Environmental Threats

Despite their height and inaccessibility, the Karakorum mountains have not been immune from the environmental pressures which threaten other mountain areas. In fact, this very height and inaccessibility may yet prove to be the region's undoing, through the challenges which it poses to modern youth. Thus all-too-numerous and lasting signs of human prevalence include empty bottles and food containers, polyethylene bags, and discarded mountaineering gear, left behind by trekkers and mountain climbers, exemplify one of the major threats to the once-pristine mountain slopes. Of these, the bottles, containers, food packages, and plastic bags, are perhaps the most environmentally damaging, though the depletion of vegetation also poses a grave threat to the area's delicate ecological balance. In fact, a study commissioned in 1991 declared K-2 to be the world's most polluted mountain. No one disputes that there will have to be stricter vigilance of all mountain climbing and trekking expeditions thereto if K-2 and the Karakorums are to retain their beauty and grandeur.

Such vigilance, however, is not easy to impose — especially when mountain climbing and trekking bring in much-needed foreign exchange to the national exchequer. According to a newspaper report dated 14 January 1991, Pakistan earned 3 million rupees (US $100,000) in foreign exchange from 65 mountaineering and 68 trekking parties with totals of 449 and 450 members, respectively, in 1990. Experts feel, however, that declaring the area a national park will at least allow for closer monitoring and control of the teams that arrive to scale the mountain or trek locally.

Lack of Permanent Habitation

Despite the problems caused by mountain climbers and trekkers, the rugged terrain and severe climatic conditions have ensured that the Central Karakorum mountain range remains devoid of permanent human habitation. Infrastructural facilities are non-existent: there are no roads, no villages, and no man-made structures other than a few stone shelters (used by shepherds during the summer grazing season) within the area which is to be nominated as a World Heritage Site (*see* below).

The only exception to the area's undisturbed quality is the presence of Indian and Pakistani troops in the Siachen glacier area. The site is the subject of a long-running dispute between the two countries, both of which claim it as their own. The glacier lies at an altitude of about 20,000 feet (nearly 6,000 metres) and is often called the world's highest battlefield. Though the damage to the environment is most likely to be negligible, there remains the question of removing the weaponry and debris if and when any fighting ceases. Talks between the two countries have so far proved inconclusive and there has been no withdrawal of troops; so at present the situation remains static.

The wildlife content of the region is not of exceptional significance due, in part, to hunting. Remnant populations of Urial sheep (*Ovis* sp.), Markhor goat (*Capra* sp.), and Snow Leopard (*Panthera uncia*), are to be found on the subsidiary valleys leading to the region.

IUCN Involvement

The World Conservation Union (IUCN) has been deeply involved in the initiative to set up a park in the Karakorums. Some time ago, reacting to a request made by the Government of Pakistan through its National Council for Conservation of Wildlife, IUCN dispatched a two-man team to assist in the selection of a natural site in Pakistan for World Heritage nomination. The team, which consisted of Dr James W. Thorsell (IUCN's Senior Adviser on World Heritate) and Abdul Latif Rao (Programme Director of IUCN–Pakistan), spent two weeks in the Karakorums, assessing the area as a potential World Heritage site. As a result, the mission concluded that '... the Central Karakorum is the most outstanding mountain landscape in Pakistan worthy of nomination.' The mission's report and proposal was then sent to the Government of Pakistan, and IUCN offered its assistance in taking the process forward.

Now that the Prime Minister of Pakistan has finally approved the proposal to establish a National Park in the area, IUCN has been asked to compile background information on the resources of the site, to establish contact and consult with user groups (local village councils, private trekking agencies, mountaineering groups, conservation organizations, etc.), and to convene a workshop to review legal issues, demarcate boundaries, and identify key management priorities. This will serve as the basis for the management of the national park and for the World Heritage nomination, as well as for planning the initiation of essential field activities at key pressure-points. In the words of Dr Thorsell, 'This could be the best thing that has happened to the Karakorums in a long time.'

RICARDO BAYÓN
Information & Public Relations
IUCN–The World Conservation Union
Rue Mauverney 28
1196 Gland
Switzerland.

Prague Declaration

In the name of its members, Chairman Horst Niemeyer, Vice-Chairman Michael Brophy, and Director Dr John Richardson, of the European Foundation Centre (EFC), convening in Prague, capital of the Czech Republic, on 9 November 1993 signed the following document, indicating that it:

- *Reaffirms* the unique role played by independent funders in building a just, equitable, and sustainable, civil society in the New Europe;
- *Acknowledges* the paramount importance of openness, integrity, self-regulation, and control, within the rule of law in democratic society; and
- *Calls* upon governments and European and international institutions to provide a coherent legal and fiscal framework to support and regulate foundations and associations.

The European Foundation Centre and its independent funder members *are committed to*:

- *Defence* of fundamental human rights and freedoms;
- *Advocacy* of individual responsibility and participation for public benefit;
- *Development and promotion* of swift, flexible, coordinated, and effective, responses to specific social, cultural, environmental, educational, scientific, health, and economic, challenges which governments alone cannot address;
- *Global* and cross-frontier funding initiatives irrespective of size;

- *Structured* exchanges of ideas and dissemination of information on funding practice, administration, governance, and corporate community investment;
- *Reinforcement* of the infrastructure of citizens' associations by the establishment of training, research, and self-help, programmes and facilities to underpin and stimulate organized independent funding; and
- *Respect for* openness and accountability within the rule of law.

By providing resources and undertaking operational projects, independent funders promote innovation, flexibility, diversity, and voluntary citizen involvement. They have a proven ability to reach out to disadvantaged, minority, and marginalized, groups. They make a key contribution to the creation of open, democratic society and provide both the means and the motivation for active and compassionate citizenship.

To ensure a dynamic and accountable independent funding sector free from narrow national or other interests, the European Foundation Centre therefore calls on governments and European and international institutions to take all appropriate action to:

- *Uphold* the right of citizens to form new foundations and associations;
- *Acknowledge* a strong independent sector as an essential component of open civil society;
- *Encourage* individual and corporate community involvement; and
- *Promote* funding partnerships between the public, private, and voluntary, sectors.

Courses on Life-zone Ecology and Tropical Dendrology Offered by the Tropical Science Center, San José, Costa Rica

Classification of the Earth's ecosystems and ecocomplexes affects many aspects of both ecological and geographical sciences. Additionally, the identification of plants is closely related to the classification of ecosystems which on land are largely characterized by their plant components. From an academic perspective both subjects are crucial, as they form the basis for sustainable resource management and biodiversity preservation.

Dr L.R. Holdridge's Life-zone Ecology classification system and Tropical Dendrology (a system to identify forest trees) have been used by scientists and other professionals in the tropics for more than 30 years. Furthermore, based on the Life-zone Ecology system, several practical, sound applications have been developed by the Tropical Science Center to be used in rural development, sustainable resource management, watershed management, land-use capability, assessment of environmental impact, territorial zoning, and ecosystem characterization in protected areas.

Recently, the United States National Atmospheric and Space Agency (NASA) prepared an earth map of life-zone ecosystems which has been used to monitor and predict vegetation changes due to the increase in atmospheric CO_2 (the so-called 'greenhouse effect'). Also, in 1992, the World Conservation Monitoring Centre (WCMC), located in Cambridge, England, gave strong support to the Holdridge Life-zone system by including it in their official publication 'Global Biodiversity: Status of Earth's Living Resources'.

Upon participating in the Life-zone Ecology course, students should have gained enough knowledge to implement sound, practical applications of the system to activities as mentioned in the preceding paragraphs. After attending the Tropical Dendrology course, students should be accomplished at identifying a large proportion of tropical trees and shrubs down to family, genus, and in some cases species. Successful course participants will also gain special skills enabling them to continue making progress on their own upon returning to their respective countries.

Courses last for 3 weeks and will be offered in 1994 from March 21 to April 8 (Dendrology), and from April 25 to May 13 (Ecology). Costs will be US $2,500 for Tropical Dendrology and US $2,700 for Life-zone Ecology (please note that these amounts include accommodation but not airfares). For additional information, please contact the undersigned.

HUMBERTO JIMÉNEZ SAA
Tropical Science Center
P.O. Box 8-3870
San José 1000,
Costa Rica.
Tel. (506) 252649
or 533267
Fax (506) 534963

Bay of Bengal Islands' Population and Environment Future: An Urgent Appeal

The Andaman and Nicobar Islands are situated in the Bay of Bengal, have a total geographical area of 8,294 sq. km, are bestowed with one of the world's richest ecocomplexes of forest, marine, and mangrove, maintaining partly- or completely-closed systems of energy, nutrients, and fresh water. These Islands harbour an irreplaceable gene-pool of many interesting endemic plants and animals, unique to the islands and confined to some specified areas representing Indo–Chinese and Indo–Malayan elements.

The ecology of the Andaman and Nicobar Islands is fragile and very sensitive to population growth. The present human population of about 0.3 million already exceeds the absolute carrying capacity of 0.25 million of these islands, while the projected population of 0.45 million or even more in AD 2000 is estimated to make annual demands of 442 thousand million litres of water (both drinking- and irrigation-) and 0.9 million tonnes of firewood. Intensive agriculture over 500 sq. km would require 8,500 tonnes of fertilizers and 275 tonnes of pesticides for optimum yield. The consumption of petrochemicals for power and transport would be 50% more than the present annual consumption of 38 thousand million litres of petrol and 37.5 thousand million litres of high-speed diesel oil.

The ultimate target of the exploding population is to clear virgin forest to meet the requirements of agriculture, firewood, settlements, fodder, etc. — leading to the extinction or threatening of the survival of endemic flora and