

Symposium I
CONSERVATION OF HIMALAYAN ENVIRONMENT

Preamble

- 09.30 Minister of State for Tourism on the Chair (Karna Sakya to co-ordinate)
- 09.35 Opening statement by the minister of tourism
- 09.45 Introduction by the UIAA President
- 09.55 Purpose of the Symposium (Ronald Meige)
- 10.05 Aspects of environmental conservation (D.D. Bhatt)
- 10.35 Mountain Protection (Lord Hunt)
- 10.50 Site Protection (G. Atanassov)
- 11.05 Energy Alternative (S. Tambe)
- 11.20 to
11.40 C O F F E E B R E A K
- 11.45 Points of Agenda (J. Vandevoorde)
- 12.00 Intervention and floor discussion (The Themes enumerated below) *
- 13.00 Concluding Remarks by the Chairman
- 13.10 to
14.30 Lunch at Hotel Everest Sheraton (NATA)
- 14.30 Joint meeting of both symposia for plenary session to be chaired first by Kumar Khadga Bickram Shah. Formation of six working groups out of all participants.
- 16.00 Reassemble for final plenary session to be chaired by the president of UIAA
- 18.00 Conclusion of the symposium

* THE THEMES

1. Information-education: actions to be taken in the countries of origin of the visitors, and in the countries of the Himalayas.
 2. Mountaineering code: complementary document, or supplementary pages to Trekking Permit through which the visiting mountaineer respects certain behaviour rules.
 3. Formation of specialists: extension of the function of the liaison officers concerning the protection of the environment, formation of specialists in welcoming and accompanying.
 4. Physical planning: opportunity of creation of fixed lodging poles, (camping, huts, etc.) in the most sensitive aereas. Networks of tracks and marking out, topo-guides.
 5. Energies, waste and consumer products: setting up of investigations concerning wood substituting energies, starting up collection circuits, processing and recuperation of waste, definition of the rules for commercialization of nutritious products and handicraft.
 6. Miscellaneous
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MOUNTAINEERING AND TREKKING IN NEPAL

by

Dr. Soorya Lal Amatya

UIAA SYMPOSIUM

on

PROBLEMS RELATED TO MOUNTAINEERING EXPEDITIONS

13th October 1982

KATHMANDU

MOUNTAINEERING AND TREKKING IN NEPAL

Dr. Soorya Lal Amatya*

Introduction

Mountaineering is a sport as well as an adventure. In ancient times people usually went to the high altitude areas of the Himalayas for the sake of holy pilgrimage and meditation. These people had a belief that the towering Himalaya peaks touch the heaven, as the ancient men in Europe regarded Olympus, Etna and Sinai as the home of gods.

Mountaineering expeditions are also organized for exploring new routes; surveying unknown areas and mountain peaks, scaling height, observing rare high altitude plants and animals, and for conducting a variety of scientific experiments at high altitude.

It is considered as an adventurous sport. It helps in development of physical fitness, keen observation, risk taking attitude, confronting difficult situation and in cultivating a team spirit. Like in other team sports, mountaineering is a group activity and for successful mountaineering expedition, team spirit and a good leadership are quite essential.

Mountaineering and Trekking have been of considerable importance in Nepal. These activities accounted for about 16.85 percent of the total incoming tourists in 1980¹/(Appendix I and III). Tourists who come for mountaineering and trekking stay in Nepal for longer period.

Mountaineering and trekking activities have been the leading factors to the development of tourism in Nepal. The total number of tourists visiting Nepal have dwindled for the last few years, but the total number of mountaineers and trekkers has been on the increase. For example, 29,500 people were given trekking permit in 1981 as

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against 13,891 people in 1976. About 80 mountain expeditions were organized to different Himalayan peaks in 1981 as against 11 expeditions in 1961 and 31 expeditions in 1971.

Mountaineering in Nepal Himalaya

The first Everest Expedition was organized in 1922 and a bold attempt was made to climb Everest from the Tibetan side. However, it failed to achieve its objectives. A series of reconnaissances and climbing expeditions were organized to subdue the highest peak, Mount Everest, from the Tibetan side. But all these expeditions failed to achieve their objective.

It was only in 1950, that mountain expedition teams were permitted in Nepal, and thus an important period of mountaineering began and continued upto 1964. The successful Annapurna Expedition in 1950 was a turning point in the history of mountaineering in Nepal Himalaya. The British team conquered Everest (29028 feet) in 1953.

With the climbing of Everest, mountaineering gained great publicity and reached its highest point of achievement. During the decade of 1950-1960, more than a hundred expeditions visited Nepal and climbed about 121 peaks of over 17,000 feet in height.

Since most of the important peaks of the Himalayas are on the border with Tibet the autonomous region of China, H.M.G. took a restrictive policy in granting permission to expeditions and trekking teams after the Sino-Indian War of 1962, and due to clandestine political activities of some expedition teams across the border in Tibet. A couple of expeditions were permitted to climb Everest. Large areas in the northern Nepal were kept as the restricted zone for foreigners. So permission was not granted to expeditions to some of the important peaks of the Himalayas. This policy continued upto 1968. This, indeed, was a great setback in the history of mountaineering in Nepal. In 1969 H.M.G./ Nepal opened only a few peaks for climbing and gradually other peaks were also opened for expeditions. Now there are four categories of 122 peaks opened for expedition. : a) 17 peaks

opened for Nepalese expeditions or joint Nepalese and foreign expeditions; b) 15 peaks opened for foreign expeditions only after it is climbed by a Nepalese and foreign joint expedition team; c) 72 peaks opened for foreign expeditions, and d) 18 peaks opened for trekking groups with permission from Nepal Mountaineering Association. (Appendix IV).

We can discern three distinct periods in the mountaineering history of Nepal Himalaya. Initial period from the later half of the 19th century to 1949. Surveying and reconnaissances were the leading activities of the period. Mountaineering endeavours were mainly focused on climbing Everest from the Tibetan side. However, Everest continued as a challenging target to mountaineers.

The second period of extraordinary mountaineering activity commences from 1950 to 1964. This period can be termed as a golden decade in the mountaineering history of Nepalese Himalaya since most of the high ranking peaks were climbed. The tools, methods and the way of mountain climbing were further improved during this period.

In the third period from 1969 to the present time, a large number of expeditions teams visited Nepal to climb the high ranking as well as the virgin peaks. New routes were taken to climb the higher peaks. New equipment were tested and experiments of wide variety were conducted at high altitude. The number of mountaineering expeditions increased substantially in this period. Everest has become a Mecca for the mountaineer from all over the world and it has been booked upto the 1988 climbing season. Including 1982 pre-monsoon season, there has been 25 successful expeditions on Everest and 127 have reached to the summit of Everest. Everest has been ascended twice in 1973, 1974, 1978 and 1980 and thrice in 1976, Manaslu has been climbed ten times. Peaks like Makalu, Dhaulagiri and Annapurna I have been climbed eight times. ^{3/} Most of the expeditions are organized to the Himalayan peaks in between Dhaulagiri in the west to Kanchanjunga in the east. There has been overcrowding of the expeditions to some of the main peaks of Khumbu Himal, Khumbakarna Himal, Ganesh Himal, Gorkha Himal, Annapurna Himal and Dhaulagiri Himal. Only a few expeditions were organized to the Himalayan peaks west of Dhaulagiri Himal. Kanjiroba Himal Saipal Himal and Byas Rikhi Himal in the far western Nepal

are generally considered inaccessible and it takes more than a month to establish the base camp. Communication to these Himalayan areas is also comparatively difficult. However to reduce the overcrowding in some of the Himalayan areas of eastern and western Nepal a series of new peaks should be opened and efforts are to be made to divert expeditions to far western areas.

Mountain Climbing Seasons:-

Two distinct seasons have been recognized for mountain climbing in Nepal: Pre-monsoon and post monsoon. The pre-monsoon season is slightly longer and the expedition teams usually begin their caravan journey in early March and the pre-monsoon season continues upto mid-June. Endeavours are made to climb the peaks in May and June. May and early June are generally considered the best period for high altitude climbing in Nepal Himalaya.

Post-monsoon season commences from September and continues upto mid-November. October and mid November are generally best months for high altitude climbing in this seasons. His Majesty's Government of Nepal has also given permission for climbing to some of the peaks in mid-winter. A few expeditions have been organized in mid-winter. There has been three successive expeditions to Mount Everest in mid-winter. Gradually the number of expeditions in mid-winter will increase in near future and mountain climbing season will be rather continuous for almost ten months from September to mid-June.

Trekking:

The number of foreign tourists visiting Nepal for trekking and mountain climbing has been increasing substantially. In 1981, 29,500 tourists were given permission for trekking and mountain climbing and it was about 18 per cent of the total tourists. The number of trekkers will most likely increase in the near future. At present the large percentage of trekkers go to Jomsom-Mukthinath and Everest areas. In 1980 about 36 per cent of the total trekkers went to Jomsom-Mukthinath area and about 21 per cent to Everest area. Quite a number of trekkers went to Helambu, Annapurna, Langtan Valley and Manang Valley.

(see Appendix II) However, overcrowding of trekkers has been noted in Jomsom-Mukthinath and Everest areas. Manang was opened for trekkers only a few years back and it has already attracted quite a number of trekkers. In 1980, 1813 tourists went to Manang for trekking purpose. Northern Taplejung-Olanchungola, Taragaon-Ringmo, Baitadi-Darchula, Chainpur-Baitadi and other high altitude places need to be opened as alternative areas for trekking. The trekkers should be permitted to

regulated arrangements. A number of trekking agencies should be encouraged to initiate arrangement for such trekking in the remote and restricted areas.

The trekkers have been found visiting different areas almost throughout the year. The monsoon period from June to August is generally considered as lean season and about 1020 trekkers went to remote trekking areas in 1980 which was only 3.7 per cent of the total trekkers in 1980. Large number of tourist usually go for trekking in the pre-monsoon and post-monsoon periods. More than 80 per cent of the total trekkers went for trekking in 1980 during these periods. (Appendix No II)

Socio-Economic Impact:

Quite a large number of Sherpas have been employed in mountaineering and trekking business. Some of them are professional high altitude climber and guides. These Sherpa are also good porters and provide a variety of services. In fact, some of the Sherpa villages like Namche Bazar, Khumjung, Pangboche, Kunde and Thame are generally considered as prosperous since the residents of these villages get their earning mainly from mountaineering and trekking. Quite a large number

Sherpas have gone into permanent travel and trekking business. At present there are 35 travel and trekking agencies as against a dozen in 1970 and three travel agencies in 1965.

Tourism has emerged as an important source of earning hard currency in Nepal. The total foreign exchange earning was US \$ 51 million in 1980-81 as against \$ 1.3 million in 1969-70 and \$ 78,000 in 1961-62. The average stay period of tourists has been 12 days in 1981.^{4/}

Due to influx of trekkers, mountaineers and general tourists there has been a considerable impact on traditional culture. Erosion of native culture, drug abuse and high inflations have been noted in the high remote areas. However, rural people have become more enlightened through the contact with foreign tourists and there has been some incentive in reviving the old art and handicraft products.

Physical Interferences:

Rush of mountaineer and trekkers has been noted in certain Himal areas which led to rapid deforestation along the routes and the high altitude areas. Already local people have to go longer distances for collecting fuel wood. The shortage of fuel wood, obviously will be a serious problem in near future. Man's interference through rapid deforestation has deformed the beautiful natural landscape and led

^{4/} Gurung, Harka, Tourism Development in Nepal, a paper presented at Symposium on Tourism Management held in March 8-12 1982, Kathmandu.

to aggravated landslides, soil erosion and avalanches. The alpinists, trekkers and the local people need to be encouraged to use alternative source of energy for domestic and commercial use.

The indiscriminate litterenes of cans, foodstuff and other waste materials along the route as well as at the base camp areas has polluted the environment and has been a problem of serious concern.

Ecological deterioration in Nepal has already been a problem of much concern. Mountain eco-systems are generally considered fragile because of continuous tectonic and geomorphic processes. 5/ Due to high altitude, steep slopes and rugged topography the mountain areas are more prone to destructive landslide and soil erosion. Highland areas in Nepal have comparatively higher densities of population, which, in turn, has caused rapid ecological deterioration.

Problems:-

There are a number of problems confronted with an increase of mountain expeditions and trekkers to Nepal Himalaya. Currently the total number of expeditions visiting Nepal each year has been slightly over 80. Expeditions are continuously organised to Mount Everest, Manaslu, Makalu, Annapurna, Dhaulagiri, Lho Tse, Kanchejunga and other leading peaks. Large number of trekkers also travel along the same routes.

- a) The caravan routes and the vicinity of the base camps have been polluted by indiscriminate throwing of the tin cans, foodstuffs and other waste materials.
- b) Overcrowding of expedition teams and trekkers in certain Himal areas has caused high inflation and rapid deforestation.
- c) The shortage of fuel-wood has been greatly felt in certain routes and high altitude areas.
- d) There has also been shortage of professional porters and this problem is quite acute particularly in the far western region and in the rest of the country during the peak seasons. In a way this has been a monopoly of the Sher community. People of other communities do not have the skill and will for high altitude climbing.

Tamangs and people of other community should also be employed in large numbers as high altitude porters and in trekking business.

- e) In recent years, the security of the trekkers and mountaineers has also been a problem of serious concern. Religious belief of the local people in certain areas has occasional created confrontation between the expedition team and the local community. Such opposition of the local community in certain high altitude areas has to be tackled very carefully by convincing them of the better earnings from their association with mountaineering and trekking business. Due to lack of helicopter and technical skill, rescue operation is inefficient.

In 1980 eighteen mountaineers died, out of which fifteen were foreign mountaineers and three local people. There were fifteen casualties in 1981 and ten casualties in 1982. 6/ To cope with this sort of problems, wireless communication^{need} is to be well established in some of the Himal areas the eastern and western Nepal. Helicopter service should be made available immediately for rescue operation and a number of people are to be trained and kept on standby for rescue operation.

- f) Frequently problems have been caused due to the weather condition. During the main tourist season from mid-fall through winter it remains often foggy in Kathmandu until 9.30 in the morning. In some of the mountain areas like Homosom and Lukla usually have strong windy condition by mid-morning. As a consequence the planes are forced to turn back causing inconveniences to the trekkers and other passengers.

Concluding Remarks:-

The numbers of tourists visiting Nepal for trekking and mountaineering purpose has been increasing and most likely this trend will continue in near future. In order to reduce the rush of trekkers and mountaineers in certain

6/ Source : Department of Tourism, H.M.G., Nepal.

Himalayan areas, new peaks be opened for mountain climbing and the trekkers should be given permission under regulated trekking to remote and restricted areas. A number of trekking agencies be permitted arranging such regulated trekking. Trekking and mountaineering will continue to be an important activity in providing employment to a large number of rural people in Mustang, Khumbu, Manang, Helambu, Langtang and Annapurna areas which are, indeed, very poor in agricultural resource. Financial loans be made available to rural people in such areas to produce green vegetables, fruits, poultry, dairy and the handicraft products for catering and meeting the needs of the trekkers and mountaineers. Internal services of RNAC to mountain areas should be further improved and strengthened by adding a number of Twin Otters, Pilatus Porters and helicopters to its fleet. Quite recently with the amalgamation of Civil Aviation and RNAC under the ministry of Tourism, better co-ordination and further improvement in air service can be expected and a good prospect lies ahead for the development of trekking and mountaineering in Nepal.

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Appendix I/*

Nepal-Tourist Arrivals 1962-1981

<u>Year</u>	<u>Total Number Tourist</u>	<u>No. of Tourist (Non-Indian)</u>	<u>Percentile Change (Non-Indian)</u>
1962	6,179	-	-
1966	12,567	-	-
1970	45,970	-	-
1974	89,838	72,601	
1975	92,440	74,559	-3.5
1976	105,108	85,769	-15.0
1977	129,329	106,277	-24.0
1978	156,123	125,636	-18.2
1979	162,276	124,753	-0.7
1980	162,897	122,285	-2.0
1981	161,669	-	-

/* Source : Annual Statistical Report, 1980, Department of Tourism.

Appendix II

Number of Trekking Permit Issued in 1980/*

<u>Trekking Routes</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov.</u>	<u>Dec</u>	<u>Total</u>
Everest Trek	121	368	943	953	177	17	15	23	186	1397	1006	636	5836
Helambu	96	196	378	301	115	18	35	39	85	979	296	281	2819
Langtang Valley	40	50	154	184	72	17	7	24	63	337	215	131	1294
Jomsom	538	972	1479	1344	557	84	123	187	547	1858	1260	1070	10019
Rara	-	-	-	-	1	-	-	-	1	14	-	-	16
Annapurna	165	95	336	226	66	20	27	49	137	660	344	375	2500
Manang	44	38	217	197	20	42	86	105	161	545	250	108	1813
Others	149	285	535	421	129	50	34	18	182	554	314	492	3163
Total	1153	2004	4042	3626	1131	248	327	445	1362	6344	3685	3093	27460

Source : Annual Statistical Report 1980, Department of Tourism,
H.M.G.p.43

Appendix III

Number of Trekking Permit Issued in 1976-1980/*

<u>Year</u>	<u>Jan.</u>	<u>Feb.</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
1976	834	1063	2113	1659	412	74	112	170	913	2756	1735	2050	13891
1977	1051	1073	2444	1633	628	170	280	284	1162	3947	2489	2070	17231
1978	1135	1822	3308	2598	900	156	362	433	956	4800	2962	2487	21919
1979	1320	1980	3214	3582	1013	362	406	418	1161	2900	2110	1402	19868
1980	1153	2004	2042	3626	1131	248	327	445	1362	6344	3685	3093	27460
1981	1619	2012	4157	3840	1288	511	289	514	1604	5989	4697	2980	29500

*/ Source: Annual Statistical Report, 1981, Department of Tourism, H.M.G., Nepal.

Appendix IV

List of mountaineering and trekking peaks

A. Peaks opened for Nepalese expeditions or joint Nepalese and foreign expeditions consisting at least three Nepalese members :-

<u>S.No.</u>	<u>Name of the peak</u>	<u>Height in meter</u>	<u>Geographical Location</u>	<u>Administrative Zone</u>
1.	Bhrikuti	6,720	Damodar Himal	Dhaulagiri
2.	Big White Peak	7,083	Langtang Himal	Bagmati
3.	Chamar	7,177	Sringi	" Gandaki
4.	Changla	6,715	Gorakh	" Karnali
5.	Dorje Lakpa	6,990	Jugal	" Bagmati
6.	Gurza Himal	7,193	Dhaulagiri	" Dhaulagiri
7.	Gyachung Kang	7,922	Khumbu	" Sagarmatha
8.	Gyalzen Peak	6,705	Langtang	" Bagmati
9.	Jongsang Peak	7,473	Janak	" Mechi
10.	Keryolung	6,681	Khumbu	" Sagarmatha
11.	Lantang Ri	7,239	Langtang	" Bagmati
12.	Madiya Peak	6,800	Jugal	" "
13.	Nala Kankar	6,935	Chandi	" Karnali
14.	Nepal Peak	7,168	Janak	" Mechi
15.	Omi Kang Ri	7,922	"	" "

B. Peaks opened for foreign expeditions only after it is climbed by a Nepalese and foreign joint expedition Team :-

1.	Bobaye Himal	6,808	Byasrikshi Himal	Mahakali
2.	Chamlang	7,319	Khumbu "	Sagarmatha
3.	Cheo Himal	6,812	Gorkha "	Gandaki
4.	Cho-Oyu	8,153	Khumbu "	Sagarmatha
5.	Ganesh Himal I	7,406	Ganesh Himal	Bagmati
6.	" III	7,132	" "	"
7.	" V	6,950	" "	"
8.	Himlung Himal	7,126	Gorkha Himal	Gandaki
9.	Jethi Bahurani	6,849	Byasrikshi Himal	Mahakali
10.	Kangchenjunga Central	8,496	Kangchenjunga Himal	Mechi
11.	Kangchenjunga South	8,490	" "	" "
12.	Lhotse Shar	8,383	Khumbu Himal	Sagarmatha
13.	Ngozumba Kang	7,806	" "	"
14.	Roc Noir	7,485	Annapurna Himal	Gandaki
15.	Shartse Himal	7,502	Khumbu "	Sagarmatha

C. Peaks opened for foreign expeditions:-

1.	Ama Dablam	6,856	Khumbu Himal	Sagarmatha
2.	Annapurna I	8,091	Annapurna Himal	Gandaki
3.	" II	7,937	" "	"
4.	" III	7,555	" "	"
5.	" IV	7,525	" "	"
6.	" South	7,237	" "	"
7.	Api	7,132	Byasrikshi Himal	Mahakali
8.	Baruntse	7,220	Kumbakarna "	Koshi
9.	Baudha	6,672	Gorkha "	Gandaki
10.	Chobuje	6,689	Rolwaling "	Janakpur
11.	Cholatse	6,440	Khumbu "	Sagarmatha
12.	Cho Polu	6,734	" "	"
13.		7,375	Dhaulagiri "	Dhaulagiri

14.	Dhampas	6,012	Dhaulagiri Himal	Dhaulagiri
15.	Dhaulagiri I	8,167	" "	"
16.	" II	7,751	" "	"
17.	" III	7,715	" "	"
18.	" IV	7,661	" "	"
19.	" V	7,618	" "	"
20.	" VI	7,269	" "	"
21.	Sagarmatha	8,848	Khumbu "	Sagarmatha
22.	Fang	7,647	Annapurna Himal	Dhaulagiri
23.	Ganesh Himal II	7,150	Ganesh "	Bagmati
24.	" " IV	7,102	" "	"
25.	Gangapurna	7,454	Annapurna "	Gandaki
26.	Gauri Shankar	7,150	Polwaling "	Janakpur
27.	Glacier Dome	7,193	Annapurna "	Gandaki
28.	Hanging Glacier Peak	6,500	Kanjiroba "	Karnali
29.	Himalchuli	7,893	Gorkha "	Gandaki
30.	" North	7,371	" "	"
31.	" West	7,540	" "	"
32.	Hongde	6,556	Mukut "	Karnali
33.	Jagdula	5,785	Kanjiroba "	"
34.	Jannu	7,710	Kangchenjunga Himal	Mechi
35.	Junction Peak	6,139	Kanjiroba Himal	Karnali
36.	Kangbachen	7,902	Kangchenjunga Himal	Mechi
37.	Kagmara I	5,960	Kanjiroba Himal	Karnali
38.	Kande Hiunchuli	6,627	" "	"
39.	Kangchenjunga(main Peak)	8,598	Kangchenjunga Himal	Mechi
40.	Kanguru	6,981	Hemlung Himal	Gandaki
41.	Kangtega	6,809	Khumba "	Sagarmatha
42.	Kanjerulwa	6,612	Kanjiroba Himal	Karnali
43.	Kanjiroba	6,882	" "	"
		6,853	Polwaling "	Janakpur

45.	Lamjung Himal	6,986	Annapurna Himal	Gandaki
46.	Langshisa Ri	6,300	Langtang Himal	Bagmati
47.	Langtang Lirung	7,246	Langtang Himal	"
48.	Lhotse	8,511	Khumbu "	Sagarmatha
49.	Lobuche West	6,145	" "	"
50.	Makalu	8,481	Kumbhakarna Himal	Koshi
51.	Maklu II(Kangchungtse)	7,680	" "	"
52.	ManapathiHimal	6,380	Dhaulagiri "	Dhaulagiri
53.	Manaslu	8,156	Gorkha "	Gandaki
54.	Manaslu North	7,157	Gorkha Himal	"
55.	Nampa	6,754	Btasrikshi "	Mahakali
56.	Nilgiri Central	6,940	Annapurna "	Dhaulagiri
57.	" North	7,061	" "	"
58.	" South	6,839	" "	"
59.	Numbur	6,954	Khumbu "	Sagarmatha
60.	Nuptse	7,879	" "	"
61.	Patrasi	6,860	Kanjiroba "	Karnali
62.	Peak 29 (Kakura)	7,541	Gorkha "	Gandaki
63.	Pumori	7,145	Khumba "	"
64.	Putha Hiunchuli	7,246	Dhaulagiri "	Dhaulagiri
65.	Saipal	7,031	Saipal "	Mahakali
66.	Sisne Himal	6,945	Kanjiroba "	Karnali
67.	Sita Chuchura	6,611	Dhaulagiri "	Dhaulagiri
68.	Taboche	6,542	Khumbu "	Sagarmatha
69.	Thamserku	6,623	" "	"
70.	Tilicho	7,132	Annapurna "	Gandaki
71.	Tukuche Peak	6,920	Dhaulagiri "	Dhaulagiri
72.	Yalung Kang	8,420	Kangchenjunga "	Mechi

D. Peaks opened for trekking groups with permission from Nepal Mountaineering Association:-

3.	Tent Peak (A)	5,500	Annapurna Himal	Gandaki
4.	Hiunchuli	6,337	" "	"
5.	Fluted Peak	6,390	" "	"
6.	Ramdung	6,021	Rolwaling "	Janakpur
7.	Pharchamo	6,282	" "	"
8.	Mere Peak	6,431	Khumbu "	Sagarmatha
9.	Mehra Peak	5,820	" "	"
10.	Kusum Kangru	6,369	" "	"
11.	Gangja La Chuli	5,800	Langtang Himal	Bagmari
12.	Pokhaldé	5,806	Khumbu "	Sagarmatha
13.	Mardi Himal	5,555	Annapurna "	Gandaki
14.	Lobuje	6,119	Khumbu "	Sagarmatha
15.	Kangde	6,134	" "	"
16.	Pisang	6,091	Manang District	Gandaki
17.	Chulu West	6,630	Manang "	"
18.	" East	6,200	" "	"

Actors

Norval - Study of Ecosystems functioning

- localization - quantification of stress impact
- integrated dev. and soft technology
- forestry - agriculture - waste / garbage use
- education & teaching



Mountainneers

- impact zone - hills & mountains
- participation in environmental study
- conservation and landscape authenticity

a) sensibilization of teachers & tourist

b) rules & regulations

- importation fuel
- exportation of waste
- controlled use of local resources
- protection of local habit / for where
- limited access zone (birds breeding)
- concentration of paths
- vulnerability map (vegetation, soil, water)

c) surveys

d) communications of observations to scientists

et

- charbon de bois, oil acids fuels + replantation
- pb de points

1) 3 scenarios,

-> tourism
-> plantations

"learning by doing"

Alpine German Club.

Rosetta

- redon in previous le + sde = Amantour
- tourists légers ne paissent pas
- climbing villages ont installé 100th
- on a construit un camp le br
- > le contrôle de la route
- > la instance sur la vicinité de protège

NE, Tafelberg

round mountain

Phoksondo lake

Kamp chengra area