

Feature

Environment

WORLD PARKS UNDER THREAT

by Sheila Davey

ILLEGAL drug production, mining, oil exploration, acid rain, tourism, military installations, pesticides and poisons are all taking a heavy toll of some of the world's most prized nature reserves. In the latest update of its threatened parks register, the International Union for the Conservation of Nature and Natural Resources (IUCN) Commission on National Parks and Protected Areas (CNPPA) lists a total of 107 parks in 64 different countries. Just recently, another sixteen of the world's parks and reserves have been added to the register of protected areas at risk. "If corrective actions are not taken," warns Mr Jim Thorsell, Executive Officer of the Commission on National Parks and Protected Areas, "the basic integrity of the natural heritage of each of the areas will be lost."

An increase in human activity in the watershed is believed to have exacerbated the problem. Kaziranga has been on the CNPPA list before — but for different reasons. It was listed in 1987 because of heavy rhino poaching and plans to build a railway, but was removed when these threats were averted. In Nepal, a section of the Royal Chitwan National Park could be flooded if plans for an irrigation project go ahead. It is feared that the climate and wetlands of the park would also be affected. A Japanese construction company has already established a camp to begin work on the scheme, which would use 75 per cent of the base flow of the East Rapti River. There are also plans to build a dam which would flood part of the park. The 30-million-dollar project, which is being financed by the Asian Development Bank, was initiated in 1976 when Environmental Impact Assessments were not required and the bank still supported this kind of development. The Nepal Government and the Bank are now reconsidering the project after an intervention from the World Heritage Committee. In the Philippines, the Tubatuba National Marine

Park has been stripped of half its coral reef cover over the past five years, because of destructive and illegal fishing methods. The use of explosives to stun fish has reduced many coral areas to rubble, says the CNPPA. The coral reefs have also been damaged by use of sodium cyanide poison to catch ornamental fish for the aquarium trade. The poison is used to knock out the fish which then float up to the surface. Many are killed by the poison, others die at a later stage. In the meantime, the coral reef is steadily being destroyed. Other threats to marine life include the collection of sea turtle and seabird eggs and the removal of giant clams by migrant fishermen and the use of tourist diving boats. The Doi Inthanon National Park in Thailand is facing a variety of threats — mainly because of a big increase in the size of the hill tribes who live there. The land has been degraded by bad farming practices and many of the park's large animals have been killed by hunters. Fifteen per cent of the park area has been cleared to grow opium poppies and other crops. Heavy doses of DDT and other pesticides are used by farmers, and extensive slashing and burning has caused degradation of the wa-

terland. Three parks in Eastern Europe are also causing concern. In Poland, nine national parks are severely threatened. Worst is the Ojcow National Park near Krakow, where more than a third of species are now endangered. Over the past 90 years, 43 floral species alone have disappeared. Levels of sodium dioxide, the main cause of acid rain, are ten times higher than in other protected areas. Pollution from industry, farming and construction for a burgeoning tourist industry are major problems. In neighbouring Czechoslovakia, the Low Tatra National Park is threatened by plans to increase ski facilities and by a cellulose plant which is causing serious air pollution. In Bulgaria, the Pirin National Park is affected by plans to divert water from the Mesta River — creating dams and spillways. In Latin America, many parks are used by illegal coca producers. The Tingo Maria National Park has been literally invaded by growers and traffickers, says the CNPPA. Large tracts of forest have been cleared, and toxic chemicals used in making cocaine are discarded at random.

The other listed parks include: the Himschari National Park in Bangladesh — reduced to a biodiversity disaster area because of illegal removal of timber; the Gulf Kutch Marine National Park in India — depleted by harmful fishing techniques and affected by industrial pollution; the now-overpopulated Kirthar National Park in Pakistan; the Khao Sam Roi Yot National Park in Thailand — threatened by aquaculture, tourism and poaching; the Ras Mohammed Marine National Park in Egypt — damaged by tourism, waste dumping and oil pollution; the Pembroke Coast National Park in Britain which could become the site of a military installation; the Montez Azules Biosphere Reserve in Mexico — where both the remaining rainforest cover and local Indian culture are fast disappearing; the St Lucia Game Reserve in South Africa — threatened by plans to dredge-mine titanium and other heavy metals along the sand dunes. The CNPPA list is published annually in an effort to persuade governments to block developments which would threaten the survival of protected areas. If the threat is removed, the park is taken off the list. — WWF Feature.

Belated Move to Save Forests

South-east Asian governments are belatedly applying the brakes on logging to save their rapidly dwindling forests. S Sivam of IPS reports.

ALARM bells on the destruction of the world's last tropical rainforests are finally being heard — and heeded — by governments in South-east Asia. After years of warnings and criticisms from environmental groups, the governments of Indonesia, Thailand, Malaysia and the Philippines are belatedly applying the brakes on logging. The Philippines, struggling to save its rapidly dwindling tropical forests, will ban logging in what is left of its virgin forests starting January next year, the government announced recently. The country has adopted a 25-year master plan for forestry development, funded by the Asian Development Bank (ADB) and the Finnish International Development Agency, which an environmental official has described as "25 years too late". Only about 800,000 ha of the country's virgin forests remain, down from 922,000 last year. An estimated 50 per cent of this area is within logging concessions owned by timber licence holders. Malaysia, known for hitting back angrily at critics of its logging policies, has for the first time required its states to make a public accounting of remaining forest reserves and taken an unequivocal stand on the need to conserve forest resources. Kuala Lumpur did not find out until late April that at least four states had been over-logging their forests by 300 per cent in the last five years. Primary Industries Minister Lim Keng Yaik said. The states have been asked to drastically cut down on their logging rate beginning this year to make up for the loss, Lim added. After suffering the worst floods in its history because of uncontrolled logging, Thailand imposed a permanent nationwide ban on logging in January 1989. Indonesia, which banned log exports back in 1985, has imposed stiffer penalties for loggers flouting the ban — 10-year jail terms and fines of up to US\$250. The alarming rate of deforestation in South-east Asia has become a cause of concern worldwide but has been downplayed by governments. The forests are a renewable natural resource and there is a necessity to exploit them to develop the agriculture and agro-based sectors of their economies, they contend. "For the sake of humanity, we are willing to keep our jungles intact, unexploited and left alone, although it will deprive our people of an important source of livelihood," Joseph Patrin Kittingan, chief minister of Malaysia's Sabah state, said speaking at a recent forest day observance. "But what will we get in return? Are developed countries willing to pay us compensation?" he asked. South-east Asian countries have also maintained that there is no cause for worry because the logged areas are being replanted. Only lately have the authorities become convinced that a significant percentage of the loggers who have won concessions fail to stick to the areas allotted or to the species of trees permitted to be logged. Forests cover 600 million ha or about 32 per cent of the total land area of the Asia-Pacific region, making up a

quarter of the world's forest resources. Half of these are located in South-east Asia. Malaysia and Indonesia are the world's top exporters of tropical timber and plywood, while the Philippines and Thailand have already banned timber exports because of severe depletion. "At current rates of harvesting, the remaining timber reserves in Asia would last for less than 40 years," according to the Manila-based ADB. At the present rate of logging, Malaysia will become a net importer of timber by 1995 to meet the needs of the timber industries, according to a World Bank report. Indonesia fears that supply for the local timber industry will dwindle by the end of the decade the industry is Indonesia's third largest after oil and gas. Wood product exports last year earned US\$3.6 billion. Indonesian authorities estimate about 20 million ha of forests have been lost. President Suharto said his government will need US\$300 million dollars to reforest some 300,000 ha annually. At this rate it will take 65 years for the whole 20 million ha lost to be reforested, officials say. Malaysia will begin awarding logging concessions based on production volume instead of just area size alone to enable the authorities to have better control of the amount of logs being brought out of the jungle. Kuala Lumpur is also considering buying helicopters for aerial checks on illegal logging activities, according to Deputy Prime Minister Chafar Baba, who is also chairman of the National Forestry Council.

NEW DELHI: It is estimated that 17 million hectares of forests, one-and-a-half times the size of Austria, disappear annually from the face of the earth.

Of this number, India contributes nearly a million hectares, an alarming loss that has made local forestry officials running to their drawing boards.

They have come up with a new scheme called the National Forest Action Plan which will concentrate on the greening of the degraded forest areas of the country. Based on the Food and Agriculture Organisation (FAO) tropical forest action programme, it will involve local communities and non-governmental organisations (NGOs).

The new afforestation scheme is good news for NGOs and other voluntary agencies. Before its inception, the forestry programme had been highly centralised.

According to Mr. P. Dass, an NGO activist heavily involved in the campaign for the right of local communities to devise their own afforestation projects, "the forest departments all over India had inherited the colonial attitude of the British Raj. Each forestry project was a closed-door activity. Government control was total. The local communities had no

Expansion in all forms of agriculture is the main reason for forest loss in India

by Prakash Chandra

New Delhi Draws Up Forest Action Plan

say and the government will always prevailed." It is a whole new ballgame today. State forest secretaries will launch programmes to involve village communities in afforestation. This will mean the revival, restoration and development of degraded forests. In addition, foreign aid funds which were exclusively used for social forestry projects outside the forest areas will now be used specifically for the maintenance, management and development of the forests themselves.

Each state government has been asked to prepare its own afforestation plan and each specific project will qualify for special assistance. At the same time, existing social forestry projects in such states Tamil Nadu, Orissa and Bihar, which get financial assistance from the Swedish International Development Agency, will be combined with the new forest

action plan. However, the ambitious project is expected to encounter some kind of a problem in the northeastern states of India, whose own forests are disappearing at breakneck speed because of shifting cultivation. An expert told Depthnews: "It is a sociological problem in the northeast where the tribals burn forests traditionally. They habitually shift cultivation to new areas from time to time, which contributes to great destruction. They have been doing it for generations. And it will be a king-size job to persuade them to change centuries-old tradition."

The main reasons for the loss of forest cover in India are the increase of all forms of agriculture, including shifting cultivation, degradation of forests to meet the people's needs for fuelwood and over-grazing.

J. P. Lanly, Director of the Forest Resources Division of FAO, sees the growing need for a worldwide convention to tackle the problems of deforestation. A dialogue on forests, he said, like the convention on wetlands, is overdue. Such a meeting would have to look at the systematic development of woodlands so that man uses them judiciously.

The FAO hopes to take the lead in the formulation of this convention. Both the International Union for Conservation of Nature and the World Wildlife Fund are expected to be involved.

Meanwhile, the FAO is trying to get other countries to accept the new scheme and the bonanza of funds it brings to forestry. The FAO says that 13 countries have already drawn up action plans and 67 others are working on their forest action plans.

The UN body has high hopes of success. Already, it said, the aid for forest conservation programme had shot up from US\$ 500 million a year ago to US\$ 1.1 billion today. Hopefully, the convention would generate further improvement in the funding, a big boost for all concerned countries to their own afforestation projects. — Depthnews Asia

SCIENTIST TURNS SEWAGE INTO TREES

An Indian scientist has developed a way of growing trees on raw sewage that could turn sewage lakes around the country's cities into forests and prove a cheap and profitable way of treating effluent, reports Sudhendra Sharma from New Delhi.

At the Karnal-based Central Soil Salinity Research Institute (CSSRI), soil-chemist Dr Ranbir Chhabra grows trees on ridges along shallow trenches receiving sewage water. Depending on season and plant type, up to one million litres of sewage per day per hectare (90,000 gallons per day per acre) can be disposed of. The trees act like bio-pumps and quickly absorb sewage water.

Chhabra has successfully grown eucalyptus and poplars. A crop of five-year-old poplars earned US\$3,750 for the institute.

According to Dr Chhabra, heavy metals such as lead and cadmium are not accumulated in the soil of sewage water plantations and the land can safely be used for agriculture. Says Dr N T Singh, Director of CSSRI: "It is a clean system of forestry from dirty water."

INDIGENOUS Hawaiians and United States environmental groups are accusing the US Government of destroying its last major tropical rain forest while exhorting developing countries to conserve their own forest resources.

Test-drilling for a US\$4 billion geothermal power project has already begun in the Wao Kele O Puna (green forest of Puna) rain forest on the eastern rift of the Kilauea Volcano on the island of Hawaii. If the drillers succeed, they will create a geothermal complex of five power plants tapping into the steam beneath the active volcano to generate 500 megawatts from 80 wells nearly three kilometres deep.

This energy is intended to surge along a 433-km cable stretched along the seabed reaching down to 1,830 metres, and around mile-high mountains to the island of Oahu to provide electricity for the local economy which is dominated by the US\$6 billion a year tourist industry.

The rain forest is small by South American standards — just 10,935 hectares — but it is regarded by opponents of the project as a key ecological resource and an important symbol of the alleged hypocrisy of the US Government on environmental issues. Brent Blackwelder, of Friends of the Earth, comments: "What is going on is nothing short of a national disgrace. We're preaching to developing countries that you have to preserve your rain forest, while at the same time we are subsidising the destruction of our own." Scientists say the rain forest, already gouged by bulldozers, is "the best theatre for evolution in the world" — greater than Darwin's Galapagos Islands because of Hawaii's isolation in time, distance and environmental variation. The biota of Hawaii is unique: 95 per cent of the state's flowering plants and 97 per cent of its animals, includ-

American conservationists are attacking Washington for having two environmental standards — one for South America, and a very different one for the last major US tropical rain forest. By Rick Carroll.

US 'Greens' Rally Round Hawaii's Fire Goddess

ing birds, live only in Hawaii, and many of these only in the rain forest. Says biologist Peter M. Vitousek, an expert on rain forests at Stanford University: "Nowhere else on earth is there such a spectacular matrix of climate and soils occupied by plants and animals whose evolutionary history is

so well-known. Work in Hawaii can allow us to determine what controls the way tropical forests grow and develop all over the world." Volcanoes National Park manager Dan Taylor says: "The rain forest is delicate, non-renewable and collapsing fast. You can't sacrifice something irreplaceable like a rain forest

to satisfy an insatiable hunger for air conditioning and neon lights." Indigenous Hawaiians are fighting the geothermal project on grounds that it desecrates Pele, the Hawaiian goddess of fire, who causes volcanoes to erupt. They have formed a protest group called the Pele Defence Fund led by Molokai physician Noa Emmet Ahuli and Big Island fisherman Ralph Palikapu Dedman.

Says Dedman: "For us, it is a sacrilege to keep poking holes in Pele's body to capture her steam so people can make money. 'Indigenous Hawaiians believe Pele, the sole manifestation of Hawaiian deities, may disappear, along with their religious beliefs, if her steam is sold for profit. The Pele Defence Fund has filed a lawsuit against the state, claiming it has failed as a land steward to keep the forest open for indigenous Hawaiian rites and to maintain it as a source of traditional herbal medicines.

In 1983, Kilauea volcano erupted and covered the original drill site with 92 metres of lava. The eruption, which continues sporadically today, has claimed 200 homes and added an area almost as big as San Francisco to the island. The fight to save the rain forest received wider publicity in the US when the San Francisco-based Rain Forest Action Network launched a tourist boycott of Hawaii. Meanwhile, the Sierra Club, a leading environmental group, filed a federal court suit in San Francisco to require a federal environmental impact report on the geothermal project. The suit turned up docu-

Hawaii: the last US rain forest



Icy Blast of Scandal Hits Norway's Sealers

The emotive image of moist-eyed seal pups being slaughtered on the Arctic pack ice has helped to raise massive public support for campaigns to end sealing. But, as Gemini News Service reports, recent scandals which have seriously embarrassed the Norwegian government may do more to kill off controversial sealing activities than all the years of effort by environmentalists. by Ross Brown

TWO recent scandals are more likely to hasten the end of Norway's controversial sealing activities than all the years of campaigns by environmentalists and the threatened boycotts of Norwegian products. Sealing has managed to continue with heavy state subsidies, and only four Norwegian sealing vessels operated in this year's six-week season. Two headed for the West Ice, east of Greenland, while two were in the East Ice around the Soviet Union's Kola Peninsula.

The vessels in the West Ice had been allotted a quota of 6,400 seals. Yet a lack of pack ice — the breeding ground for Arctic seals — lured the Norwegian ships and a Soviet sealer deep into Greenland's territorial waters to make their kill.

This encroachment was a serious embarrassment to a fishing nation perennially concerned about foreign fishing vessels poaching in its own waters, and also because the state subsidies gave an official air of approval to the Norwegian vessels' activities. Foreign Minister Thorvald Stoltenberg had to make formal apologies.

Soon after, the best-selling newspaper VG exposed the confusion about statistics of killing of whitecoat seals, and the bemused Norwegian fishing authorities had to admit that far more whitecoats have been taken than records show. Official numbers from 1983-86 were 537, whereas reports from inspectors on sealing vessels showed that in the 1987 season alone, 3,000 were killed.

Whitecoats are the moist-eyed, defenceless pups so often featured in tabloid papers as heart-wrenching symbols of the campaigns against Norwegian sealing. It was just such a campaign which virtually shut the Canadian sealing industry several years ago, while the European Community (EC) placed a ban on the import of whitecoat furs in 1983 and Norway banned the killing of whitecoats in 1989.

The newborn harp (Greenland) seal has a creamy hair that changes to chalk-white, yet this definition of a whitecoat becomes confused

because the seal pup grows quickly and its fur becomes shabby with maturity. A whitecoat may not easily be registered in the intensity of the kill. Norway has been sealing since 1898, with hunters traditionally living near Tromsø in the Arctic north and Aalesund in the Western fjords. In the Fifties, about 80 sealers still operated, bringing home 375,000 furs in a good season, but things began to change in the Seventies, when conservationists abroad started to accuse sealers of sadistic killing methods.

Norwegians use a "hakapik" to crush the seals skull, while a bowed pick on the other end is shoved into the brain. Sealers insist that this method is humane, and that no slaughter is without blood. However, the conservationists also claimed that hunting was unnaturally depleting stocks which were already threatened by baby seal drownings, lack of fish and pollution.

The four Norwegian sealers this past season gained a state subsidy of nine million crowns. This will shortly be reviewed by Fishery Minister Oddrunn Pettersen, while the two vessels guilty of hunting in Greenland waters are in danger of losing their concession. Sealers are tough, but Pettersen, from the far north, is both a jovial and merciless woman in debate.

If sealing is stopped for good, fishermen fear an invasion of seals along Norway's indented coastline. In 1987, no fewer than 56,000 seals became tangled in nets and the state had to pay compensation for damage caused. But in addition to the scandals and the reviewing of subsidies, there is another decisive element against Norwegian sealing.

Just the mention of the name Odd Lindberg seems to make media people, coastal dwellers and sealers quiver. Controversy hovers over him. Lindberg, now 45, sailed with the sealing vessel Harmoni as an inspector in the season of 1988. He returned with unsubstantiated descriptions of drunken hunters kicking beasts to death and claimed to have recorded a

long list of breaches of hunting regulations. Lindberg's film, not shown in Norway, was seen by an estimated 200 million television viewers round the world. Reaction was intense, almost hysterical, as Norwegian embassies were picketed and their premises flooded with protest letters. Norway responded by banning the killing of whitecoats. Stocks of 180,000 furs from previous seasons still lie in warehouses in Bergen and Tromsø. After the EC ban of 1983, the few seal furs used today are made into souveniers and slippers.

In August last year, Lindberg appeared in court and lost a case against 18 sealers from the Harmoni. The court deemed that most scenes in Lindberg's film were not a breach of sealing regulations and he was ordered to pay crew members compensation totalling 500,000 crowns. Backed by this triumph, the same crewmen now demanded 5.6 million crowns compensation from Norway's state television corporation and various newspapers, claiming that they reported Lindberg's accusations without checking the facts. Paradoxically, one leading newspaper which unhesitatingly attacked the environmentalist stance against sealing is now accused of giving accounts of alleged flogging (stripping of blubber or skin) of live seals on deck. Lindberg wrote a manuscript that no Norwegian publisher dared print, although his book Sealing in the West Ice was published in Sweden, where sealing is anathema. Now an Oslo publisher will market a book by two Swedes who support Lindberg. At present, Lindberg has 40 hours of film being edited in England into an even more revealing film on sealing. He calls this "a final act with the Norwegian state."