

Last Chance to Save Olive Ridley Sea-turtles in India*

As early as 1977, a note of caution was sounded regarding extinction threats to sea-turtles at Gahirmatha, in the coastal strip of the 70 km² Bitarkanika Wildlife Sanctuary, Orissa State, India. It was pointed out that the once-common and familiar Olive Ridley Sea-turtle (*Lepidochelys olivacea*) seemed to be losing its fight for survival — ironically enough, in one of the world's largest rookeries (Davis *et al.*, 1978). Olive Ridley Sea-turtles are considered as *endangered* in the Red Data Book of the World Conservation Union (IUCN).

Gahirmatha in India is one of the four vital *arribada* (Spanish for arrival, for mass nesting) beaches left in the world — where tens of thousands of Olive Ridley Sea-turtles arrive ashore to lay their eggs within the space of a few days. Females lay about 100 or more eggs at a time on sandy beaches. Two such frequented beaches are left on the Pacific coast of Costa Rica and another on the Pacific coast of Mexico. Mexico's other nesting sites have been almost decimated during the present century.

Gahirmatha in Orissa is the only site in the world where more than half a million (actually an estimated 610,000) females laid eggs during a single week in March 1991. No other spot has such a unique distinction of sea-turtle nesting. The year 1992 witnessed 320,000 and the emerging hatchlings from this nesting were 35,000,000.

However, the Gahirmatha sea-turtle population is to face very serious threats. For the Government of India intends to develop, about 10 km from the beach, a major fishing port for shrimp trawlers, a processing plant, and a large-scale prawn culture facility, with establishment of a road through the local mangrove — which is linked with the food-chain for the turtles (Eckert & Eckert, 1993).

The road problem could be avoided as road facilities exist at nearby Paradeep and Dhamara. Otherwise it could end the nesting site which has no parallel globally. Is there a possibility of increasing the capacity of existing harbours? The planned jetty is expected to take care of around 500 mechanized fishing boats and shrimping trawlers, and it should be remembered that fishing gear takes a heavy toll of adult sea-turtles.

* Presented in the Workshop held on 18–19 December 1993 to discuss the methods of saving our protected areas, held at the M. S. Swaminathan Research Foundation, Madras 600 113, India.

The following are questions that should be considered by the concerned authorities and the legion of Nature lovers in India and elsewhere in the world:

- Is the major port for fishing to have only a mild effect on sea-turtles nesting just 10 km away?
- Is it possible to impose regulations to save sea-turtles?
- If tourism is made profitable, will it contribute to the economy of the area?
- If protein for people is to be harnessed, why ruin the very resource that builds up huge numbers of excess turtle eggs every year (for example, those dug up by turtles nesting later)?
- Shall we ever be able to bring back populations of sea-turtles when once they have been destroyed?
- Why has the Government not cared to initiate studies on the environmental impact of its plans and make the findings public?
- Has the Government any policy on sea-turtles?
- Have we ever realized the ravaging mortality-rates of sea-turtles from incidental catches by shrimpers?

It is a pity that India seems keen to undertake what could amount to abandoning the world's largest aggregation of Olive Ridley Sea-turtles at Gahirmatha. Hence, the Author earnestly seeks global environmental and conservation support to ensure that the world's largest nesting-ground of Olive Ridley Sea-turtles, finding shelter at the Gahirmatha habitat in Orissa State, are given a new lease of life — especially as the species is threatened with extinction.

REFERENCES

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Pakistan to Protect 'Throne-room of Mountain Gods'

Reacting recently to environmental pressures on one of the most outstanding mountain regions in the world, the then caretaker Prime Minister of Pakistan, Mr Moeen Qureshi, approved in principle the declaration of a new national park in the Central Karakorum mountains in Baltistan. The area, better known as Concordia, contains the greatest concentration of high peaks in the world, including K-2, the world's second-highest mountain.

The Karakorums, along with the Pamirs, the Hindu Kush, the Kun Lun, and the Himalayan ranges, intersect to form a complex geographical feature known as the Pamir Knot. This phenomenon, which is the result of a 'collision of continents', has resulted in the formation of the world's loftiest and most dramatic example of mountain-building, which has been well-called 'The Throne-room of the Mountain Gods'. The ongoing geological evolution of the area is of exceptional scientific interest.

Together with the Himalayan ranges, the Karakorum range accounts for 96 of Earth's 109 highest mountains. Baltistan alone contains 10 of the world's 30 highest peaks. The area not only boasts some of the finest alpine sights in the world, but is also the home of the greatest extent of glaciers outside the polar regions, namely the Siachen (74 km), the Baltoro (58 km), and the Biafo/Hispar glaciers (59 km).

K-2, which is short for Karakorum 2, rises to a height of 8,611 metres and earned its peculiar name because it was the second peak measured by Colonel T.G. Montgomerie, who 'discovered' it in 1856. A recent geological report speculates that over the next 100 years, the height of K-2 will approach that of the Mount Everest, the highest peak in the world. This calculation is based upon the phenomenon of the upthrust of land which could result in the rise in height of the mountain over the time-span of a century.

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 Heritage) 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.'

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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;