have a more effective management plan is up to us.

#### Slide Show on Traded Animals

Although there are many species involved in trade, my focus, keeping in mind the transboundary areas, is on the more endangered animals.

**Rhinoceros:** Rhino is poached for its horn. The horn mainly goes to Yemen and Oman where it is used for making carved handles for traditional daggers. For this purpose, the African rhino is used. The Asian rhino, which is the one-horned rhinoceros, is mainly used in traditional medicines in China, Taiwan, South Korea, and Tibet. The Asian rhino horn or 'fire horn' costs five-10 times more than African rhino horn or 'water horn' in Taiwan and China.

**Tiger:** Each and every part of a tiger is used for some purpose or the other by human beings. Skins and heads are used as trophies, claws as talismans, bones and skulls for medicine, fat for balms and potions, and so on. I would like to mention that, in 1993 alone, 475kg of bones and 13 tiger skins were seized, and it was estimated that 47 tigers must have been killed to account for these alone.



Plate 18: Musk Deer

Photo: J. Van Gruisen

**Musk and Bear Bile:** Musk deer (*Moschus chrysogaster*), Himalayan Black Bear (*Selenarctos thibetanus*), and Brown Bear (*Ursus arctos isabellinus*) are highly endangered animals within India, and their distribution is limited to the Himalayas. The musk deer is poached throughout its belt and is one of the most sought after animals because of its valuable musk pods which are used as a perfume base and in medicines.

**Fur Items:** This also forms a major ingredient of this trade. The wild cat fur trade in India deals with at least 20 species. To name a few: snow leopard (*Panthera uncia*), lynx cat (*Felix lynx isabellina*), fox (*Vulpes spp*), and otter (*Lutra spp*). TRAFFIC-India did three surveys in Kathmandu to quantify the fur trade in Kathmandu as it was a major trade centre for fur items, and these were displayed openly in shops. Thanks to the Nepalese authorities, now there are no more displays in the Kathmandu market of these items.

**Reptile Skins:** It is estimated that India used to export US \$60 million worth of reptile skins annually when the trade was legal. Today, there is no overt trade, but illegal trade continues; it has gone underground. Reptile

skins are used for manufacturing wallets, belts, shoes, and other accessories of skins from snakes, monitor lizards, and also crocodiles. Even turtles are poached heavily for their flesh and for curios.

In addition to animals, plants are also traded from India, especially medicinal plants. India and Brazil are the largest exporters of medicinal plants. India has approximately 2,500 species of medicinal plants, and out of these 2,000 are used in traditional medicines, while at least 150 species are used commercially on a fairly large scale. The notion that a plant collected from the wild is more efficacious than a cultivated one poses problems for plant conservation. An export ban exists on all plants obtained from the wild, except the ones with no objection certificates, and these too can be issued only from Mumbai, Delhi, Calcutta, Chennai, and Cochin. Apart from this, 46 species of plants are totally banned for export.

Besides medicinal plants, orchids are also traded for ornamental value. The orchid trade centres in India are Kalimpong, Shillong, and Trivandrum. Often wild orchids are smuggled out of the country with cut flowers by misdeclaring them as lilies or other exotic flowers.

### Discussion

Dr. Kattel gave the participants some information about the Transboundary Joint Meeting between Nepal and India especially dealing with these issues in January 1997. There was a bird city in Patna which was visited by some journalists from Kathmandu, and they brought some of the trade in birds to light.

**Ms. Fahmeeda Hanfee**, TRAFFIC-India, informed the participants that there was a study of live birds being carried out, covering this area, and forest of-

officials had been informed about the trade. One place in Patna was not only famous for live birds but also for live animals. The report would be out in a month or two, and the recommendations would be implemented. Forest officials would then be pursued to get them to take action.

Mr. Brian Penniston of the Mountain Institute wanted to know who were buying the orchids and where the ultimate market was. Was it a domestic or an international market and were they buying these as cut flowers or plants?

Ms. Hanfee replied that the orchid trade had both markets, domestic and international. They were basically traded for ornamental value. They were traded both as flowers and plants, but there was a lot of fraudulence in this trade.

Mr. Javed Hussain, WWF-Thailand, asked the Chinese delegates whether the demand for animal products was increasing or decreasing in China since many of the animal (tiger) products were consumed in China. Was there any government policy to ban these products? What was the current position of China?

The Representative from China, Mr. Ban Zong, replied that this was a part of culture in China and it could not be stopped immediately. Due to the endangered wildlife species, the government, including the Tibetan Government, had made regulations to restrict some use of wildlife. Some were absolutely prohibited such as the rhino horn. Officially it was not permitted, but illegally it was another matter. Musk deer products and bear bile were permitted legally. There was a deer breeding farm in Tibet designed to breed domestic deer to supply to the market. There were bear breeding farms in northeastern China and southwestern China.

Prof. Pei further added that there should be a good balance between conservation of nature and conservation of culture, and this takes time. In China, about 5,000 medicinal plants were being used, out of which 1,000 were regular and 500 were used on a large commercial scale. Five years previously, the annual export of medicinal plant products was worth US\$ 1.6 billion. Regarding animal products, 400 different animal species were used in medicine, out of which 50 were for regular use. According to scientific research and statistics, there were no species used in Chinese medicine that were already extinct. The best conservation strategy for plants and animals was to use them. When the demand was there, people automatically would find a way to develop or multiply them. This was just general information. Illegal trading and black marketing should not be considered a good thing. Substitute materials had been produced in China for many years, but this had not been successful. The only one which had been successful was buffalo horn as a substitute for rhino horn.

It was also added that an effective and practical management system must be developed so that poor people did not get poorer and the rich did not get richer.

### Remarks from Sikkim

*MR. P.K. BASNET*

It is my privilege to present my remarks on the ecology efforts to this Regional Workshop on the Conservation of the Kanchanjunga Mountain Ecosystem. Kanchanjunga Mountain Ecosystem is a unique system. This system has an area covering three different political boundaries, namely, those of India, Nepal, and Tibet

(China). On the Indian side, Kanchanjunga falls in the State of Sikkim and is designated as the Kanchanjunga National Park. The special feature of this park is that it has a large number of flora and fauna which makes it extremely rich in biodiversity. My friends from Sikkim have already described the Kanchanjunga National Park in greater detail with regards to area, irrigation, vegetation, habitat, flora, and fauna and also on socio-economic activities of the people living in and around KNP. The State Government of Sikkim and the Central Government are working on raising KNP's status to a Biosphere Reserve. In Sikkim, the best efforts are being made to conserve this unique mountain ecosystem. The system, although separated by political boundaries, is one whole system, and conservation and management issues should be dealt with through common complementary action. The trans-boundary issues of high altitude grazing, wildlife movement, tourists, conservation of plants, and so on have to be looked into professionally. Measures for implementation should be adopted after common study in a site-specific manner. In order to do this, there should be site visits and study tours by experts involved in research management in Kanchanjunga in each country. This should be followed by a workshop in which specific transboundary issues common to this country are identified. Following this, a comprehensive research and management programme should be developed. I am extremely pleased that we have come to one table to discuss transboundary issues of the Kanchanjunga Mountain Ecosystem. The efforts made by ICIMOD are highly praiseworthy. We had a good beginning and I strongly believe that we will be able to conserve this unique mountain ecosystem for years to come. Let us dedicate ourselves to conservation in this area. Thankyou very much.

## Discussion

Replying to the question about how many people/population there would be inside the proposed biosphere reserve area, Mr. Sharma replied that, currently, the Kanchanjunga National Park had 1,760sq.km. and 10 families living inside the area. There was very sparse settlement along the fringe area. Now another wildlife sanctuary had also been included which had no population. With this addition, they were making a compact single biosphere reserve. For the settlement on the fringe areas, they were making a buffer zone. The actual physical identification was being carried out currently by the Department of Forests.

Mr. Brian Penniston of the Mountain Institute wanted to know about the advantages of declaring a biosphere reserve. The strategic thinking behind this was not very clear, e.g., there were no specific funding sources to provide money only for the biosphere reserve. If the advantages were to increase local participation in the system of the Government of India, were there any other ways to do so without declaring it a biosphere reserve?

Mr. Sharma replied that in National Parks there was no designated buffer zone, but in the biosphere reserve there was a core zone and a buffer zone. The core zone was an area totally protected from any outer interference. On the fringe areas of National Parks, people had been in some ways, traditionally, drawing resources from the core zone. So the idea of various activities which were implemented in the buffer zone was to keep them away from the core zone. He also added that funds were provided to the buffer zone for protection and regeneration of the degraded area as well as for the total protection of the core zone.

**Mr. Narayan Poudel**, Chief Ecologist from the Department of National Parks

and Wildlife Conservation (DNPWC), requested the Indian participants to share their experiences of Joint Forest Management, and how much of it was applicable to buffer zone management, with the participants. He also asked if community development activities and income-generating activities really motivated the local people to contribute towards conservation and whether the protected area system really increased the biodiversity of the area?

Mr. Sharma replied that Joint Forest Management had been introduced by the government in some areas, and it had been very successful in the plains of West Bengal but had not been successful in the hilly regions. Regarding conservation, if provided with economic incentives and close cooperation with the community and, with the proposal coming from the community, itself, then it could really work well. He also added that, since people from different areas had different demands and needs, and their requirements were dependent on the resources, conservation could not be generalised and needed to be site-specific.

Mr. Mingma Sherpa of the WWF-Nepal Programme, commented that the enlightening thing about the biosphere reserve was the total aspect of the inclusion of people, core areas, buffer zones, and of living action research. The idea of how to actually involve people was very interesting and this might be an interesting concept for the future which both the China and Nepal side could also propose. There was no specific legal action in setting up a biosphere reserve. It also drew the attention of the international community. Transboundary parks between the United States and Canada had also been set up as biosphere reserves; this could also be done here on the level of regional cooperation. There could be cooperation on research, tourism, training, management, technology

transfer, and sharing of information on data. So, it was worth pursuing.

### Remarks from India

*DR. R.K. RAI*

I would like to mention that the Government of India is in the process of designating this area a biosphere reserve. Old institutions such as the Zoological Survey of India and the Botanical Survey of India, which have been working for 70-80 years, and the G.B. Pant Institute of Himalayan Environment and Development, which has been working for seven to eight years, are giving support to the process. The area harbours unique biodiversity. These institutions are already assessing the biodiversity status and conservation needs of the area. Once we designate the area a biosphere reserve, it will have a better conservation status. Presently, the proposal put by the Sikkimese Government mentions that there is one existing National Park and Maenam Wildlife Sanctuary. These areas will be a part of the core zone. The total area of the biosphere reserve is going to be 2,665sq. km.

Once we designate the area as a biosphere reserve, the Government of India expects a management action plan from the State Government for implementation, and 100 per cent funding will be given by the Government for carrying out approved activities. I am told by the representative of the Sikkimese Government that they will be submitting the reports very soon. Once the management action plans are finalised and approved by the Government of India, funds will be provided for research, training, education, protection, and many eco-development activities in the region. The basic philosophy of the biosphere reserve programme from our side is that all the

human activities in the core zone are to be more or less banned. These areas are supposed to be preserved in their totally natural form. Activities encouraged in the buffer zone are intended to keep people away from the sources in the core area, because people who are living there ultimately depend upon local resources. Once people have alternative sources of livelihood, then the dependancy on forest products will decrease. Basically floriculture, horticulture, and beekeeping can be encouraged. Our major focus is on people's participation. In which way can we convince the people to participate in conservation activities? For this purpose, whatever activities are initiated, some economic benefits must accrue to the people, only then will the locals be attracted towards the programme. Unless local people become involved, all the efforts of the government will fail. Nothing will materialise at the field level. For this purpose, the people need to be educated, and they should be provided with alternative sources of livelihood. These are the two focussed programmes which are implemented in all the biosphere reserves. Till now, we have been largely involving the Forest Department since the areas are basically managed by the Forest Department. In the buffer zone, there are some areas which are outside the control of the Forest Department, therefore, we are also considering the involvement of other departments like agriculture, fisheries, and so on. There is a lot of scope for exploiting resources for the benefit of the people without having any damaging effects.

There are major problems in the hills such as infrastructure, communications, roads, and so on. These problems are such that, if you develop infrastructure, they have their own repercussions and if you do not develop infrastructure, again there are reper-

cussions. Our national policies on any major development activities of major natural resources, hydroelectric, and other projects used to be decided only by a group of officials from the Central Government, State Government, and some experts. Now the Government has decided to have a public hearing in which the officials will go to the field and discuss these matters with the local people. A lot of information about various problems and solutions comes from the local people. Such areas have great potential for horticulture and floriculture. These projects are such that they do not have any impact on overall conservation efforts.

In the central Himalayas, there is a problem of absentee farmers. Whenever there is free labour available, only then do people practice agriculture. Wherever money has to be spent, it is not considered to be a beneficial activity. We will be designating this area as a biosphere reserve very soon. As our friends from Sikkim already mentioned, it will cover a large area of Sikkim — almost more than 25 per cent. In fact, in buffer zones, the restrictions are not too many. Traditional activities will continue with little modification. There are some activities which are detrimental to conservation efforts. People will be educated to change their way of doing things. Once we come out with the final recommendations, we have to be very practical. We should come up with recommendations which can be accepted by both the government as well as the people.

Thankyou.

#### **Remarks from Nepal**

*DR. BIJAYA KATTEL*

A biosphere reserve has three major components, namely, protected areas,

people's participation, and regular monitoring. So, once this Kanchanjunga area is established as a whole in three different countries, probably then we can call it one biosphere reserve. That is collective work. Today, we have already heard of a biosphere reserve and national park, and now we come to a conservation area. Why it has been proposed as a conservation area is that the experience of Nepal has so far been an experience in which people's participation is maximised. I will describe briefly the status of this area on the Nepal side. This area has already been proposed as a conservation area and any day it can be declared as such. Different research has taken place and a database has already been created courtesy of the WWF Nepal Programme on flora, fauna, and socioeconomic conditions (inclusive of traditional rites and rituals of the local people, especially for grazing and pasture).

Participation through the private sector is very critical. Can we rely only on private sectors for conservation? It is a big question and I do not have the answer. This forum could come up with some sort of answer, if not all answers. When we talk about conservation, law enforcement comes as one of the major components because many illegal activities have to be stopped. Whom do we trust? Do we give law enforcement responsibility directly to institutions? Therefore, a participatory approach must be there, and we have had several experiences in Nepal in which local committees can contribute to conservation. But, law enforcement should be with the government agencies which can be minimised into a small unit. We can proceed on two different levels for management: the macro-level and micro-level. On the macro-level, the principal question is the establishment of the area as a conservation area or protected area. The

other thing we need is collaboration and cooperation with major NGOs. So far, the WWF-Nepal Programme has been deeply involved along with other government agencies and ICIMOD has created the database. A big database has been collected which would be very useful for cooperating countries. On a micro-level, we can go through different local-level institutions such as the 'Kanchanjunga Development Committee', and many others. We also heard that, in Sikkim, India, there are many committees. What legal base do we have? Because, unless and until we create a protected area with a legal base, we will be desperate and confused. There are too many laws in Nepal, e.g., National Park and Wildlife Conservation Act and Forest Act. Along with these laws there are three regulations which I would like to mention here which are directly related to the proposed protected area. Conservation Area Regulations 2053 (1996), which are very recent, Forest regulations 2051 (1994), which are two years old, and Buffer Zone Regulations 2052 (1995). These three sets of regulations have provisions for an area to have been created and a mechanism developed for its management. Ecoregional conservation is the focus of this morning's session, so I have called it Eco-conservation on a Regional Basis. Nobody clarified what eco meant when somebody put that word there, because unless and until we combine 'economy' with 'ecology', I don't think sustainability will be there.

We can have uniformity of management on two levels. On a regional level, we can gather and exchange ideas and come up with some policy guidelines. The implementation of those policies is carried out at the local level in the field. In Nepal, there are many traditional rites. Although, the public lands are government lands which were nationalised in the mid-50s, a lot of peo-

ple in the Kanchanjunga area are still managing and prescribing who can take the cattle into which area and which sheds they can use. The lands are locally managed, despite the fact that the government has its own regulations and policies. Therefore, incorporating the cooperation of those people in conservation is essential.

A trans-frontier action committee could be formed from this meeting. I appreciate the steps taken by ICIMOD to organise this meeting and WWF for supporting it. The government alone cannot do things like this, so initiatives should be taken by other institutions. This action committee should facilitate conservation action. Eco-tourism should be taken as an enterprise. We are all talking about eco-tourism, and I don't know what it really means. I know what is there, has been documented. But those people who are really running the show are right. I may make some money from tourism. Is that all we are talking about? Control of illegal activities is very important because I personally was involved in many raids. Kanchanjunga may not be directly affected by this but, if we have a Joint Action Committee, it would provide us with an opportunity to exchange information on all the management and the implications of illegal activities in different areas. Income-generating activities should be promoted. Training and capacity building are very important. We should be able to go to the local level and train them in conservation, and that needs research. If we do not have any information, we cannot talk. If the G.B. Pant Institute establishes some sort of database on GIS applications, they can share it with ICIMOD, for example, which has enough information stored. This kind of exchange is very important. I want to share our experiences on core protected area and buffer zone management. In the Annapurna Con-

ervation Area, which was established with a different concept from that of simply a protected area, we are still undergoing experiments and we have yet to see whether those concepts which we had adopted are evolving and changing every decade, for example. In the last two decades, we have carried out changes in three different phases, so we have to see where we will be in the next decade or two. Thankyou.

### Discussion

Mr. Brian Penniston, Representative of the Mountain Institute, remarked that the Annapurna area was delegated to the King Mahendra Trust. He further questioned what would be the new situation for the Kanchanjunga area, which department would have the mandate to control all the activities there, and what would be the relationship of the department with local bodies such as the VDCs (Village Development Committees)?

Mr. Kattel replied that the Annapurna Conservation Area was delegated to King Mahendra Trust and, with experience, it had been conceptually adapted. The government could not give it completely into the hands of the

local people because of law enforcement which was a very important component. Law enforcement should always be the prerogative of the government, he stated, but local people should be mobilised to provide, through local institutions, the core unit of the law enforcement group with minimum staffing. This had been the concept.

Mr. Javed Hussain of the WWF-Regional Office, Thailand, remarked that they had been talking about biodiversity, cultural diversity, and social diversity, and, if that was the structure, there could not be one single model. There would be diversity of actions and models so there was not going to be a single prescription which could apply everywhere. In the workshop group there should be some commonality. They should focus on local diversity and localised approaches.

Mr. Kattel answered that this was very important because they needed to be site-specific. Things which were successful in the lowlands of the *Terai* might not be effective in the highlands. Unless and until one small unit was institutionalised, growth would not take place.

## Outcome of Group I

The participants in Group I discussed 'A Common Framework for Biodiversity Assessment and Monitoring'. The six participants discussed different aspects of the issues. The outcome of this discussion is provided below.

Participants	Mr. Gut Lepcha	Dr. R.K. Avasthe	Mr. Pradip Regmi
	Mr. Devendra Amatya	Dr. K.K. Shrestha	Mr. Javed Hussain

### Presentation

#### PHASE I Planning

1. **Goal** : To develop a common framework for biodiversity assessment and monitoring.
2. **Objective** : Conservation of the Kanchanjunga Mountain Ecosystem.
3. **Activities**

#### (A) Assessment

1. Development of a Methodological Framework Output - Manual
  - i) Standardisation of Nomenclature (Flora and Fauna)
    - a. Scientific Names
    - b. Common English Names
    - c. Local Names
2. Categorisation of Land-use Types
  - a. Scale of Assessment and Monitoring (Flora and Fauna)
  - b. Indicators (Flora and Fauna)
3. Categorisation of Resource Use Types

#### (B) Monitoring

1. Monitoring Based on Assessment
2. Mechanism: Technical Exchange Programme
  - a) Identification of Resource Persons (from each country) and by required disciplines (June-Aug. 1997)
  - b) Technical Workshop (Oct.-Nov. 1997) for development of a methodological framework, as mentioned above under Assessment.
  - c) Resource Person Exchange (Field Assessment) - (March-May 1998)
  - d) Report Preparation - Distribution - Evaluation (July-Aug. 1998)
  - e) Assessment and Planning Workshop (Sept. - Oct. 1998)

#### 3. Budget:

- |   |              |
|---|--------------|
| 1. Development of a Methodology (Manual) Consultant and Consultancy                               | US\$6,000/-  |
| 2. Categorisation of Land-use Types / Categorisation of Resource Types Consultant and Consultancy | US\$6,000/-  |
| 3. Activities :   |              |
| a) Technical Workshop   | US\$15,000/- |
| b) Pilot Study  | US\$40,000/- |
| i) In-country   |              |
| ii) Trans-regional  |              |
| c) Workshop   | US\$20,000/- |
| i) Planning Phase Evaluation  |              |
| ii) Project Development and Planning  |              |

**Phase II**

Implementation Phase	
Operational and Management Cost	- US \$ 13,000/-
TOTAL COST	- US\$ 100,000/-

**Outcome of Group II**

The participants in Group II discussed "A Common Framework for Sharing Conservation Benefits with the Local People". The outcome of their discussions is provided in Table 1.

**Participants**

Ms. Fahmeeda Hanfee	Mr. A.L. Joshi	Mr. Pradeep Mool
Dr. Eklavya Sharma	Mr. Brian Penniston	Mr. Ajay Rastogi
Mr. D.D. Sharma		

**GOAL:** There should be a strong link between conservation and community benefits, so that local people would develop a purposeful stake in conservation and sustainable use of natural resources.

**APPROACH:** The perception of 'benefit' largely depends on the socioeconomic and cultural aspirations of the people. At the same time, all community benefit activities may not have positive linkages with conservation objectives and vice versa. Therefore, research needs to be undertaken to identify, plan, and implement the activities that fulfill the dual objective of conservation and development.

There are different types of development schemes currently being undertaken in the three countries. Sharing information on all aspects of these ongoing and future development programmes could prove very useful in initiating a comprehensive strategy that enables sustainable development of the Kanchanjunga Mountain System.

Preliminary discussions in the group led to the following Table (see Table 1) that outlines the activities and establishes community and conservation links.

**Table 1: Group II Common Framework for Sharing Conservation Benefits with Local People**

Benefits	Community	Conservation Link
Tourism Domestic and Foreign	<ul style="list-style-type: none"> <li>- lodge operators and campsite management</li> <li>• services - roads, guides, porters</li> <li>• indigenous products - consumables, handicrafts, etc</li> <li>• transport - yak, dzos(s), jeeps, etc</li> </ul>	<ul style="list-style-type: none"> <li>- sustainable use → during tour souvenirs, etc</li> <li>- minimum environmental impacts</li> <li>- alternative energy (kerosene, blankets, etc)</li> </ul>
Genetic Resources Animal and Plants Wild Domestic	<p>Forests - fuel, fodder, construction, pasture/grass</p> <p>NTPP collection, med. plants, edibles</p> <ul style="list-style-type: none"> <li>- construction materials - bio prospecting - ornamental flowers, land races, plant stocks, domestic crops.</li> <li>• animal parts, genetic stocks, hunting pets, fishing</li> <li>• meat, dairy, skinning + wool, transport, manure, ploughing, construction materials</li> </ul>	<p>community managed forests</p> <ul style="list-style-type: none"> <li>- sustainable use (wild species)</li> </ul> <p>vegetable seed production</p> <ul style="list-style-type: none"> <li>- maintenance of genetic stock (plants and animals)</li> <li>- manure (soil conservation values)</li> </ul>
High-value Natural Resources	extract mines, quarry - construction materials minerals, precious stones	- value-added (i.e., rings, etc.)
Water Power hazard control	<ul style="list-style-type: none"> <li>- micro-hydel, employment subsidy and benefits, ghatsa(s) (milling)</li> <li>- irrigation, drinking, soil fertility, land stabilisation, cash crops, flood control, lake management</li> </ul>	- landscape/watershed protection/ downstream benefits
Culture Antiquities (rugs) trade, etc.	<p>religious centre + pride, tourism revenues, employment, festivals</p> <ul style="list-style-type: none"> <li>- ecological knowledge (avalanche safety, flood, etc.)</li> </ul>	<p>Cultural/religious prohibitions monasteries, etc</p> <p>reverence for nature and culture historical importance, appropriate technologies (bamboo), medicinal practices</p> <ul style="list-style-type: none"> <li>- (no hunting, fishing, etc.)</li> </ul>
Aesthetic Flora and fauna - viewing, photography Landscape - mountain climbing, viewing Lakes and waterfalls, Trekking	<p>knowledge (guides, plants, etc)</p> <ul style="list-style-type: none"> <li>- services</li> <li>- attraction</li> <li>- fees (climbing, viewing, eating)</li> </ul>	<p>direct payment for knowledge/services</p> <ul style="list-style-type: none"> <li>- fee sharing with community e.g. buffer zone</li> </ul>
Global/Regional carbon sequestration global climate global genetic resources networking	<ul style="list-style-type: none"> <li>- indirect research/employment</li> <li>- info. sharing, networking, training</li> <li>- indirect information exchange</li> <li>- indigenous knowledge system</li> </ul> <p>→ employment (banks, etc.)</p>	- global links + long-term interests

### Outcome of Group III

The members of Group III discussed 'A Collaborative Arrangement for Cooperative Management of the Kanchanjunga Mountain Ecosystem'. All the participants discussed the topic at length and came to the conclusions given below.

<b>Participants</b>	Mr. P.K. Basnet	Co-chairperson:	Dr. R.K. Rai India,
	Mrs. B. Zong	Dr. B. Kattel	Mr. M. Sherpa
	Prof. P. Shengji	Mr. D. Rana	Mr. D. van Blitterswijk

### Presentation

#### *Goal*

All the three respective governments should endeavour to designate their respective areas of Kanchanjunga Mountain Ecosystem protected areas by the year 2000.

### Regional Collaborative Arrangements

#### *Approach*

1. Conservation activities to be implemented by individual countries by maximising people's participation for poverty alleviation: micro-enterprises, income-generating activities, and a cooperative movement.
2. Establishment of a Coordination Forum for Conservation involving three regional countries with ICIMOD as the facilitator.
3. Tri-national expert coordination meetings should be held on a rotational basis to focus on the transboundary issues.
4. The responsible authorities should be mobilised through meetings to plan for local-level policies.
5. Collaboration can be carried out at three levels.
  - a) National Level
    - Pushing policy action collaboration
    - Making necessary regulations
    - Organising joint planning for management
  - b) Local Level
    - Establishment of management collaboration between offices and local bodies
    - Joint planning and implementation
  - (c) Regional Level
    - Transboundary collaboration to establish a mechanism

#### **Activities/Issues**

- a) Protection of migratory species
- b) Illegal trade
- c) Fire control
- d) Exchange of information
- e) Capacity building and training

Assist in the implementation of international conventions