

## Research Paper

# Tourism in the Himalayas

## I Introduction

Tourism in a broader sense has existed for a long time in the Himalayas: in the form of pilgrimage to Hindu sanctuaries that are located high up in the mountains. With the arrival of the British in the 19<sup>th</sup> century, summer resorts, the so-called Hill Stations, were established. Examples for these foundations are Darjeeling, Nainital, Mussoorie or Shimla. Nowadays, these Hill Stations are most frequented by members of the Indian and Pakistani middle-class. “Modern” tourism in the Himalayan region – activities such as trekking, mountain climbing, sightseeing and winter sports – has been introduced only in the last few decades. These forms of western mass tourism have a huge impact on the environment and on the local social structure. This paper will explain the history of tourism in the Himalaya and discuss the effects of modern mass tourism on the local society and environment and possible enhancements towards a sustainable tourism in this region.

## 2 History of tourism in the Himalayas

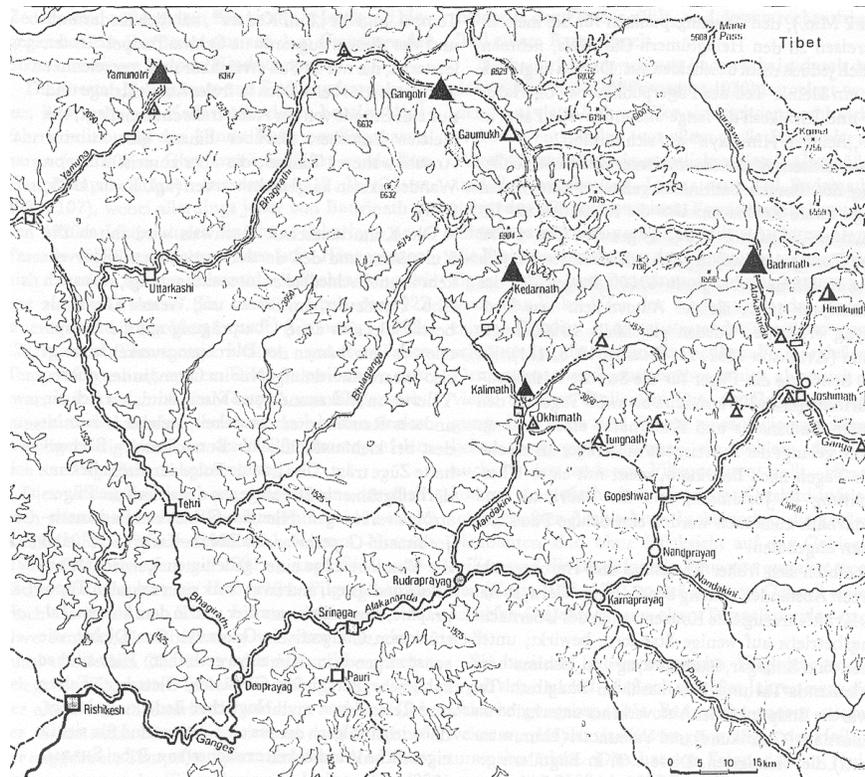
Tourism in the Himalayas, seen from a historical viewpoint, can be divided into three distinct phases or categories: the religious pilgrimages, the British hill stations of the 19<sup>th</sup> century and the modern mass tourism of the 20<sup>th</sup> century.

a. Pilgrimage

Pilgrimage to the Himalayas has played an important role for a long time in several different religions: the worshipping of holy rivers and nature deities has its roots in the Aryan culture and was later integrated into Hinduism. The whole Himalayan region has an important spiritual meaning for Hindus as a “sacral space” (GRÖTZBACH 1994, P. 184). This leads to a different, Hindu point of view of the Himalayas: not a collection of natural features or a beautiful landscape, but a representation of the divine.

It is estimated that pilgrimage to the sanctuaries in the Himalayas started between the 4<sup>th</sup> and 2<sup>nd</sup> century B.C. The earliest written evidence for pilgrimage to the Himalayas is the Epos Mahabharata from the 1<sup>st</sup> century B.C., which

mentions Hardwar and the sources of the Ganga (Badrinath and Kedarnath) as pilgrimage destinations. The most important pilgrimage destinations were and still are the sources of the rivers Ganga and Yamuna (FIGURE 1), and, even more important, the lake Manasarovar and Mount



▲▲▲ Hindu sanctuaries (Symbol size proportional to number of visitors)  
 △ Hindu sanctuaries without a temple

FIGURE 1: Sanctuaries in the Ganges Source area (Source: GRÖTZBACH 1994, P. 186)

Kailash, the home of Shiva, in southern Tibet. Vaishno Devi and Amarnath, two cave

sanctuaries, are located in Jammu and Kashmir (GRÖTZBACH 1985, pp. 30-31). Even though most of the sanctuaries in the Himalayas are Hindu sanctuaries, there are also Buddhist and Bon sanctuaries such as the Kongpo Bonri in central Tibet.

Until the middle of the 20<sup>th</sup> century, the number of pilgrims that went on the arduous trek to one of the sanctuaries was relatively low: for example, about five to ten thousand pilgrims arrived in Badrinath each year after a 30-day hike in the middle of the 19<sup>th</sup> century. But with the expansion of streets in the middle of the 20<sup>th</sup> century, Badrinath could be reached from Rishikesh within one and a half day by bus. Since then, the number of pilgrims arriving in Badrinath and the whole Garhwal region has increased dramatically (TABLE I).

| Year | Badrinath | Kedarnath | Gangotri | Yamunotri | Hemkund<br>Bhyundar Valley |
|------|-----------|-----------|----------|-----------|----------------------------|
| 1975 | 180       | 82        | 57       | 30        | 6                          |
| 1980 | 208       | 81        | 59       | 62        | 25                         |
| 1985 | 252       | 100       | 131      | 79        | 25                         |
| 1988 | 377       | 137       | 99       | 85        | 53                         |

Source: GRÖTZBACH (1994), KAUR (1985)

The total number of pilgrims arriving in the pilgrimage places of the Garhwal Himalaya (Badrinath, Kedarnath, Gangotri, Yamunotri, Hemkund) is still rising, too: from 355 000 in 1975 to 751 000 in 1989 (GRÖTZBACH 1994, p. 185). It is obvious that this development has an impact on the environment in this area: GRÖTZBACH reports on the fact that in Badrinath undeveloped areas are used as garbage dumps and even the water of the holy river Alakananda is contaminated with feces and sewage (GRÖTZBACH 1994, p. 188).

**b. The British Hill stations**

The second stage of tourism had its beginning in the 19<sup>th</sup> century, when the British discovered the Himalayas as a recreation area. After several military excursions of the British in the early 19<sup>th</sup> century discovered the restorative effects of a stay in the Himalayan hills, several sanatoriums were established to provide services to members of the military. The first hill station was Simla, founded in 1819. It was recognized as the government and military summer

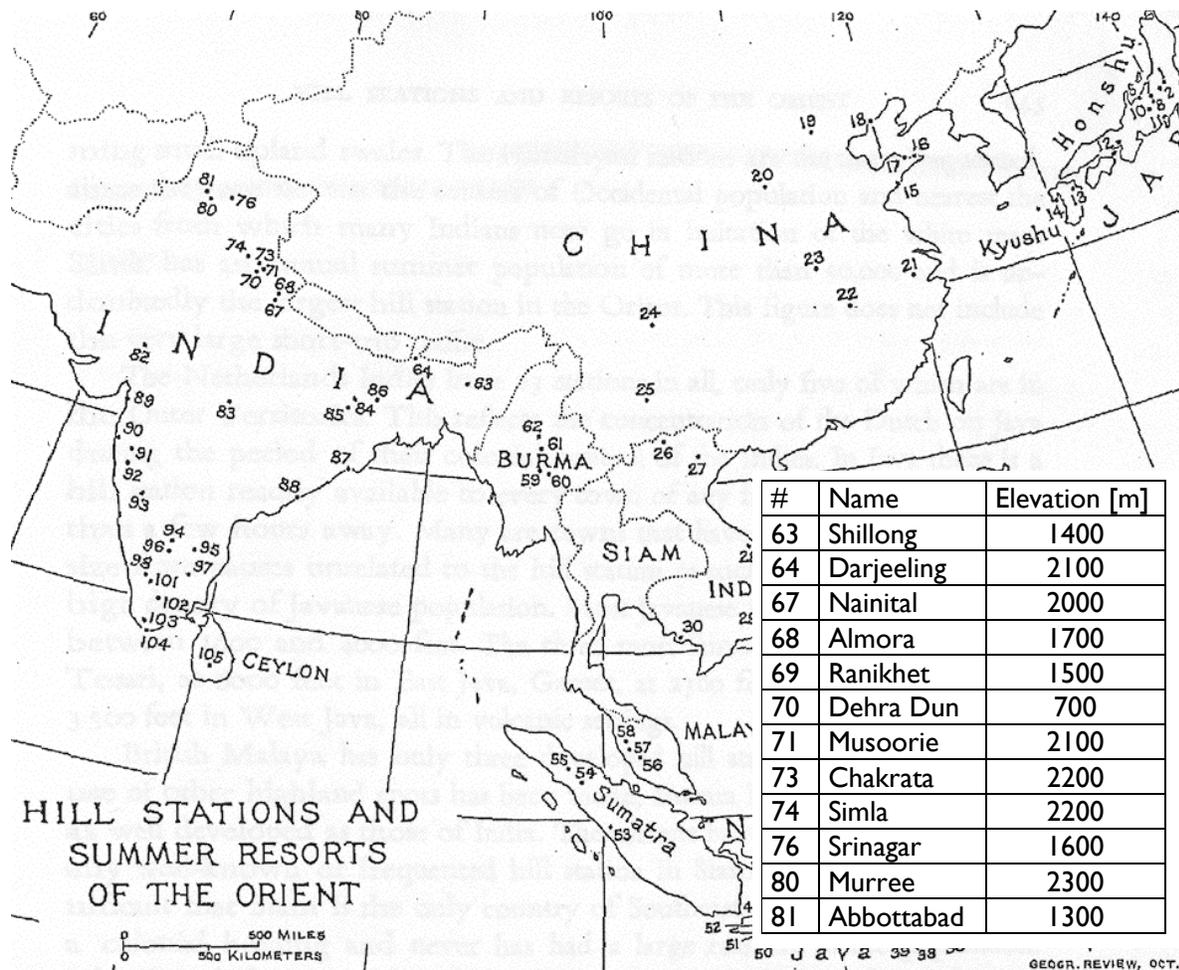


FIGURE 2: Hill Stations in India (Source: SPENCER 1948, P. 643)

headquarters for India in 1838 (which it stayed until the British withdrawal from India in 1947), thereby gaining importance (SPENCER 1948, PP. 640-641). Simla has retained its importance until the present day, being the capital of the Himachal Pradesh (GRÖTZBACH 1996, P. 31).

Other hill stations were Mussoorie (founded in 1827), Darjeeling (1835), and Nainital (1839). Up to 1869, several more hill stations were founded: Dalhousie, Dharamsala and Ranikhet (FIGURE 2).

After some time, in the late 1830's, the hill stations became more attractive for the civilian residents of India (especially for the colonial middle and upper class), due to the fact that they were an opportunity to escape the hot pre-monsoon months and the summer monsoon, at the same offering a stay in a more pleasant region with a beautiful landscape (GRÖTZBACH 1985, p. 34).

Change started in 1947, when India became independent and the number of British tourists decreased dramatically. After a few years of crisis the number of tourists started to increase again: the Indian urban middle class had discovered the Hill Stations as an interesting vacation destination.

Modern mass tourism started in the 1960s and the number of tourists visiting the hill stations increased by huge numbers: in Nainital, the number of visitors increased from 166000 in 1958 to 332000 in 1968 and to 560000 in 1988. In Mussoorie, the number of visitors increased from 158000 in 1958 to 306000 in 1966 and 720000 in 1981 (JOSHI 1990, p. 347; GRÖTZBACH 1985, p. 36). This enormous increase had, of course, its negative side effects on the nature: JOSHI, for example, describes the situation in Nainital as follows:

“[...] Sukhatal, a small lake northwest of the town at an altitude of 1960 m, has dried up and its bed is being used as a dumping ground for building debris. [...] The waters of the [Naini] lake are no longer clear due to the increased turbidity. Bacteriological pollution and the concentration of coliform and E-coli bacteria in the lake are at unsafe levels. Similarly, the levels of chlorine, lead and manganese are far beyond those considered safe.” (JOSHI 1990, p. 351)

**c. Modern Tourism of the 20<sup>th</sup> century**

Modern mass tourism in the Himalayan region started in 1950s after Sir Edmund Hillary and Tenzing Norgay climbed the Mt. Everest and made the region popular in other parts of the world, that had until then more or less ignored the region (WALDER 2000, P. 9). In the first years, the lack of transportation infrastructure limited tourism to the Hill Stations and the Garhwal region. But soon after the Indian-Chinese border war in 1962, a huge number of roads were built in the Indian part of the Himalayas – until 1970, 10 000 km of roads. Although their purpose was primarily a military one, they opened the region to modern mass transportation. After these roads were also opened for foreign tourists, the regions close to the roads experienced an enormous growth in tourism – in Ladakh, e.g., the number of visitors increased from 0 in 1974 to 15.000 in 1982 (GRÖTZBACH 1994). Nepal, too, witnessed an enormous growth of tourism in the last 50 years. In 1962, 6179 tourists arrived in Nepal. The growth in the number of tourists reached its climax in 1999, when 421 000 tourists arrived in Nepal (WALDER 2000, P. 13).

The Himalayas offer the modern tourist a widespread range of possibilities: the activities range from visiting the unique cultural attractions, hiking, skiing, to the more adventurous types of tourism. In the last years, the modern (western) trend sports have been established in the Himalayan region: rafting, kayaking, canyoning, rock climbing, mountain biking, bungee jumping, paragliding etc (NEPAL TOURISM BOARD 2000, PP. 45-51).

The modern mass tourism has an enormous impact on the economy, ecology and society in the Himalayas. These impacts and possible solutions to cope with the negative side effects of mass tourism are the focus of the following chapter.

### 3 Impacts of modern mass tourism

#### a. Impact on Economy

The dawn of the mass tourism era in the Himalayas had an enormous influence on the local economy: with the number of visitors increasing dramatically, the total amount of money spent by these visitors increased in the same way (TABLE 2). In Nepal, tourism accounts for 10% of the GDP and is the single-most important source of foreign currency (THE WORLD BANK 2002B, P. 7). In India, tourism is the second-largest source of foreign currency behind the gem and jewelry business (TED, P. 8).

The money spent by the tourists has diverse effects on the local economy. It stimulates the economy and induces the so-called “multiplier-effect” – jobs are created, capital is accumulated and local workers that used to be dependent on subsistence farming start their own businesses that serve the tourists: selling or renting supplies, providing guides or selling souvenirs to the tourists. Those businesses, in turn, employ people as guides or workers, which thereby benefit indirectly of the tourist money (TED, P.8). But a part of the money can also be used to improve the local living standards through better health care, education and building structure.

The huge amount of money spent in the tourism industry makes the economy extremely dependent on the revenues out of this sector. But because the tourism sector is also an extremely sensible one, the earnings out of this sector are extremely fluctuant. This became obvious on several occasions: the Maoist insurgency that started in 1996 destabilized the tourism economy – in 1996, the yearly growth of tourist arrivals dropped 4.1% from 11.3% in 1995 to 7.2% in 1997 (TABLE 2). In December 1999, after the hijacking of the Indian Airlines flight, the number of tourists started to diminish increasingly. The decline was compounded by the tragic events in the Royal Family in June 2001 and the escalation of the Maoist violence. After the terror

attacks in the United States in September 2001 the November 2001 tourism earnings in Nepal plummeted to 50% of the earnings in the previous year (THE WORLD BANK 2002B, P. 7).

|  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  |
|--|-------|-------|-------|-------|-------|-------|
| <b>Tourist arrivals (in thousands)</b> | 325.6 | 363.4 | 393.6 | 421.9 | 463.7 | 491.5 |
| (Percentage Change)                    | 11.2  | 11.3  | 8.3   | 7.2   | 9.9   | 6.0   |
| <b>Per capita expenditure</b>          |       |       |       |       |       |       |
| (In US. Dollars)                       | 394   | 474   | 430   | 402   | 476   | 479   |
| (Percentage Change)                    | 16.9  | 20.5  | -9.3  | -6.6  | 18.4  | 0.6   |
| <b>Total expenditure (in millions)</b> |       |       |       |       |       |       |
| (In US. Dollars)                       | 128.3 | 172.3 | 169.3 | 169.6 | 220.8 | 235.4 |

Source: THE WORLD BANK 2002B, Statistical Appendix - Table 2.5.

### b. Impact on Ecology

The most obvious and visible impact of modern mass tourism is the impact on the ecology (this is not only true for the Himalayas, but also for the rest of the world). In this chapter, the main types of ecological degradation will be described.

#### **Deforestation:**

Deforestation in general (and not only the deforestation induced by tourism) in the Himalayas has been the source of long-lasting debates. ECKHOLM describes the Himalayas as a fragile ecosystem, where “forces of ecological degradation building so rapidly and so visibly” (ECKHOLM 1975, P. 764) and adds that “the pace of destruction is reaching unignoreable proportions” (ECKHOLM 1975, P. 765). The World Bank issued a report in 1978 that suggested that the hill

areas of Nepal would be completely deforested by 1993 and, in 1987, Newsweek reported that Himalayas, once fertile and productive, could become a desert within 25 years (WALDER 2000, pp. 10-11). These calculations are based on the fact that a huge percentage of the population relies on firewood as primary source of energy. With a rapid increase in the population growth, the amount of firewood needed and therefore the area being cleared will increase in the same way. This will in turn, according to ECKHOLM, intensify the monsoon-induced erosion and soil loss from the mountain slopes and leave these mountain slopes barren and infertile (WALDER 2000, p. 10). But ECKHOLM'S theory is, according to other authors, not only oversimplified, but also "seriously distorted" (WALDER 2000, p. 10; IVES 1989, p. 2). IVES AND MESSERLI showed that deforestation in the Nepali Himalayas is not a recent development, but that deforestation has been happening over centuries and that the forest cover of the Middle Hills has not changed significantly since the 1950s. Aerial photography of the Middle Hills, taken between 1964 and 1977, showed that only 1.5 of the original tree cover was lost – a rather insignificant number (WALDER 2000, p. 11). Nonetheless, WALDER states that

"This is not to suggest, however, that the mountain areas are free of environmental problems, notably deforestation. The more pragmatic view is that while there are inevitably conflicts between man's activities in the mountains and the natural ecological balance, it is the extent of the resulting problems that has been overstated." (WALDER 2000, p. 12).

Which role does tourism play in the deforestation of the Himalayas? Even though the use of firewood by trekking groups is strictly forbidden since the late 1970s, it is still done – for example, it is estimated that only 7 to 10% of the visitors to the Sagarmatha National Park used other sources of fuel than firewood (MISHRA 1986, p. 320). The 1979 ban on the collection and use of firewood in the Sagarmatha National Park was not applied to the tourist lodges, what in

turn led to an decrease of porter-assisted treks and to an increase of the so-called “tea house” treks. Today, lodges on average use about 75kg of firewood each day during the peak season. With an increasing number of tourists in the region, this leads to an increasing pressure on the forests close to the main trekking corridors. WALDER states, “[...] while the problem of forest depletion is not widespread throughout the park area, in the main trekking corridors it is said to be severe.” (WALDER 2000, P. 18).

### Waste disposal:

Another severe problem related to tourists and trekking in the Himalayas is waste disposal. Again, the Sagarmatha National Park can serve as an example: Despite a law from 1979 that requires trekkers to bury or carry out their waste, the amount of waste left behind on the trails and campsites is tremendous. It is estimated that one group of trekkers (consisting of 15 people) creates 15kg of waste that is not biodegradable or burnable during a 10 day trek (WALDER 2002, P. 18). According to a MOUNTAIN AGENDA report on the Everest region, it is estimated that there are 17 metric tons of garbage per kilometer of tourist trail – for this reason, the Everest region is sometimes labeled as “the world’s highest junkyard” and the trail to the Everest Base Camp as “the garbage trail” (MOUNTAIN AGENDA 1999, P. 22). Because the garbage problem in the Everest region has had a high profile and the media brought it to the attention to the people



FIGURE 3: Oxygen tanks collected in the Sagarmatha NP.  
Source: [http://www.johnck.com/gallery/album07/0002\\_044](http://www.johnck.com/gallery/album07/0002_044), 3/5/03.

creates 15kg of waste that is not biodegradable or burnable during a 10 day trek (WALDER 2002, P. 18). According to a MOUNTAIN AGENDA report on the Everest region, it is estimated that there are 17 metric tons of garbage per kilometer of tourist trail – for this reason, the Everest region is sometimes labeled as “the world’s highest junkyard” and the trail to the Everest Base Camp as “the garbage trail” (MOUNTAIN AGENDA 1999, P. 22). Because the garbage problem in the Everest region has had a high profile and the media brought it to the attention to the people



FIGURE 4: Garbage left by trekkers in a base camp, Sagarmatha NP.  
Source: <http://www.everestcleanup.com/goals/cleanup/graphics/C4+trash+-+BW.jpg>, 11/2/03.

in the west, several initiatives have been started to reduce the amount of waste in the region: local initiatives that are assisted by NGOs, governmental initiatives, foreign initiatives like the “Everest Environmental Expedition“ (<http://www.everestcleanup.com>, at the moment offline), or foreign individual volunteers.

In 1984, a team of Sherpas collected and removed 1000 bags of litter from the lower parts of the mountain. Between July 1995 and 1996, the Sagarmatha Pollution Control Committee removed a total of 190 tons (145 tons of burnable and 45 tons of unburnable) of garbage (NEPAL 1997, p. 8).

The disposal of human waste can also pose a threat to the environment: if not buried at least 50 m away from water, human waste can pollute the water. But even if human waste is buried correctly in a so-called “cat hole”, the sheer amount of people having to do so is a problem: nowadays, areas in the vicinity of popular campsites look like “moonscapes” because of the amount of “cat holes” dug. (WALDER 2000, p. 18).

**Trail degradation:**

Another problem that arises with the increasing number of tourists in the Himalayas is trail degradation. When trails are not maintained properly, soil erosion and deep ruts along trails will occur because of heavy use by tourists and local people (NEPAL 1997, P. 15). These obstacles make the trails difficult to walk, thereby inducing people to seek alternative paths and leave the formal routes. These informal paths, in consequence, lead to increased damage of the vegetation cover through trampling. The damage to the vegetation cover, in turn, can lead to habitat loss and a change of species composition (WALDER 2000, P. 17).



FIGURE 5: Trail erosion

Source: <http://www.utexas.edu/depts/grg>, 3/5/03.

**c. Impact on Society**

A third impact of mass tourism is the impact on the local society. It has changed the structure of society itself by preferring certain groups of the population that are able to interact with the tourists and provide services to them. But tourism has also an influence on the local culture by introducing new elements and showing the people different, “modern” ways of living. The Sherpas of Nepal may serve as an example for these statements: in the early days of modern tourism in Nepal, they were the first to come in contact with foreigners (NEPAL 1997, P. 17). In the following years, the Sherpas earned a reputation as sturdy, reliable guides and this image was spread in the western countries, the source of most tourists. Because of their reputation, the

Sherpas were in high demand as guides and were able to earn their living with tourism-related business. Tourism made the Sherpas one of the most affluent ethnic groups in the Nepali society (MOUNTAIN AGENDA 1999, P. 21). Although certain researchers suggest that in spite of the influence of tourism, Sherpas have been able to maintain their distinctive lifestyle and customs (FISHER 1990 & STEVENS 1993, cited in NEPAL 1997, P. 17), there are signs that this is not completely the case. NEPAL states that he is

“[...] somewhat skeptical of the above statements [by Fisher and Stevens]. The Rinpoche (the incarnate abbot) of Thyangboche Monastery expressed his concern for deteriorating traditional values among young Sherpas. [...] during the 1970s [...] many young Sherpas became drug addicts, a problem which did not exist in Nepal before the advent of tourism. Many Sherpas have married foreigners and are now living abroad.“ (NEPAL 1997, P. 17)

Even the monks have become involved with tourism – they get a two-month leave during peak season each year to earn money with tourism – and the Rinpoche of Thyangboche Monastery himself operates a tourist lodge close to the monastery (NEPAL 1997, P. 17).

But the economic success of the Sherpas led to increasing number of conflicts between them and non-Sherpa ethnic groups: the non-Sherpa groups (for example, the Rai or the Tamang) complain that they have been de-facto barred from the better-paid jobs in tourism and that the Sherpas are the sole beneficiaries of tourism. These groups do not feel that they get a fair treatment by the Sherpas, but that they are being humiliated and deprived.

#### 4 Modern approaches on tourism-related issues

Nowadays, there is an increasing awareness of the effects that mass tourism has (described in the previous chapter) on the local economy, ecology and society. With this increasing awareness, the concepts of a sustainable tourism became more and more accepted (OWEN 1993, cited in EAGLES 1995, P.1):

- Tourism should be one part of a balanced economy.
- The use of tourism environments must allow for long-term preservation and for use of those environments.
- Tourism should respect the character of an area.
- Tourism must provide long-term economic benefits.
- Tourism should be sensitive to the needs of the host population.

Following these concepts, several codes of conduct, ethical codes and minimum impact codes which aim on minimizing the impact of tourism and raising the awareness of ecological problems have been published for tourism in general and been partially adapted to the Himalayas (APPENDIX A). But as these codes of conduct completely rely on the acceptance by the tourist, success is not guaranteed. Therefore, other strategies must additionally be used to support the effort of creating a sustainable tourism:

- **The seasonal dispersal and regional diffusion of the tourists:** in Nepal in 1995, over 60% of the trekkers went to the Annapurna area and half of annual number of tourists visited in the time between October and November (GURUNG 1998, P. 9). A seasonal dispersal and regional diffusion of the trekkers could help in taking pressure off the local ecosystem. This could be achieved by either regulating the number of tourists allowed in a certain area, or, by introducing a more dynamic pricing policy, creating incentives to visit less frequented areas or to visit outside of the peak season.

- **The promotion of alternative, fuel saving technologies:** the use of alternative energy sources such as micro-hydro can help in reducing the use of firewood by locals and tourists and, thereby, reducing the pressure on local forests (THE MOUNTAIN INSTITUTE ASIAN REGIONAL OFFICE 1990, P. 1; SHERPA 2002, P.2; WALDER 2000, P. 20).
- **The creation and promotion of designated campsites:** when designated campsites are created that offer certain amenities (such as washing facilities, for example), the amount of “wild” camping along the trails could be reduced.
- **The sharing of revenues:** The management of the environment can involve an enormous amount of money. The revenue from user charges and mountaineering royalties should not only help the governments, but should be shared between the governments and the areas where this revenue is created (GURUNG 1998, P. 10-11).
- **The training of local people as guides:** this can help the local people to develop the skills needed to guide tourists. This, in turn, can give these people the confidence to get involved in the tourism business and start an own enterprise. Additionally, by setting a minimum skill level for porters through training, the service to the tourists is improved and a higher income can be expected (THE MOUNTAIN INSTITUTE ASIAN REGIONAL OFFICE 1990, P. 2; SHERPA 2002, P.2).
- **The creation of community-based, participation-oriented tourism management committees:** this allows locals to participate in the decision-making process and influence the decisions that have a direct effect on their lives. At the same time, participation increases the support and co-operation of the locals for protection projects. Additionally, the amount of knowledge that the locals have of their

environment and the ways to save it, should not be underestimated (WALDER 2000, P. 20; SHERPA 2002, P. 2).

That these measures can be successful is shown by the Sikkim Biodiversity and Ecotourism project: started in 1995, its goal was the conservation of biodiversity and natural resources through increased capacity and actions of the stakeholders. The main threats to biodiversity were identified: fuelwood use and the grazing by pack animals. The fuelwood consumption problem has been tackled by introducing alternative fuel saving technologies: between 1996 and 1998, the fuelwood consumption was reduced by 60% (THE MOUNTAIN INSTITUTE ASIAN REGIONAL OFFICE 1990, P. 1).

At the same time, participation by the private sector and the local communities in the decision-making process has increased and there has been a 50% rise in the number of households involved in tourism-related activities. This rise can be partly attributed to training courses and enterprise support of porters, guides, etc. These training courses have also increased the base daily rate for porters and pack-animal operators by 30% (THE MOUNTAIN INSTITUTE ASIAN REGIONAL OFFICE, P.2).

## 5 Conclusion

Tourism in the Himalayas has a long tradition. But the dawn of modern mass tourism, induced by the extension of modern transportation deep into the Himalayas, has had serious consequences for the local economy, ecology and society. Modern-day approaches like the ones used in the Sikkim Biodiversity and Ecotourism project can help reducing the negative side effects of tourism and allow both the tourists and the local population to benefit from a more sustainable, conscious “soft” tourism.

## 6 Appendix A – Codes of conduct, ethical codes and minimum impact codes for tourists and expeditions

### a. Minimum impact code for travel to upper Mustang (MINISTRY OF TOURISM 2000)

*This minimum code is issued to tourists prior to their visit to Upper Mustang in a bid to raise awareness of the conservation of the environmental and cultural integrity of the region:*

"As visitors and friends, you are asked to help conserve the sanctity and beauty of the Upper mustang region for the generations to come. Here are a few tips on ways to "step gently" in this fragile area.

#### **Travel ecologically**

In Jomson and Upper Mustang, it is possible to rent horses and ponies, which are traditionally used for transportation and as pack animals. In fact, the people of Upper Mustang are not fully habituated to accommodating porters. To maintain tradition, and to minimise the environmental burden created by porters, it is recommended that ponies be used instead.

#### **Save fuel**

Fuel is a scarce commodity in Upper Mustang Many travel for over a day to collect firewood, thorny Taklang bushes. and then spend another day returning others spend hours collecting goat and sheep pellets. In order not to further aggravate the problem of fuel gathering , it is forbidden for groups to buy firewood from the communities in Upper Mustang. All groups to Upper Mustang must demonstrate that they are self -sufficient in fuel before departing Jomsom. (Note that kerosene may not be readily available in Jomsom until the establishment of a fuel depot).

During the trek, make sure your staff uses kerosene or gas for cooking. Do not make open fires. Limit hot showers. Bring adequate clothing for yourself, and ensure that your trekking staff is also warmly clothed.

#### **Do not pollute**

In order to minimise pollution, burn all paper products, including toilet paper, cigarette butts, non-plastic and non-foil wrappers. Carry out all non-burnable rubbish like bottles, plastics, cans, and batteries. These may be disposed of in Jomsom Vegetables and food scraps should be properly buried or fed to stock animals.

Use available toilet facilities, and make sure that your trekking agency carries along a toilet tent. Supervise your trekking staff to make sure that they cover toilet pits On the trail, make sure that you are at least 50 meters away from any water source when relieving yourself. When bathing, use only biodegradable soaps, and wash away from streams, as they are the only source of drinking water.

#### **Protect wildlife**

Due to the limited carrying capacity of the desert environment, wildlife densities in Upper Mustang are very low. Nevertheless, in addition to the many species naturally found on the Tibetan Plateau, Upper Mustang is host to rare species such as Argali sheep, wild ass (kyang). and snow leopard.

It is illegal to interfere with wildlife or their habitat in any manner, or to purchase any item

made of rare or endangered animal parts. Please respect the fragile ecology of the area by avoiding walking on vegetation or collecting plants and flowers.

### **Respect the culture**

- Upper Mustang is replete with religious sites such as gompas (monasteries), chortens (structures for worship) abandoned caves, and reliquaries of ruined monasteries. These sites are a remarkable showcase for a culture that is ancient, yet alive.
- In order to assure the security of monuments and structures, it is essential that most of these areas, and especially the abandoned caves, be off-limits to trekkers and their staff.
- Local residents may wish gompas to be off-limits to tourists, or accessible for a small fee or donation. As the local people are the custodians of their culture, trekkers are asked to abide by their wishes.
- Please do not remove any religious artefacts from the area.
- Respect local customs in your dress and behaviour. Women should not wear shorts or revealing shirts. Men should always wear shirts. Avoid outward displays of affection. Nudity is highly prohibited.
- Ask permission to take photographs and respect people's right to privacy.
- Do not give anything to beggars unless they are legitimate religious mendicants.
- Encourage young Nepalis to be proud of their culture.
- Above all remember that your vacation has a great impact on the natural environment and on the people who live off its resources. By assisting in these small ways, you will help the land and people of Nepal.

*"Nepal is here to change you, not for you to change Nepal."*

### **b. UIAA Ethical Code for Expeditions (UIAA 1997A)**

1. Ensure all members of the team are aware of the regulations set by the host country, the objectives of the Kathmandu Declaration, and the UIAA Ethical Code for Expeditions.
2. Adopt a sporting approach to the expedition's objectives and not use equipment or other resources out of proportion to those objectives.
3. Conduct the expedition in a way that maintains the safety of its members and especially those it employs.
4. Whenever possible and appropriate provide technical advice and training to members of the expedition from the host country.
5. Give an accurate report about the expedition to the appropriate bodies.
6. Do not use equipment and materials owned by other expeditions without permission, and be prepared to help local people and other expeditions if the need arises.
7. Leave the mountain environment as clean as possible at the end of the expedition

**c. The International Mountaineering and Climbing Federation's Recommended Code of Practice for High Altitude Guided Commercial Expeditions (UIAA 1997B)**

1. Definition. This Code applies to commercial expeditions attempting 8000m peaks which offer to guide or accompany climbers above Base Camp. It is not concerned with the many expeditions which employ trekking agencies to supply transport etc. to Base Camp, and may also supply Base Camp services and H.A. porters.

2. Rationale. A variety of organisations offer to take clients on 8000m peaks. They vary from those which provide a full service to the summit or nearly to the summit, to those where there is minimal support for clients above Base Camp. However at the present moment it is difficult for clients to deduce from brochures exactly what is offered in terms of guiding and support, and whether it corresponds to their needs. This Code supplies clients with pointers to assist them to make an informed choice.

3. High Altitude Warning. Mountaineers climbing at very high altitude, especially above 8000m are at the limit of their mental and physical powers and may not be capable of assisting others as has always been traditional in mountaineering. This fact is of particular importance to mountaineers of limited experience who rely on professional guides to bring them safely up and down 8000m peaks.

**The Code**

1. The leader or chief guide and as many as possible of the guides should have experience at least to the altitude of the peak to be climbed. [There is no qualification appropriate to high altitude guiding, so the term "guide" does not imply that the person holds a professional qualification. Clients can only judge from the previous experience of the guides, who may be westerners or Sherpas or other local mountaineers].

2. The staff on the mountain must be adequate for the aims of the party and the services offered.

3. A doctor in the party is very desirable but at the very least advance arrangements must be made for medical help. Advance arrangements must also be made for evacuation assistance in case of emergency.

4. The minimum safety equipment available must be walkie-talkie radios, a satellite phone, medical oxygen, and recommended First Aid supplies.

5. Advertising must give a true picture of all the difficulties and dangers involved, and avoid promising the impossible. Biographical information about the team should be included.

6. Clients should not usually be accepted for 8000m peaks unless they have previous altitude experience to 6-7000m.

7. Information supplied in advance should include a clear statement of the guiding and support offered.

8. The expedition must take account of the UIAA Environmental Objectives and Guidelines and follow the UIAA Expeditions Code of Ethics.

**d. The Eco-Trekker (SIKKIM BIODIVERSITY AND ECOTOURISM PROJECT 1997)**

- Be respectful of others' peace and quiet. Speak quietly on the trail and at overnight stops.
- Use your head. Drinking alcohol while hiking is unsafe and your behavior may offend others.
- Please don't make fires for cooking or warmth, even from fallen wood.
- Bring adequate warm dry clothes and see that staff and porters have proper gear.
- Always ask before photographing people and try to establish friendly contact before shooting. Please don't pay money.
- When visiting sacred spots, please do not talk loudly, don't smoke or litter. It is customary to leave a donation at monasteries and to circle shrines in a clockwise direction.
- Please don't give anything to begging children; it teaches them poor habits.
- Use toilets wherever available. Where not, stay at least 20-30 m. from water sources and bury all waste and paper.
- Carry a plastic bag for litter. Pack out all non-biodegradable and rubbish; burn papers carefully.
- Please don't drop cigarette butts or candy wrappers -set a good example for children!
- Don't leave plastic mineral water bottles in the mountains. Use iodine to treat drinking water in a re-usable bottle.
- Pay fair prices for lodging, food and services. Buying local products benefits the local economy, but buying antiques and artifacts robs Sikkim of its culture.
- Wear good hiking shoes or boots as trails are slippery and rocky. Don't go off the trail - it leads to soil erosion.

(The Eco-Trekker Was adapted from the "Model Trekker" originally produced by KEEP, Nepal).

**Code for Conservation**

Visitors to the Yuksam area are asked to follow this Code for Conservation:

Leave only footprints, take only photographs. High altitude vegetation is frail; avoid trampling, follow trails, and do not pick plants or flowers. Do not disturb wildlife nor its habitat; do not buy endangered animal or plant products. Use kerosene or bottled gas for cooking, heating and lighting; avoid using fuel-wood. Ensure that you and your staff are properly equipped with warm clothes and alternative fuel. Avoid littering; deposit garbage at designated sites; carry out all batteries. Keep all pollutants—even biodegradable soap and sunscreen—away from streams and lakes. Do not give treats to children; it only encourages begging. Respect the sanctity of holy lakes and historical sites: no smoking, drinking nor loud talk. Educate yourself about the ecology, customs, manners, and culture of Yuksam. Support local conservation programs.

Prepared by the Khangchendzonga Conservation Committee (K.C.C), a local organization working to conserve the natural and cultural heritage of the area.

**Safety Concerns:**

Anyone who ascends in altitude too quickly runs the risk of getting high altitude sickness, a potentially fatal disease that is entirely preventable with caution and care. Medical experts in high altitude sickness (HAS) advise that once a trekker is above about 3,000 m in elevation, they not gain more than 400 m from one night's camp to the next. If a person shows symptoms of HAS, such as persistent headache, dizziness, breathlessness, nausea etc., they should descend immediately at least 3-500 m. If symptoms continue, go to the Primary Health Centre, Main Bazaar, Yuksam.

It is unsafe to trek after dark or to venture off the trail. Always carry a torch, matches, drinking water, a high energy snack, and warm dry clothing while trekking. Don't trek alone: hire a porter/guide instead.

**Accommodations:**

Sikkim Tourism Trekkers' Huts and campsites are located at Yuksam, Bakbim, Tshoka, Dzongri, and Thangsing, and Khecheopalri, and must be reserved in advance from Yuksam.

**Hiring local porters and guides:**

It is highly advisable to hire trained porters and naturalist guides for your trek. Ask a lodge operator or a K.C.C member for assistance in arranging for local trained porter/guide services. Please do not bargain unfairly. The money earned by local trekking guides and porters is their incentive to conserve the natural and cultural sites that tourists come to see. This is a small price to pay for their services of keeping the environment clean and green for future generations.

**Tourist Registration:**

All domestic tourists are advised to register at the Police Check Post in Yuksam for their own safety.

## 7 Bibliography

- EAGLES, P. (1995): Understanding the market for sustainable tourism. – In: MCCOOL, S. ET AL. (1995): Linking tourism, the environment and sustainability. <http://www.ecotourism.org/textfiles/eagles.txt>, 11/02/03.
- ECKHOLM, E.P. (1975): The Deterioration of Mountain Environments. – In: Science, vol. 189, September 5, pp. 764-770.
- GRÖTZBACH, E. (1985): Tourismus im Indischen Westhimalaya – Entwicklung und räumliche Strukturen. – In: STEINBACH, J.: Beiträge zur Fremdenverkehrsgeographie (=Arbeiten aus dem Fachgebiet Geographie der Katholischen Universität Eichstätt, Band 1).
- GRÖTZBACH, E. (1994): Hindu-Heiligtümer als Pilgerziele im Hochhimalaya. – In: Erdkunde 48(3).
- GRÖTZBACH, E. (1996): Tourismus und Umwelt im Himalaya und Karakorum. – In: HGG-Journal, Band 10.
- GURUNG, H. (1998): Mountaineering in Nepal Himalaya: Some Reflections. Himalayan Association of Japan, Tokyo.
- IVES, J.D. & B. MESSERLI (1989): The Himalayan Dilemma: Reconciling development and conservation. Routledge, London.
- JOSHI, S.C. & P. PANT (1990): Environmental Implications of the Recent Growth of Tourism in Nainital, Kumaon Himalaya, U.P., India. – In: Mountain Research and Development 10(4).
- KAUR, J. (1985): Himalayan Pilgrimage and the New Tourism. New Delhi.

MINISTRY OF TOURISM, NEPAL (2000): Minimum impact code for travel to Upper Mustang.

<http://www.mtnforum.org/resources/library/motne00a.htm>, 11/02/03.

MISHRA, H.R. (1986): Deforestation and environmental degradation through tourism in Nepal.

– In: TUTING, L. & K. DIXIT (ED.)(1986): Bikas – Binas, Development –Destruction. Geobuch, München.

MOUNTAIN AGENDA (1999): Mountains of the World: Tourism and Sustainable Mountain

Development, prepared for the United Nations Commission on Sustainable

Development. Insittue of Geography, University of Berne (Centre for Development and

Environment) and Swiss Agency for Development and Cooperation. Paul Haupt AG

Berne.

NEPAL, S.K. (1997): Tourism Induced Environmental Changes in the Everest Region: Some Recent Evidence.

<http://www.panasia.org.sg/nepalnet/ecology/everest.htm>, 03/05/03.

NEPAL TOURISM BOARD (2000): Welcome to Nepal.

<http://www.welcomenepal.com/Brochure.asp>, 03/03/03.

SHERPA, A.R. (2002): Management of Community-Based Mountain Tourism: Case Study of

Makalu-Barun National Park, Nepal. News from the Australian Alps in IYOM2002.

SIKKIM BIODIVERSITY AND ECOTOURISM PROJECT (1997): The Eco-Trekker. Sikkim, India.

<http://www.mtnforum.org/resources/library/sikki97a.htm>, 11/02/03.

SPENCER, J.E. & W.L. THOMAS (1948): The Hill Stations and Summer Resorts of the Orient. –

In: Geographical Review 38.

THE INTERNATIONAL ECOTOURISM SOCIETY (1998): Ecotourism Statistical Factsheet.

<http://www.ecotourism.org/textfiles/stats.txt>, 11/02/03.

THE MOUNTAIN INSTITUTE ASIAN REGIONAL OFFICE (1999): Sikkim Biodiversity and Ecotourism: Summary, 1995-1998.

<http://www.mtnforum.org/resources/library/tmias99a.htm>, 11/02/03.

THE WORLD BANK (2002B): Nepal Development Forum. Economic Update 2002.

[http://lnweb18.worldbank.org/SAR/sa.nsf/Attachments/rpt/\\$File/econnp.doc](http://lnweb18.worldbank.org/SAR/sa.nsf/Attachments/rpt/$File/econnp.doc), 11/02/03.

TRADE AND ENVIRONMENT DATABASE (TED) (YEAR N/A): Himalaya Case Issue.

<http://www.american.edu/TED/HIMALAY.HTM>, 11/02/03.

UIAA (1997A): UIAA Ethical Code for Expeditions.

<http://www.mtnforum.org/resources/library/uiaa97b.htm>, 11/02/03.

UIAA (1997B): Recommended Code of Practice for High Altitude Guided Commercial Expeditions. <http://www.mtnforum.org/resources/library/uiaa97a.htm>, 11/02/03.

WALDER, G. (2000): Tourism Development and Environmental Management in Nepal: A study of Sagarmatha National Park and the Annapurna Conservation Area Project, with special reference to Upper Mustang. MSc Thesis, The International Centre for Tourism and Hospitality Management, Bournemouth University.