

Feature Environment

Global Warming and Environmental Degradation

GLOBAL warming with its concomitant greenhouse effect and environmental degradation pose a severe threat to all living species in the whole world. Bangladesh with its denuded forest zones, burgeoning population growth and ever-increasing use of pesticides is already in peril. Technological advances in the form of efficient health care system, air conditioners bringing forth ease and comfort in life, mobility in transport and industrial growth, have provided means of upsetting nature's equilibrium. We have failed to comprehend the way we are recklessly and relentlessly causing assault to the mother earth. To quote a few, smokestacks have disgorged noxious gases into the atmosphere, factories have dumped toxic wastes into rivers and streams, automobiles have guzzled fossil fuels and fouled the air. To create a habitat for the population that is growing up exponentially, forests have been denuded, lakes and wetlands poisoned with pesticides and underground aquifers pumped dry. Scientists have warned time and again that this sort of profligacy with nature, this wanton destruction of forest wealth by chopping down trees indiscriminately will only invite a grim and disastrous consequence for us like the colossal deluge we have witnessed in 1988.

A cursory look at the world consumption of fossil fuels will reveal that we are adding a net 3 billion tons a year of carbon to the atmosphere in the form of carbon dioxide (CO₂), methane and chloro fluoro carbon (CFC-S). The world population which now stands at almost five billion will double in another 40 years from now. To combat the pollution problem, associated with this population boom and industrialisation vis-a-vis the global warming caused by greenhouse effect, we need trees and a lot of them to store the carbon

produced by a growing population. Countries, irrespective of their position on the globe need at least 25 per cent as forest zone to sustain life without disastrous environmental hazards. In Bangladesh this figure has now come down to 6 per cent because of our senseless activities of carrying out massive deforestation without replenishing

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them. Reports have it that chopping down of trees in Madhupur reserve forest, Cox's Bazar, Chokoria, Mirsarai of Chittagong, Madhabpur of Habiganj, Shahpur, Jagadishpur (Sylhet) have been going on unabated mostly beyond the knowledge of the proper Govt agencies causing extensive financial losses to the Govt exchequer other than ecological imbalance. How long will it take us to realise that forests are like giant utilities, providing an indispensable service to the stability of this planet earth in which case Bangladesh is no exception. Stated in obvious terms, the fact is: forests are carbon dumps. Trees extract carbon dioxide from the atmosphere, emit the oxygen and store the carbon in the woods, leaves, roots and soil. We must preserve the forests that are there and replenish those that have been destroyed.

As we are heading to the last decade of the 20th century and find ourselves in the throes of an industrial growth, we are alarmed at the worst scenario that may engulf us because of the environmental degradation gripping us in various forms. Toxic wastes from the factories

by Md Asadullah Khan

crises steaming through lands criss-crossed by rivers. Lakes and marsh lands could lead to shortages of safe drinking water. The accumulation of CO₂ in the atmosphere could shoot up the planet's average temperature 30F to 90F by the middle of the next century. That could cause sea-level to rise by several feet, flooding coastal areas and destroying huge tracts of

farm lands through salinity attack, like the one we have witnessed in 1988. On the other hand, use of fertilisers and pesticides has increased crop yields but polluted water supplies and destroyed aquatic species like fish, our staple source of protein. Situation in and around us portends a crisis and calls for an awareness of the potential calamity that might strike us any time. We can't rest on our laurels by indulging in rhetorics of development. Severe climatic changes accompanied by desertification is already in sight in the northern part of Bangladesh. Massive assault on the forest wealth in the Sundarbans, the only mangrove forest in Bangladesh without any effort to replenish them signals an alarming situation in the sense that many living species are getting extinct in the process mostly beyond our knowledge. We have to remember that earth's wrath at our assault is slow to come, but it would be relentless when it does, mostly followed by catastrophic changes.

The imperatives at the moment in our country necessitate creation of environmental

studies programme in our universities, such as the one introduced in Peking University in China. The department is turning out about 2000 environmentalists each year who are offered jobs at various levels of National Environmental Agency.

Our school curricula must include courses of environmental studies in order to enlighten and impress upon the younger generations about the utility of preserving forests and tree plantation other than the economic benefits it yields. It is in the forests that various life forms and plants lie hidden whose economic and other utilities have not yet been totally explored. But scientists in developed countries are constantly at work to tap these resources. It would be no wonder to know that some 25 per cent of the pharmaceuticals in use in the United States of America today contain ingredients originally derived from wild plants. Hidden in clumps of vegetation about to be bulldozed or burned might be plants with cures for still unconquered diseases like AIDS and Cancer.

Biologist Janzen tells the world "I know of three plants with the potential to treat AIDS. One grows in Australian rain forest, one in Panama, and one in Costa Rica." This necessarily brings into focus the question of maintaining bio-diversity in Bangladesh, as elsewhere in this planet earth. Spurred by poverty, population growth, ill-advised policies and wanton greed, we are at war with the plants and animals that share this planet.

The lush green trees that once covered as a canopy in the southern and eastern parts of Bangladesh and where every acre was alive with the cacophony of birds and all kinds of insects, became suddenly the target of attack by settlers driven from other places due to poverty and famine. The soil that supported a rain forest is not suited to corn and other crops. The habitat, that we intended to create here, the promised land that we wanted to offer, ran counter to our expectations. People settling in these places can hardly eke out their living in such an impoverished land. But in the process the eco-systems have been destroyed and millions of plants and other species have gone extinct. The way plants and species are disappearing now leads us to conclude that we human beings are angles of destruction. This region as elsewhere in the earth, is suffering a decline of the entire eco-system — the nurseries of new life forms. Bio-diversity must as such, be felt as a great need to sustain various life forms here and everywhere on the globe.

The time-old proverb "variety is the spice of life" may it be the stuff of life, must be truer now than ever before. This symbiotic link between human being and other species causes the life process to go on and prepare each other to adapt to environmental challenges.

The task of protecting the environment is a global responsibility. No single country can alone make any headway in this respect "Clean up the environment" movement has to be backed by a strong political will, sufficient funding and a co-ordinated social responsibility. In Bangladesh PWD, R&H Deptt, PDB, WDB, REB and NGOs must come ahead to play a dominant role in planting trees in their own areas and keep the environment in their respective zones free from pollution and hazards.

How Green are Your Groceries?

Some consumer products touted as eco-and indigenous people-conscious may turn out to be otherwise. Pratap Chatterjee of Inter Press Service reports.

ICED cream that protects the Amazonian forests, coffee that helps unions in Nicaragua, Brazil nut oil that saves endangered Brazilian tribes — these are just some of the consumer goods setting new trends in Europe and North America.

But do these products really help people and protect the environment as their promotional literature claims? International concern about the global impact of pollution and the depletion of the earth's natural resources — from rain-forest hardwoods to the coral reefs — have prompted many economists to propose financial solutions to the crisis.

Prominent among these solutions are proposals to tax pol-

On theoretical grounds, they say gearing a community up to export a few products puts them at the mercy of the market. Cosmetic fashions today could be gone tomorrow. Or worse still, if others start selling the same product, the price could plummet.

For example, commercial plantations for commodities like coffee and rubber replaced local forests in countries from Malaysia to Ghana. Recently prices have dropped to a fraction of their prices over the last two decades. There is no reason why the same should not happen to Brazil nut prices too.

And many environmentalists say a growing number of the better known products do to live up to the claims they make.

ports that the Kayapo have complained the Body Shop has torn their community apart because only a few people benefit from the sales. In fact, half of the people who used to live in the village have left the area.

Other groups like the Minneapolis-based Institute for Trade and Agriculture Policy (ITAP) agree. ITAP's Kristin Dawkins says there are very fundamental problems with the idea that paying for products from the forests, be they timber or otherwise, will help the forest dweller, particularly in the long term.

"The timber industry sees each tree quite differently than do the furniture-crafter and the forest-dweller. Who would decide the full cost of each lost



COPIES

luters, to promote the sale of alternative products and to rewrite national economy statistics to account for the impact of environmental destruction. Many environmentalists approve of these plans but others warn that there are many possible pitfalls.

Take the alternative products, for example. The market for "green" products like Rainforest Crunch — sustainably harvested Brazil nuts — in the United States, or Body Shop fruit and vegetable-based cosmetic products in Britain, is booming.

Their slogan is 'trade not aid', and their supporters highlight statistics showing that the profits earned from products harvested in a single acre of tropical rainforest can far outweigh the amount of money made from chopping it down for timber.

But while every environmentalist would probably agree with this, there are those who point out that harvesting the forests for non-timber products can be just as damaging.

The Boston-based company Cultural Survival, for instance, buys Brazil nuts from Brazil and sells them as "rainforest harvest" bought from "rainforest peoples" in US supermarkets.

But London-based Survival International, one of the biggest opponents of the Brazil nut trade, says Cultural Survival buys its products from ordinary commercial suppliers. And while it has bought nuts from rubber tappers recently, it has never bought nuts from indigenous Amazonian tribes.

The rubber tappers are now entirely dependent on Cultural Survival for its income and even Cultural Survival admits the tappers "have been a little unhappy with us" and that one of the leaders "has criticised us for trying to squeeze him."

Likewise, Survival International says the UK-based Body Shop, which does buy Brazil nuts from indigenous Kayapo Amazon peoples, has adversely affected the people it claims to protect.

Survival International re-

ports that the Kayapo have complained the Body Shop has torn their community apart because only a few people benefit from the sales. In fact, half of the people who used to live in the village have left the area.

Others like Marcus Colchester of the World Rainforest Movement say poor people in the rainforests are threatened not because they cannot find a market for their products but because their land has been stolen from them for timber and dams and they cannot grow enough food to eat.

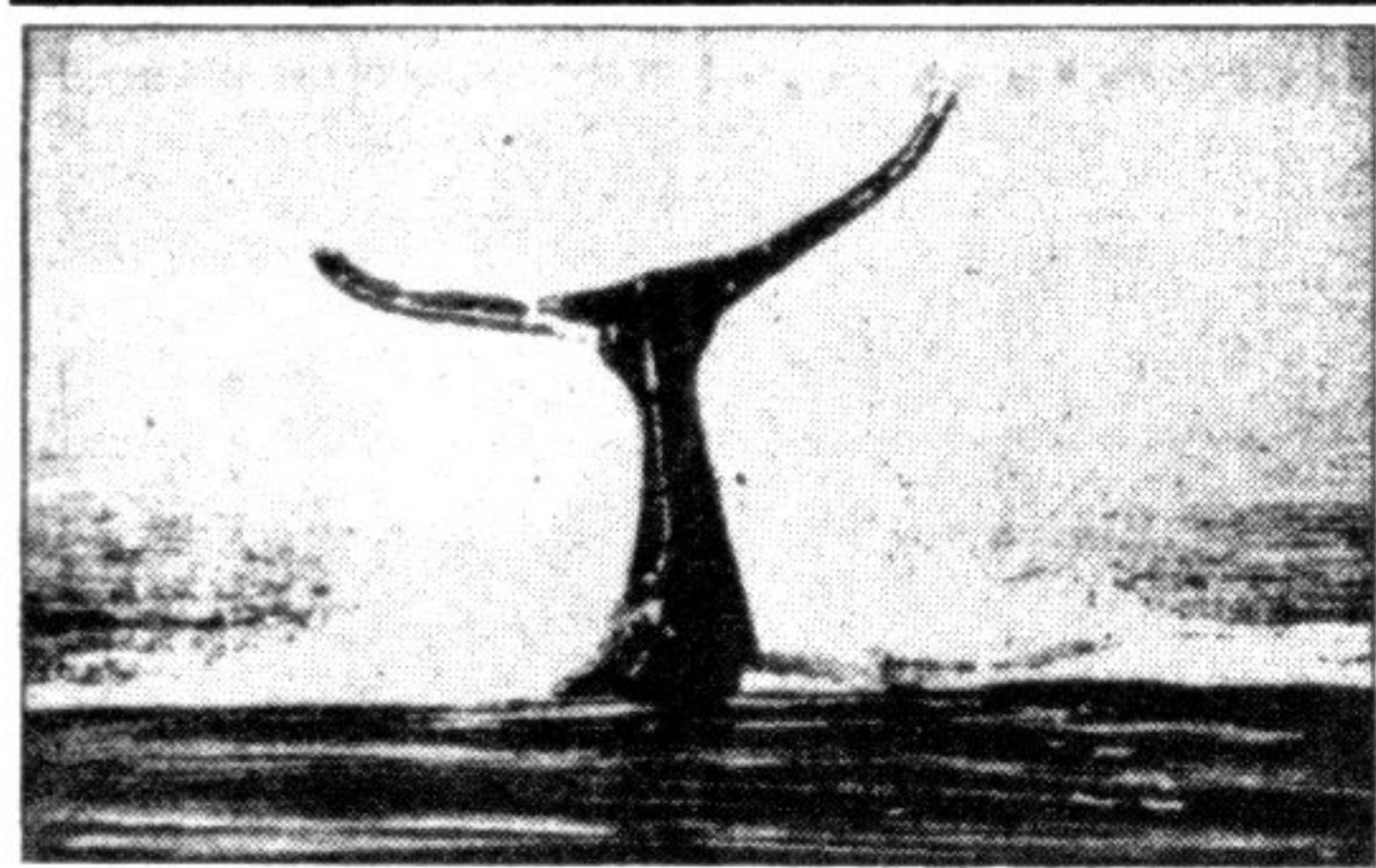
Survival International says the real solution is protecting the forests for its peoples to support themselves and not to depend on outside markets.

In a recent editorial condemning the "swindle" of the rainforest harvest, Survival International made its own position plain. "What tribal people need is their own voice and their own land," it said. "We should be fighting for nothing else." — IPS

Ringing the Bell on Whale Hunting

by Shigeki Komori

In 1988 Japan decided to honour the International Whaling Commission's ban on commercial whaling. Whale hunters, made redundant by the ban, are now using their skills at spotting whales for whale watching tours. Today, whale watching is becoming a fast growing business in Japan. Some coastal communities now view whales as worth more alive than dead.



When the International Whaling Commission's (IWC) moratorium on commercial whaling was adopted in 1982, few Japanese understood what it meant. Japan continued to oppose quota cutbacks discussed at IWC meetings while species after species of whales were decimated.

However, the year 1988 — when Japan decided to honour the IWC ban — became a landmark in the history of whales in

this country. It opened up a host of opportunities for a number of coastal towns. The Ogasawara Chamber of Commerce seized upon the idea of whale watching as a means of stimulating its economy. It helped to organise the first whale watching trip in Japan. It also asked Dr Jim Darling, a Canadian whale expert, to teach whale watching methods to local fishermen.

Dr Darling was known for having carried out the first benign survey of whales in Ogasawara in 1988, funded partly by Canada and WWF-Japan. His survey methods challenged the Japanese government's insistence that surveys required killing the whales. He continued to carry out annual surveys, the results of which WWF-Japan published regularly. This kept the whaling issue alive to the public and made people aware that whales are not just dead meat but living creatures. Dr Darling also helped formulate Japan's first whale watching regulations.

The first ever whale watching trip in Japan, led by Mr Kyusoko Iwamoto — a whale and bird loving cartoonist — visited Hahajima part of the Ogasawara Islands, more than 1000km south of Tokyo. The group, including a number of influential journalists, called itself "Geisha-ren". Its name is derived from the peculiarities of the Japanese scrip — the character for "gei", meaning skill, is a homonym for the character for whale, while "ren" means group or union. These particular "geishas" are, therefore, a "whale group".

The whales laid on a spectacular show. A cow and its calf leapt out of the water more than 20 times as if they were showing off to the enthralled spectators. Mr Iwamoto said, "Our trip was extremely successful... Science and enthusiasm to protect whales have worked together to promote whale conservation in Japan."

The village of Ogasawara thus spearheaded the whale watching and whale conserva-

tion movement in Japan. Ogasawara was also the first village to establish a whale watching association. WWF-Japan invited Dr Darling to talk about whales to the local people and tourists, and the village organised a campaign to promote whale watching.

By 1992, about 4,700 people had visited Ogasawara to see humpback whales. This represents a hundred-fold increase in the number of whalewatchers here since the programme began.

Ogasawara's whale watching experience and the added income it brought in, attracted the attention of other villages hard hit by recession. In Ogata, Kochi Prefecture, for example, a group of fishermen started organizing whale watching tours to sight Bryde's whales.

Ogata has a long tradition of respect for whales. Like other coastal communities, the people of Ogata regarded whales as "Ebisu", the Japanese deity for bumper crops and large fish hauls. In the olden days, the whales and dolphins would chase the fish into the bays where they could easily be caught. Some local people called them, "Iwashikajira", the whales that brought in the sardines.

In recent years, as overfishing depleted fish stocks in the area, the fishermen decided to use their boats for whale watching trips as an alternative source of income while allowing fish stocks to recover. As many as 5,700 visitors have been to see Bryde's whales there. Whales are thus once again bringing good luck to communities as tourist attractions.

Muroran, a steel industry town started a three-year cetacean survey in 1989 to promote whale watching as an alternative source of income. By 1992, it attracted 600 tourists. The villages of Zamami and Tokashiki near Okinawa have committed themselves to protecting humpbacks because they are worth more alive as tourist attractions.

Whale watching has thus come a long way in Japan bringing prosperity to villages hit by the IWC's moratorium on whaling. In 1992, whale watching tours generated about US \$8,120,000, with over 19,250 visitors. In 1988, when whale watching first began, there were less than 100 whale watchers and the industry brought in only \$40,000.

While it is still an infant industry compared with the income it earns in the USA, the business is growing faster in Japan than any other whale watching country.

"With whale watching gaining popularity in Japan and

Nuclear Pollution Alarms the Tibetans

A J Singh writes from Dharmasala, India

TIBETANS are alarmed at the amount of radioactive pollution of their country being caused by China's nuclear programme. Exiles have been monitoring the positioning of nuclear facilities and weapons and unsafe waste disposal on the Tibetan Plateau.

A nuclear city known as the Ninth Academy stands 14 km east of Lake Kokonor, the largest saltwater lake in Tibet. It was established in 1958 and so named because it is run by the Ninth Bureau, the secret organisation that controls the Chinese nuclear programme.

The Ninth Academy designed all China's early nuclear bombs and its primary nuclear weapons research facility. Its name rarely appears in Chinese and Western reports. Most of it is underground to deter detection and possible destruction in an attack. Another nuclear facility, at Huangyan town, is all underground.

The testing site for China's first atomic explosion in 1964 was close to the Ninth Academy. Since then all documented tests have been at Lop Nor, in China's Xinjiang province, next to the so-called Tibet Autonomous Region. The latest Chinese underground test on October 5, which surprised the

West, was conducted at Lop Nor.

Latest reports from Tibet monitored at the headquarters of the Dalai Lama in Dharmasala suggest that, although the Ninth Academy continues to function, China has moved its major nuclear facilities to undisclosed locations in its Sichuan province.

The facilities in Tibet were built in the 1960s and 1970s. It

source where the waste has been dumped, making it extremely difficult to locate.

Last year the Dalai Lama raised the issue of Chinese negligence in radioactive waste disposal in Tibet. The Chinese denied such dumps exist. Tibetan official Dawa Tsering says: "Any Chinese failing in Tibet that we point out is invariably denied by Beijing as a matter of routine."

The latest underground nuclear explosion in China has set alarm bells ringing among Tibetans because their country is the site of some of China's most important nuclear installations. Waste is being dumped indiscriminately in much the way it was in the Soviet Union. Gemini News Service reports on the underground nuclear facilities in Tibet.

is believed, by thousands of prisoners. Tibetan environmental experts are appalled at the way the Chinese have disposed of radioactive nuclear waste inside Tibet. One of them, Bhuchung Tsering, says: "It has just been put in shallow unlined landfills. Some has been dumped into rivers and lakes, just as the Russians did."

Worse still, the Chinese have not documented or kept records of the nature, quantity and location of the landmass or water

The Tibetans were particularly worried in 1984, when the Washington Post reported that China had tentatively agreed to store huge quantities of radioactive nuclear waste from the US against payment. The refugees feared it would be dumped in Tibet. The outcry forced China to abandon the dollar-earning venture.

Tibetans, realising the dangers posed by the nuclear facilities near their homes, have been agitating whenever possi-

ble. Public opposition to uranium mining broke into violence in 1989 in Ritwoche town, in the eastern province of Kham. Government vehicles were set on fire and many Tibetans arrested.

The pro-Chinese Panchan Lama, who died in 1989, opposed the building of a nuclear power station at Lhasa and the plan was scrapped.

A report by the Washington-based International Campaign for Tibet (ICT) published in April 1993 said many Tibetans had died through exposure to radioactive waste and nuclear facilities. It quoted a case in which 35 Tibetans out of 500 in a village near a uranium mine in Ngaba Prefecture have died in the last three years after drinking water polluted by waste.

No one knows how the waste is disposed from Tibet's largest uranium mine in Tewe district in Gansu province. The sign on the road to the mine simply says "710." Mining and processing are carried on in high security areas. No civilian is allowed in.

Tibet is a land of vast space and thin population, most of it 3,000 metres above sea level. The remoteness has encouraged the Chinese to locate some of its most important nuclear facilities there.

Latest reports show that China has deployed nuclear weapons in at least three sites. One is accessible only by a rugged dirt road posing transportation risks.

When China exploded its nuclear device in 1964, India launched its own nuclear programme, first exploding a nuclear device in 1974. Now Pakistan has achieved bomb-making expertise. The ICT report says: "Tibet is at the centre of South Asia's nuclear states. The nuclearisation and militarisation of the Tibetan Plateau have obvious destabilising effects on South Asia."

If Tibetans ever regain independence or meaningful autonomy over their country, they will face a formidable task managing a highly toxic and radioactive country. — GEMINI NEWS

Environment Briefs

Hill Tribes of North Thailand

RAPID deforestation of northern Thailand has spelled the end for the traditional semi-nomadic lifestyle of the region's many hill tribes.

"Before we got everything we needed from the forest, and lived well. But in the last ten years the living standard of my people has fallen," says Acha Joebaw Thainurak, of the Akha tribe in northern Thailand.

Traditionally, the Akha cleared areas of the highland forest by slash-and-burn to cultivate crops, and moved on after two or three years. Four years ago the government told the tribe that they could no longer do this. Now, locked in their villages, they have become increasingly dependent on tourism and the opium trade to survive.

The Akha tribe originates from Tibet and came to Thailand some 90 years ago. They do not have Thai nationality and cannot own the land and forests that surround their villages. Timber companies and farmers from the south buy up the land and villagers are left with the only option of being day labourers.

government to recognise their rights to the land around their villages and have set up a project to encourage international organisations to advise them on self-help.

To preserve the forest that once provided all their needs, new agricultural techniques must be learned. Better educational facilities are also wanted. Says Thainurak: "Our ancestors faced changes and found solutions. To adapt to the modern world, we must do this again." — PANOS

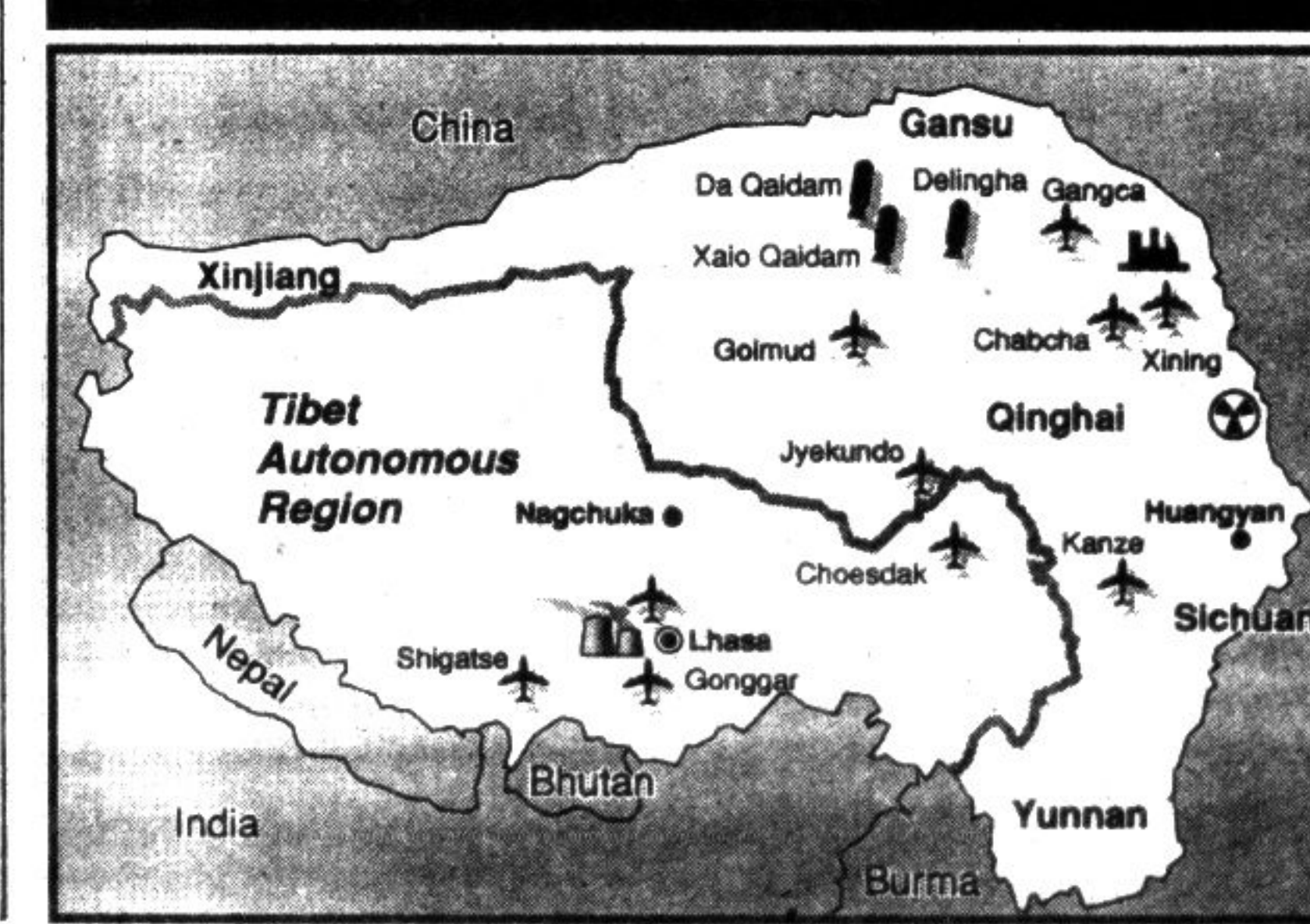
Saving Rhinos

THE Indonesian Environment Forum (WALHI) is urging the government to postpone plans to move Javanese rhinos from west Java to breeding centres in Pulau Panaitan and Gunung Hone in the southwest tip of Java Island.

A similar experiment in Sumatra proved fatal to over half the re-located rhinos. WALHI wants the government to intensify efforts to encourage the animals to breed in their natural habitats, and is also urging the government to conduct detailed research before moving the rhinos.

Indonesia's rhinos were heavily poached in the early 1980s and poaching is on the rise again. There are believed to be less than 100 Javanese rhinos left in their natural habitat in Ujung Kulon in West Java. — PANOS

The Tibetan Plateau



Nuclear facilities

- The Ninth Academy (nuclear city)
- Nuclear missile base
- Airbase
- Uranium mining
- Proposed nuclear reactor