

## **CHAPTER - VI**

### **ECO-TOURISM PROSPECTS AND PRACTICES**

#### **INTRODUCTION**

Tourism activity effects the surrounding environment mainly in four ways. Namely effects on architectural façade, land use change, burden on infrastructure and socio cultural alteration. The problem of land use change is more acute in mountain topography where land is less productive for agricultural purposes and thus farmers are willing to sell their land in getting an attractive price for it by the developers. Trekking routes in mountain landscape seems to be highly sensible as such activity affects the land use patterns in many days. The activities for instance are conversion of forestland into agriculture land, encroachments on public open spaces and tendency to leave land fallow for camping. Thus the above-cited factors have been affecting the built environment in various ways. (Batta, 2000) In general, agriculture productivity in Sikkim decreases with increase in the number of small and marginal farmers. In this scenario, money flow inside the destination is equalized by money flow outside. For example, Sikkim imports food grains, vegetable, eatable items, cloths from other states, as a result, earned money also returns with the tourists.

Damage to archaeological and historic sites due to overuses or misuse by tourists are commonly seen in the tourist destination and disturbances to living organisms in the mountain due to trekking, firewood collection are posing threat to existing tourist potential areas. There are instances of hunting wild animals in Tendong and Mainam reserved areas. The illegal felling of trees are still persistent in the higher altitude remote areas.

Therefore, eco-tourism is the only powerful answer to conserve and sustain tourism for future.

## 6.1 DEFINITION, MEANING, CONCEPT

Eco-tourism is a type of tourism where the environment, local community and visitor all derive benefit. The travel agents often use the term "eco-tourism" while marketing tourism product. Eco-tourism in other word incorporates both a strong commitment to nature and a sense of social responsibility. That responsibility extends to the sensitivity of the travellers. The term "responsible travel" another aphorism for eco-tourism, encapsulates its aims. The eco-tourism society gives a slightly fuller definition. "Eco-tourism is responsible travels to natural areas which conserves the environment and improves the welfare of locale people". (Lindberg and Hawkins, 1999). According to Ceballos Lascurain eco-tourism is "traveling to relatively undisturbed areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestations found in these areas"

According to WTO eco-tourism is "tourism that involves traveling to relatively undisturbed natural areas with the specified abject of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects found in the areas"

Black (1996) defined eco-tourism as an experience with a focus on the natural and cultural environment, ecologically sustainable activity, an activity with a predominant educative and interpretative programme and a activity that contributes to local community groups and projects and to the conservation of the surrounding (Batta-2000) environment.

The global significance of eco-tourism was recognized by declaring year 2002 as the International Years of Eco-tourism by UN General Assembly. In simple, eco-tourism has recently come to be regarded on the panacea that enables us to aggressively seek tourism dollars with no obvious damage to (Yadav, 2002) eco-systems.

*Eco-tourism in the Himalayas-Prospects and Problems Mountains are the beginning and the end of the natural scenery –John Ruskin*

The Sikkim Himalayas have attracted travelers, scholars, adventurers, mountaineers, visitors, and researchers, since the dawn of human

civilizations. Holy shrines, sacred temple abode of gods, symbol of peace, tranquility, austerity and cradle of civilization and enchanting meditating caves have always been the treasure house for god and goddesses. Our sages and saints have been moving to mountains, meadows and streams and experiencing elevation of mind that close contact and communion with nature produced. They understood that man and nature were not two separate entities but an enmeshed part of the same organic entity and the same divine spirit (Jagmohan, 2002). With the evolution of pilgrim tourism, mountains became the destination for peace seeker healer and meditator. Later with the growth of adventure tourism, mountain became the playground for trekkers, and mountaineers. However, mountain preserved its sanctity, even George Bond, first person to scale Mt. Kanchenzonga held six feet below the summit as a mark of respect to honour the sanctity and sacredness of Mt. Kanchendzonga (Sikkim Express, Now, 19<sup>th</sup> Sept. 2005)

The Sikkim Himalayas supply water for electricity and domestic consumption, minerals for industries, and renewable green wealth for better health and prosperity.

The mountain world today is in perilous ecological state. The biophysical and socio-economic resource base is undergoing disastrous impoverishment due to human action. Being an environment friendly activity, eco-tourism aims at promoting environmental values and ethics in preserving nature in an uninterrupted form. It thus benefits wildlife and nature by contributing towards ecological integrity. Participation of local communities ensure economic benefits for them, which in the longer than can ensure a better status (Yadav, 2002) and an easier life

The state of Sikkim is girdled by Himalayas from almost all the directions. Mountain peak, passes, ridges, caves and its natural wealth such as rivers, snows, wildlife and vegetation forms major center of eco-tourism.

## **6.2 POTENTIALS OF ECO- TOURISM IN SIKKIM HIMALAYAS**

The Himalayan state of Sikkim is the capital of Eco-Tourism in India. The study area provides an arena for eco-tourism activities ranging from awe-

inspiring grandeur of Mount Kanchendzonga and house of orchid and rhododendron with unspoilt harmony of nature, culture, agriculture, horticulture, sericulture and adventure. Mountaineering as an adventure sport, can be well established in Sikkim. The third highest peak and other sacred peaks, hills, caves are conserved and preserved for sustainability.

After Tenzing Sherpa ascent the Everest followed by setting up of Darjeeling mountaineering association, mountaineers from the world pointed Sikkim for mountain adventure. The mountains being the abode of gods and sacred, no permission was granted to the European mountaineers to scale Mt. Kanchendzonga. It was only in 1955 and 1977 that successive scaling of the Mt. Kanchendzonga was done. Since then, other mountain peaks namely, Mt. Kobru, Mt. Talung, Mt. Pandim, Mt. Lamaongden, Mt. Masunyange got exposed for tourism activity. However, sacred peak namely Mt. Kanchendzonga (8780m) Mt. Nursing (5825m) Pandim Peak (6601m). Mt. Simvo-(6809m), Goecha peak (6126m), Fosh Peak(6212m). Mt. Siniolchu(6891m) and Pauhungsi (7065m) have been kept at bay from pollution and environmental degradation. As a result, all the sacred peaks are now potentials for future mountain expedition in Sikkim.

An attempt made to scale Kanchendzonga in 1899 by Freshfield, remain futile. After successive attempt in 1929, 1930, 1931 finally 1955 and 1977 witnessed humans to standing just below six feet from the crest of Mt. Kanchendzonga. Other expedition included Mt. Kabru in 1935 by Cooke Pyramid peak in 1949 by R.Dittert, Mt. Paunhri in 1911 by Kailas, Mt. Pandim by Sonam Gyatso. However prospects of eco-tourism in the Sikkim Himalayas remain intact and sustainable tourism activity makes Sikkim an eco-tourism destination. Three peaks have been declared opened for the mountaineer with the announcement of Hon'ble Chief Minister of Sikkim (Now, dated 29-9-2005) on 19<sup>th</sup> Sept. 2005. It includes Ferries Peak in West Sikkim (5868m), Lama Wangchen Peak, North Sikkim (5868m), Brum Khansha Peak, North Sikkim (5635m). All the mountains and peaks in Sikkim Himalayas can be developed as eco-tourism hotspots of the Eastern Himalayas.

### 6.2.1 Major trekking spots in Sikkim

Trekking along the high mountain passes are adventurous, trail routes encompasses wide cross section of flora, fauna and heterogeneous cultural set up. The experience in the high altitude are thrilling and exciting. There are five (Table 6.1) major trek routes located at various places.

TABLE 6.1: TREK ROUTES IN SIKKIM

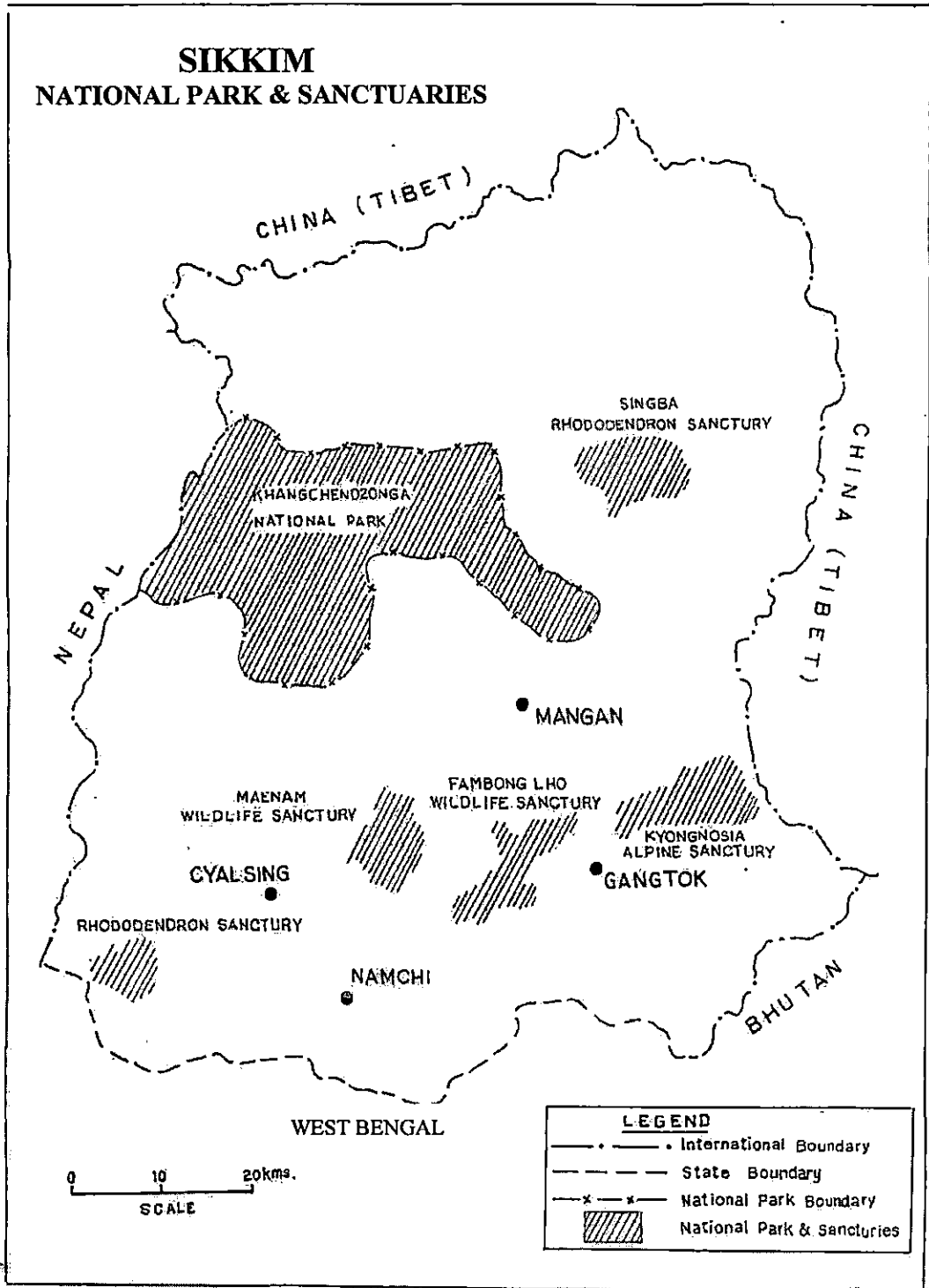
Sl. No.	Name of Trek Routes	Location	Suitable Month for Trek
1	Monastic Trek	Pemayangtse, Sangacholing, Khechopalri, Dubdi, Sinon, Tashiding, Ralong	March – May / Oct - Dec.
2	Rhododendron Trek	Naya Bazar, Hiley/Soreng Varsey, Dentam, Pemayangtse	March – May
3	Kanchendzonga Trek	Yuksom, Bakhim, Tsokha Dzongri, Thangshing/Bikbari, Zemathang/Chaurigang, Goechala, Rathong Glacier	Mid March – Mid June/Oct – Dec.
4	Coronation Trek	Rumtek, Sang, Rabongla, Tashiding, Yuksam	Oct – Dec.
5	Kasturi Orar Trek	Yuksom, Dzongri, Thangsing Kasturi Orar, Labdong, Sinon Tashiding	Mid March – Mid June/Oct – Dec.

*Source: Tourism Department, Govt. of Sikkim*

Besides, other trekking routs are:

- Yoksum-Zongri route
- Base Camp-Boktak-Laxmipokhari-Garakhet Trek
- Phalut-Singelila-Chiwabhanjang route.
- Hiley-Varsey-Chiwabhanjang route.
- Yoksum-Zongri route
- Base Camp-Boktak-Laxmipokhari-Garakhet Trek
- Phalut-Singelila-Chiwabhanjang route.
- Hiley-Varsey-Chiwabhanjang route.
- Damthang-Tendong Trek
- Rabongla to Maenam Bhaledunga trek.
- Tumlong Monastery trek.

Fig. 6.1 National park and wild life sanctuaries



Lachen-Green Lake Trek.

Thangu-Muguthang-Chorten-Nyimala-Green Lake Trek.

Zadong-Donkiala pass-Cholamu Trek.

Phimphu

Taramchu Hotspring.

Lhashar Valley.

TABLE 6.2: SANCTUARIES AND NATIONAL PARK

Sl. No.	Name	Location/District	Area
1	Kanchenzanga National Park	North Sikkim 110 km from Gangtok	850 km <sup>2</sup> .
2	Fabong Lho Wildlife Sanctuary	East Sikkim 20 km. from Gangtok	5176 hec.
3	Shingba Rhododendron Sanctuary	North Sikkim 148 km. from Gangtok	32.50 hec.
4	Kyongnosla Alpine Sanctuary	East Sikkim 26 km. from Gangtok	401 hec.
5	Mainam Wildlife Sanctuary	South Sikkim 72 km. from Gangtok	3534 hec.
6	Barsey Rhododendron Sanctuary	-	-

*Source-Statistical Profile 2004*

### 6.2.2 National parks and wild life Sanctuaries

Nature has always been the source of sound health and mental peace. In the high mountain range of Sikkim there lies number of National Parks and Wildlife Sanctuaries. (Table 6.2) These places are reserved mainly for the conservation of existing plant and animal kingdom in the region. (Fig 6.1) Varieties of species have been preserved and such places are known as the house of endangered species of flora and fauna reserves. Besides, other eco-tourism potential are underlined below.

#### a. *In Situ ex Situ Reserve*

With a view to develop eco-tourism, in situ and ex situ conservation practices have been planned in the ecologically fragile state of Sikkim.

**b. *Cave Eco-destination***

Caves are believed to have been the ancient houses of god and goddess in Sikkim. Each cave is associated with its own history and mythology of ancient Sikkim. The Laring Vigphu in North, Dechhenphu cave in West, Kahdosangphu in West and Pephu cave in South Sikkim are well preserved eco-tourism gift of Sikkim.

**c. *Hot Spring***

Health and medical tourism can be best developed in the hot spring areas located mainly in Yumthang, Ralong, Borong and Phurchachu region.

**d. *Lake Eco-destination***

The lakes in Sikkim have been listed under high, medium and low altitudinal lakes. Except for Changu and Rhenock artificial lake, all other beautiful natural lakes are the potentials of eco-tourism destination in Sikkim.

**e. *Pilgrim-Eco-destination***

Monastic tour to Pemayangtse, Rabdentse Ruins, Norbugang, Songachelling, Phodong, Tumlong may be turned into eco-tourist paradise with its rich cultural diversity, these religious and historic forts are the potentials for eco-destination.

**f. *Mountain biking- an alternative eco-destination***

The mountain biking is a popular adventure sports in Sikkim. An alternative and unusual experience in the mountain of Sikkim with modern thrilling mountain motorbike is no less than a motor scooter and SCUBA diving in the beaches.

**g. *White Water Rafting***

The rapids of mighty river namely the Tista and Rangit await for rafting along the rivers in Sikkim. The possible spot, is being opened along the river course at Chungthang, Legship, Mangley and Melli

**h. *Bird, Butterfly and Boundary Eco-destination***

Sikkim houses large variety of birds and butterfly species ranging from tropical to alpine climatic belts. With the opening of trade route with China, the destination Nathula serves as open boundary between India and China.



### **i. Village Tourism**

In order to percolate direct benefit from tourist to local community, village tourism as an eco-tourism destination plays a crucial role. Staying with the local community surrounded by natural elements and shy natured hospitable human behaviour offers an open atmosphere for seeking peace, tranquility and pristine environment.

In developing all such eco-destination, the underlying objective of eco-tourism such as eco-friendly development without destruction, knowledge based socio-cultural exploration and upliftment of backward community and stake holder is feasible in the State of Sikkim.

## **6.3 ECO TOURISM PRACTICES**

As discussed, eco tourism encompasses wide range of natural, traditional, and indigenous tourism products, which help in propagating harmless tourism by benefiting local villagers and stakeholders. A showcase of such ecotourism activity was jointly ventured by Khangchendzonga Conservation Committee, (KCC), Travel Agents Association of Sikkim (TAAS), the Green Circle, G.B.Pant Institute of Himalayan Environment and the ECCOS. During the project period, various trainings were imparted to stake holders and other key players. The activity of NGO, Tourism development association, institutions are engaging themselves for the cause of flourishing eco-tourism in the state. The Government prepares the list of DO's and DONT's and attempts are made to inculcate the principle of eco-tourism in the minds of drivers, travel agents, hoteliers etc.

### **6.3.1 Problems**

Being a mountainous state, Sikkim's prospects for eco-tourism development must be initiated in accordance with the underlying principle of eco-tourism and sustainable tourism development. The slight deviation and compromise in principles of eco-tourism will result in abrupt natural catastrophic and hazard leading to long-term impact on delicately balanced

eco-system. The constraint and feature of eco-tourism destination are discussed below.

- Most of the trekking eco-destination have been under constant ecological disturbances due to already developed trekking routes and its guidelines.
- The wildlife, national parks, bird sanctuary, bio-diversity parks are in the initial stage of conservation and no immediate response from tourist is expected.
- Village tourism may help percolate direct economic benefit to the villager, but it needs meticulous attention to check socio-cultural pollution of the host society.
- Mountain biking, skiing, ice-skating may encourage adventure tourism, however, there lies every possibility of alpine pollution.
- It takes time in inculcating the principle of eco-tourism among the local people, tourists, stakeholder and players.
- Sikkim gets domestic, low to medium budget tourists. Hence, eco-destination may cost them high. It may therefore discourage domestic tourists.
- Trekkings are always associated with rampant tempering and cutting of wood for firewood by poachers.

Despite of all such problems tourism if managed well may boost Sikkim's economy in close harmony with man and nature.

#### **6.4 ECO-TOURISM AS A TOOL OF SUSTAINABLE DEVELOPMENT**

Survey reports over crowding of vehicle at Changu, Baba Mandir and Pelling with the problem of parking, waste management and pollution.

In such places, sustainability is the powerful answer to all environmental degradation in the destinations.

Sustainable development may be regarded as a philosophy, a plan or strategy or a product. It is defined by the Brundtland Commission as 'development that meets the needs of the present without compromising the

ability of future generations to meet their own needs' (World Commission on Environment and Development 1987).

According to Wood (1993), sustainable development has received widespread support because it appeared that sustainable development was an idea whose time had come, reflecting a convergence of scientific knowledge, economics, socio-political activity and environmental realities that would guide human development into the twenty-first century. These have been articulated by any number of national and international agencies and organizations, and typically embrace components of:

- Conservation and enhancement of ecological processes.
- Protection of biological diversity
- Equity within and between generations.
- Integration of environmental, social and economic considerations.

(Wahab Pigram, 1997)

In Sikkim Himalayas, immediate application of sustainable development principles acts as a tool for environmental conservation and minimizes destruction. In the steep relief, the level and rate of development must be balanced with the rate of ecological destination. The process of sustainability involves application of concept of carrying capacity and destination management followed by the process of impact assessment and management plans.

## **6.5 CARRYING CAPACITY**

According to WTO carrying capacity is "the level of visitor which an area can accommodate with high levels of satisfaction of visitors and few impacts on resources". According to McIntyre, carrying Capacity is "the maximum use of any site without causing negative effects on the resources, reducing visitors satisfaction, or existing adverse impact upon the society, economy and culture of the area". In general it is the process by which maximum number of people visit the destination causing minimum number of harm and defacement. The development of tourism products within the limit of its load bearing capacity is also referred as sustainable way of development.

The application of carrying capacity leads to sustainable development of tourism as it restricts to the unbearable and unwanted growth of a destination. For example in Changu and Pelling limited number of vehicles set by prescribed norms only will be permitted to enter the destination. Further, construction of hotels will also be restricted to estimated numbers specified by the law of Carrying Capacity. As a result, minimum environment degraded is caused in the host region.

The first step involved the process of achieving carrying capacity is Environment Impact Assessment (EIA). According to Goverdhan (1993) "EIA is basically concerned with identification and assessing the environmental consequences of development projects, plants, programmes and policies and attempt to ensure that the best alternative for development is selected" (Batta, 2000)

It is an assessment of prevailing environmental condition, its cost and benefit, impact and management plan of a proposed project area. Identification and evaluation of element of environment is carried out by making mandatory to prepare EIA before the project is initiated.

In tourism development plans, such as construction of airports etc EIA must be prepared and environmental clearance must be obtained from the Ministry of Environment, Govt. of India. Similarly, in Sikkim EIA is prepared for Hydro-power Projects and proposed airport. As a result, minimum environment is degraded.

## **CONCLUSION**

In the hilly area like Sikkim, development of tourism industry is closely associated with environmental degradation and it is seen that large number tourists infrastructure are knocking Governments door for clearance of projects. It is a fact that major industries from Mumbai and Delhi were shifted from its core location. There have been instances where people are putting injunctions in the recently opened up industries. Due to pollution, erosion and constructional activities, large ranges of microorganisms are killed mercilessly. Besides, there is use of bio non-degradable waste generation

and problem of waste disposal, a problem which remained unsolved for centuries.

It is proved that rate of urbanization is rapid and growth of towns is taking place haphazardly. This unplanned vertical and horizontal growth of urban structure has resulted massive environmental problems like drainage, congestion, traffic and solid waste. All this in turn may result in health hazards and serious outbreak of influenza and diseases. The hotel complexes in Sikkim generate massive amount of garbage and there is no recycling process involved so far.

The concentration of population has led to various problems in the town and cities in Sikkim such as garbage disposal, lack of drinking water, lack of space, expansive transport and communication, pollution (noise, land, water, air and vehicular) improper sewage treatment, poor drainage system, lack of electricity, law and order and irregular electricity.

Gangtok town has been suffering from traffic congestion, drainage, sewage treatment and solid waste management. As a result waste generation is high and environmental degradation is resulting in the form of sudden outbreak of waterborne diseases and stress and respiratory diseases.

Due to alarming increase of human activities towards utilization of natural resources, the per capita consumption of natural resources has increased by manifold. The rate of increase in population is faster than rate of increase in forest area. It is estimated that nearly 89 percent of population inhabit rural area and they bank heavily upon natural resources. The livelihood of rural poor are earned from existing natural resources. The pressure on agriculture land is excessive, shortage of food grain is seen everywhere. People primarily depend on agriculture and forest for their livelihood and growth of infrastructure to accommodate tourists may harm surrounding environment on the whole. On the other hand, tourism growth is greater than its carrying capacity. An attempt therefore has been initiated in the next chapter to elucidate recommendations for the planners and decision makers as a guideline and eye opener for the redressal of various environmental predicaments.