

Feature

Environment

Interdependence of Life and Environment

by M M Alam

BEFORE 1970s environment was not an important matter for common people. Most educated men or women were also not interested in it. But now the situation is changing. In 70s when "United Nations Environment Protection Programme" was formed and people of developed countries became vocal against pollution, consciousness started growing.

Mozambique. As a result, thousands of people died of starvation and various diseases. Naturally plants and other animals were destroyed in those areas. In all these cases nature itself polluted the environment, but the main damage has been done by man himself. How men damage environment is a key question. Generally, destruction of grass-

Depletion of forest is one of the causes of ecological imbalance. Ninety-five per cent of the west and middle Europe was forest in the middle age and that has now decreased to 20 per cent. Within 10 thousand years 70 per cent of forest of China decreased to 5 per cent and in the past 400 years 75 per cent forest of USA was removed. In India about 4 lakh

continues. As a result of the Gulf War 1250 oil wells began burning. Here one million ton oil burnt each day. That produced heavy carbon-dioxide, 50 thousand ton of sulphur-dioxide and one lakh ton shoot. These are the terrible consequences that leave environment ravaged.

Depletion of ozone layer is a great cause of concern today. Above earth 10 km areas of atmosphere is called 'stratosphere'. In stratosphere a gas called ozone is there. Ozone has protected earth from the ultra-violet ray of the sun. But for the indiscretion of men ozone layer is gradually thinning. Somewhere the layer does not protect the ultra-violet ray fully. So some unexpected things are happening in nature, which cause great damage to the environment.

In refrigerator, air conditioner and some other industries, a chemical compound called chlorofluorocarbon (CFC) is used. Some CFC are mixed with air and gradually move upwards. When CFC come in stratosphere, it reacts with ozone and destroys the ozone layer. As a result, ultra-violet ray of the sun pass through the ozone hole and contaminate the environment. If more CFC enters into the atmosphere then great hole would be made in the ozone layer. If it happens so, then somewhere sea water level may be increased and vast land would be submerged under water.

It is clear that life and environment is closely related to each other. If one is damaged, then it will spell doom on the other. So, for better life and better living every one should be aware of environment and protect it from any harm.

Even now in the Third World countries this is being discussed in many fora. Semi-nars and symposia are being held throughout the world on this issue. But the overwhelming majority of the Third World countries yet are not aware of nature and environment. So we now regularly read the news of shooting birds. In cultivation uncontrolled insecticides and chemical fertilizer are being used. Harmful smoke from factories and vehicles is causing problems to human life.

field, smoke and garbage of industries, use of chemical fertilizers and insecticides, misuse of water and occurrence of war are the man-made causes for the damage of environment. 'Green House Effect' is also one of the main causes of environment's damage.

Due to gradual increase in population, environment has taken the centre stage of world concern now. Somewhere for better life, somewhere in order to survive, men are destroying environment. Two thousand five hundred years ago, population of the world was only 10 crore. But now that has increased to 550 crore. In every year about 10 crore new faces are increasing throughout the world. Generally more population want more land, more food. So grazing-lands and forests are being destroyed indifferently.

hectares of forest land are being ruined each year and in Bangladesh over the past 20 years about one million acres of forests were destroyed.

In agriculture the picture is almost the same. In order to produce more food for more people, chemical fertilizers and insecticides are often used imprudently, causing damage to environment. Garbage and smoke of factories are also damaging environment. These are increasing the percentage of carbon-dioxide and sulphur in the atmosphere. Wrong use of water is decreasing underground water level. This has sped up the desertification.

War is yet another major cause of environmental damage. The gigantic destructive power of modern arms is the cause of heavy damage to life and environment. Even after the war the process of damage

Nature and environment are closely related. There is no way to see them differently. Pollution of environment imbalances the nature. For example, the volcanic eruption of Mount Pinatubo polluted the environment. According to an American geographical survey 'World would be more cold in future, for the volcanic eruption of Mount Pinatubo.' This will happen due to plenty of flow of sulphur-dioxide. Here nature itself has been polluting environment.

Sometimes tidal bores hit the shore, causing heavy damage to plants and animals. Destruction of these plants and animals pollute nature.

From 1980 to 86 terrible droughts had hit some East African countries. Due to lack of rain, scarcity of crops occurred in Ethiopia, Sudan and

Linking Environment with Education

by Mahesh Uniyal

SOUTH Asia's fast-disappearing forests are not only endangering the region's ecology but are also a major reason for the continuing low literacy rates there, especially among girls.

Government and non-government economists both recognise that a degraded environment erodes living standards, and children bear a large brunt of the resulting hardship, says Anil Agarwal of the New Delhi-based Centre for Science and Environment (CSE).

But, he adds, planners have missed the vital link between poor people's access to natural resources and the high female illiteracy rate in the region.

The main obstacles to growth of female literacy have been indicated by many studies

to be rooted in caste, cultural and economic factors (but) little attention has been paid to the effect of adverse environmental pressures on female literacy," says Agarwal.

An estimated 26 per cent of South Asia's over 420 million hectare land area is under green cover. Environmentalists argue that there is a link between the depletion of an area's forests and the literacy rate of its people, especially the women.

The UN Food and Agricultural Organisation (FAO) estimates that between 1976 and 1980, India was losing an average of 147,000 hectares of forests a year.

In 1987, India suffered intense droughts, triggering a

famine. Environmentalists blamed massive deforestation during the last two decades for the disaster.

Meanwhile, India's number of illiterate women increased from 181.03 million to 197.34 million during the 1980s despite a corresponding improvement in the female literacy ratio from 29.75 to 39.42 per cent of the population.

The exception is the southern Indian state of Kerala, which has over 80 per cent female literacy. Environmentalists say more girls go to school in Kerala because the state's women rarely spend more than an hour in collecting fuel, fodder and water, unlike in other parts of India.

The state gets monsoon rains twice a year and its humid and tropical climate have given it one of India's densest green cover. Agarwal said during a talk on 'Children and Environment' here in mid-February.

"If women in Kerala had to spend as much time in collecting basic needs as women have to do in other environmentally degraded regions would they not have been kept out of school so they could perform crucial household activities?" he asks.

According to environmentalists and economists alike, South Asian rural incomes are hit especially hard by the depletion of the region's forests because many villages depend on them for livelihood.

CSE researchers cite the case of the north Indian Himalayan village of Syuta, where production on the 34 hectares of the village farm is dependent on the resources of 160 hectares of forest and grassland. Villagers collect 100 tons of leaves and about 485 tons of grass to feed livestock whose manure is the only farm fertiliser available.

Environmentalists also note that forest depletion leads to floods that destroy livestock and crops, and land erosion, depriving people of arable land.

The village has 115 men and 98 women. But only a third of the males as against more than half the women labour for a living.

Collecting fodder grass is only a small part of the daily chore of the young girls in Syuta. They also gather firewood, tend livestock, fetch water, cook and look after their younger brothers and sisters.



New Zealand Rules Warships 'Safe' Despite Nuclear Ban

by David Robie

A government-ordered inquiry into the safety of nuclear-powered ships has given British and US vessels clearance for visits to New Zealand ports. But public outcry has made any immediate change to the nation's nuclear-free law unlikely.

Both Professor Alan Poletti, a nuclear physicist of Auckland University, and Professor David Elms, a civil engineer of Canterbury University, denied reports by peace groups that they had worked under the direction of the Prime Minister's Office.

Poletti, who worked for Lockheed Missiles in the 1960s, rejected the allegation and angrily said he and the other three committee members acted without any outside pressure. He challenged critics to find "holes" in the 283-page report.

The \$500,000 report, released after a year of study, found that the risk of any accident during a port visit by a US

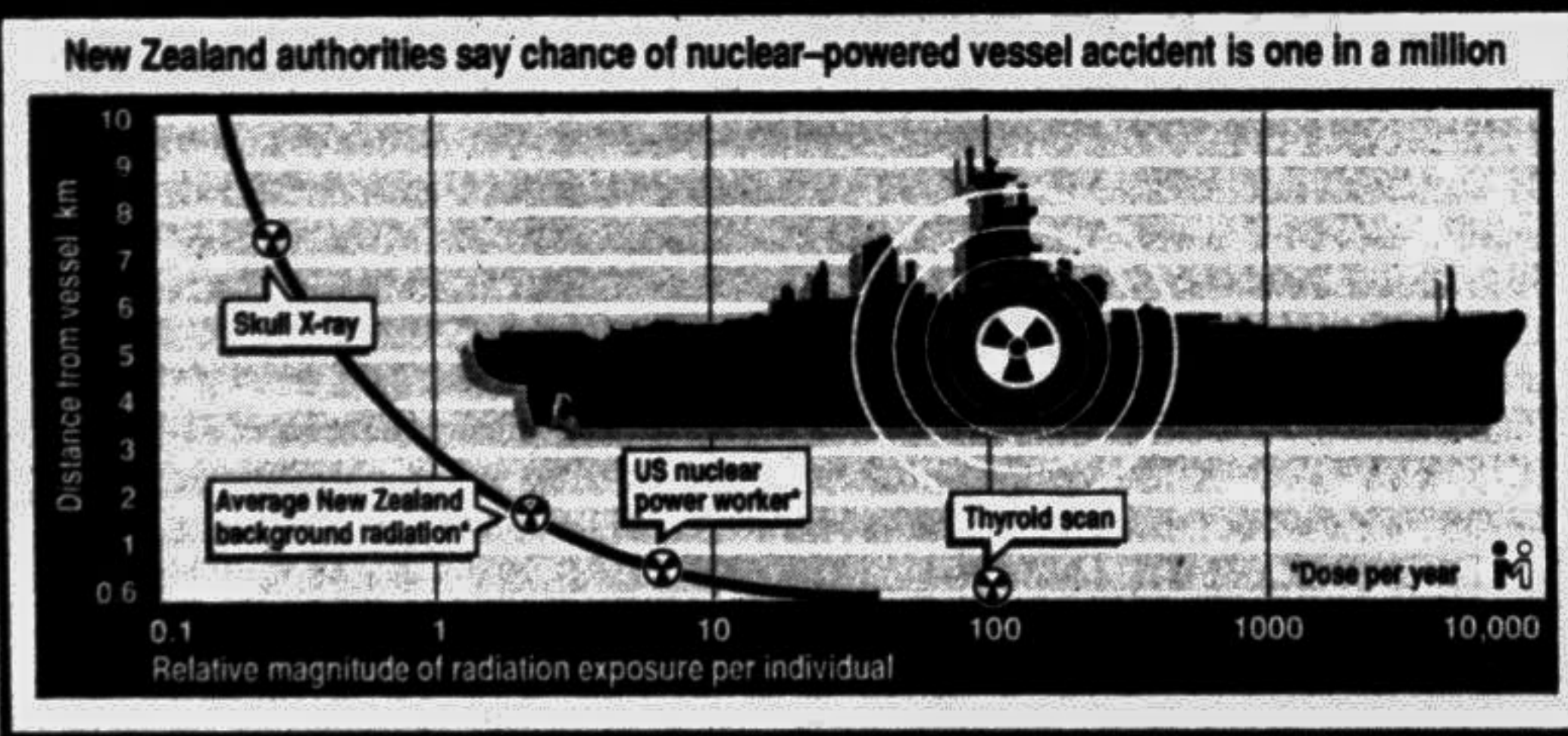
tee's statistics were based on the ships remaining in New Zealand for short periods, with a typical ship visiting five times a year for a few days each time.

"Despite all its tables and graphs, the report actually says nothing new about safety. Everyone agrees that the chances of a catastrophic accident are small, but it's a risk people are not prepared to take," said Coalition Against Nuclear Warships spokesperson Nicky Hager.

Another opposition group, the Campaign for Nuclear Disarmament, described the report as "costly, predictable and futile." "The government-appointed committee has produced the expected answer to the narrow question. I am

A New Zealand government committee studied the safety of port visits by nuclear-powered foreign ships for more than a year. Its conclusion: US and British ships are safe. Although the ruling National Party was elected in 1990 on a pledge to maintain the country's nuclear-free status, Gemini News Service reports that critics fear the government is preparing to backtrack and may soon end its tough anti-nuclear laws to appease the US.

Dangerous diagnosis



70 per cent of New Zealanders support the nuclear-free legislation.

Opposition leader Mike Moore vowed that Labour would restore the nuclear ban if the government did change the law. He described the report as simply a tribute to and broken promises by the ruling National Party.

"The Titanic and the space shuttle were considered safe too, and their fate is now history," said Moore. "The report has one purpose — to manipulate public opinion to get nuclear-powered warships back into New Zealand harbours as a first step to getting nuclear weapons back into New Zealand ports."

Nuclear-armed and nuclear-powered ships have been barred from NZ ports since Labour leader David Lange was elected in 1984. The ban was given legislative force in 1987 when the Nuclear Free Zone Act was passed.

Two of the report's authors said there had been a deliberate campaign to manipulate New Zealanders, and accused unnamed groups in radio and press interviews of releasing "active disinformation" and "wild statements".

or British nuclear-powered vessel was so remote that unease was "not rational." It listed Auckland, Wellington and Lyttelton as the most suitable ports for such visits.

According to the controversial report, there is a greater risk of premature death from drinking coffee, riding a bicycle or taking oral contraceptives than from a nuclear reactor accident. It also makes another comparison: the amount of radioactivity released by patients at Auckland Hospital each day is twice that released into water by the entire US nuclear fleet each year. The report does not argue that nuclear-powered ships are absolutely safe.

Instead, it uses as complex mathematical risk analysis to estimate that the chances of an accident involving even a small release of radiation would be less than one in 10,000 for any ship in each year. A more serious accident was determined to have an even lower probability of one in a million.

Professor Elms did not rule out the likelihood of a major accident on a nuclear-powered ship somewhere in the world within the next 30 years. But he stressed that the commit-

tee's report confines itself to a consideration of US and British naval vessels only," said spokesperson Maire Leadbeater.

"It should surely have occurred to the government that the New Zealand people do not share enthusiasm for a resumed military and strategic relationship with any of the nuclear powers."

Leadbeater cited the latest edition of Asia-Pacific Defense Forum, the glossy quarterly magazine of the US military establishment in Hawaii, as offering a distorted rationale for New Zealand government policy. An introduction to an article by Defence Minister Warren Cooper stated:

"New Zealand's break from an active alliance partnership in 1985 was taken because of the popular discontent with French nuclear testing in the Pacific and fear of a nuclear industry actually in New Zealand."

Leadbeater said there was "overwhelming public support for an unadulterated nuclear-free policy." She cited a recent example: the Auckland Regional Council reaffirmed its nuclear-free policy in a vote in mid-November.

Migratory Birds May Lose Stop-over

MIGRATORY birds on their annual long-range round-trip flights between Siberia and Australia may soon lose an important stop-over in the Philippines.

An economic boom in his central Philippine city is endangering one of the country's last remaining stretches of coastal swamps where the birds spend a few days to regain their strength before taking on the long flight.

Conservationists here are waging a tough battle to keep the archipelago's unique and ecologically-fragile mangrove swamps from being wiped out by the unprecedented economic boom.

The struggle is between fast-paced growth that generates employment and the need to protect the sensitive coastal swamps that are the breeding grounds for fish and home to migratory birds.

Cebu's economic growth is around twice the national average of three per cent, but conservationists say the province is already paying a heavy environmental price for its development.

Olango Island near the

provincial capital cover 5,800 hectares of marshes. It is a favourite for at least 40,000 long-range migratory birds that drop by every year for rest and food on their flight between Siberia and Australia.

Off-shore, Olango's coral reefs are rich in marine life, and the fish use the mangroves for breeding. The birds fit into

Homer Gonzales, researcher at the Asia Wetland Bureau-Philippines Foundation (AWBP), says the tourists — mostly Japanese — take a ferry to Olango for bird-shooting sports.

It was only after the media in Cebu exposed the shooting practice last year that provincial and municipal officials be-

gan efforts to curtail such activities.

But conservationists say some shooting still goes on. Many parts of Olango are uninhabited and shooting is frequently unmonitored.

Soldiers and policemen in nearby Lapu-Lapu City have been reportedly renting out their guns and selling ammunition to tourists for up to US\$ 700 per trip. Some tourists are now using air rifles converted to fire live bullets.

The island has about 20,000 residents. Most of them welcome the tourists who buy shells and fresh coconuts.

Trigger-happy tourists and shrinking swamps are threatening migratory birds. Isagani de Castro reports from the Philippines.

this delicate ecological balance, using the swamps and the seagrass beds to stock up on food before continuing their flight.

Olango also has the potential of growing into a major destination for nature tourism. Bird-watchers from all over the world flock to Olango every spring to catch a glimpse of rare birds like the endangered Asian dowitcher.

But uncontrolled tourism is hindering conservation. The island is only 20 minutes by boat from Cebu's fast-growing industrial district, and a bit too accessible to trigger-happy tourists.

The local community objected when the AWBP first suggested setting up an Olango mangrove reserve and wildlife sanctuary. Says Gonzales: "They thought it would restrict certain areas of the island from them and affect their livelihood."

The locals changed their minds only after the AWBP explained the sanctuary would cover only 920 hectares of mangroves — 15 per cent of Olango's total area.

Some municipal officials oppose the wetland conservation project, saying it will stop the island benefitting from Cebu's economic boom. The

local authorities have reportedly delayed official sanctioning of the project by Manila.

Environmentalists here argue that the bird sanctuary can turn the island into a paradise for bird watchers and conservationists. Attracting birds would attract tourists and help generate revenue. But Custodio also notes that more funds are needed for the protection of the wetlands.

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Carlo Custodio, bureau head of the Department of Environment and Natural Resources here, says a proclamation by former president Ferdinand Marcos that made Olango a tourist spot still has to be revised to allow for a protected area.

It has also taken two years for most fishpond licences issued to businessmen in Olango to be revoked.

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Mangrove forests and coastal swamps once covered 5,000 sq km of the Philippines. Today, less than 1,000 sq km remain. Reclamation of mangrove areas for industry and urban expansion threatens 77 per cent of the country's remaining coastal wetlands.

Illegal Timber Trade Flourishes in South-east Asia

By A Special Correspondent

1980s at 17 million hectares a year. The Asian region accounted for 3.5 million ha.

Land clearing for agriculture is believed to be the single major cause of tropical deforestation. However, logging for the international and domestic timber trade also destroys forest. "All governments in the region appear to be taking steps to combat illegal timber trade, but in no case do these actions appear to be sufficient," the TRAFFIC report notes.

At one time, as many as 200 illegal sawmills were processing illegally harvested timber in Myanmar. By 1990, only half of the estimated 60 companies operating in the Thai border region has been granted legal timber concessions.

Yet, according to a report released by TRAFFIC Network and the World Wide Fund for Nature (WWF), there is widespread smuggling of timber into Thailand often assisted by corrupt officials. Illegal logging and illegal timber processing are also widespread.

TRAFFIC, the world's largest wildlife trade monitoring programme, has examined the scale of illegal trade in forestry in Asia and the Pacific. And the trail of wanted greed and forest destruction does not start nor end in Myanmar.

It reports that over the last decade millions and in some cases billions of dollars have been lost in foreign exchange, uncollected forestry-related charges and foregone forest resources, through illegal timber trade.

"Hundreds of thousands of hectares of forest, containing millions of cubic metres of timber, have been logged annually either illegally or to supply the illegal trade."

The latest estimates by the UN Food and Agriculture Organisation (FAO) put the global rate of deforestation in tropical forests during the

estimated that the country lost nearly US\$5 million daily through illegal logging and other forestry malpractices. Despite government crackdowns, illegal logging is still rife.

Transfer pricing is also rampant. This is the deliberate buying or selling of timber at prices that differ substantially from the prevailing market price. A common objective is to avoid tax.

Transfer pricing is the major problem in the illegal

being reduced by 25 per cent, the company still refused to pay.

Logging was banned in Thailand in 1989. But according to the TRAFFIC report, illegal logging (widespread before the ban) "still continues." Estimates of the amount of timber felled illegally each year run as high as 2.5 million cubic metres.

The TRAFFIC report states that timber cut illegally in Thailand is smuggled into Myanmar and then re-exported back into Thailand declared as timber of "Burmese" origin. Thai companies are alleged to be involved in illegal logging activities and timber smuggling in a number of neighbouring countries.

That involvement in Myanmar logging recently was the centre of controversy here when opposition parties criticised a deputy finance minister who used to own a company which won logging concessions in Myanmar. But, as a local daily put it, it is difficult to say whether the involvement was right or wrong since it was always a Thai policy over the last 10 years.

This policy started with the government of General Prem Tinsulanonda then faced with a now suppressed communist insurgency Thailand wanted to encourage cordial relationship with Burma. In response to a request from Rangoon, Thailand agreed that log purchases must be done only in Rangoon through bidding and

then transported by sea.

This was because the Burmese government did not want minority and rebel groups along the Thai-Burma border to benefit from the logging business. But in 1988, the military junta which toppled the Burmese one-party rule was faced with international sanctions for its suppression of the student-led pro-democracy movement.

In dire need for foreign exchange, Myanmar was forced to auction its logs and allow overland transport through the Chiang Dao district of Thailand's Chiang Mai province since rebel strength was weak on this border point. The Myanmar government provided the security.

Then the military junta allowed Thai companies to work the concession and transport the logs themselves. Since then almost 40 companies have won logging concessions from the Myanmar government. Burmese minority groups like the Karens have also cashed in on logging, albeit illegally.

Indeed, critics say Myanmar has allowed logging concessions because minority and rebel groups were already engaged in illegal timber trade. The government wanted its take as well.

Besides the virgin forests in the Burmese wilderness, also threatened is the world's largest standing teak forest.

According to TRAFFIC, short-term concessions should not be granted as these, inter alia, encourage illegal activities in the rush to maximise profits. Timber processing licences should not be issued to companies unless they can demonstrate guaranteed access to legal timber supplies.

— Depthnews Asia

All governments appear to be taking steps to combat illegal timber trade, but in no case do they appear to be sufficient.

The logging of protected trees continues, as well as logging outside concession boundaries, in protected areas and in other areas where logging is prohibited. Under-sized trees are also logged. Unauthorised logging and cutting more than the allowable harvest continue as well.

In peninsular Malaysia, the government has acknowledged that between 1986-90, 500,000 ha of forests were logged — 179,600 ha more than the official area set aside for logging. Authorities are also concerned about the level of illegal logging in Sabah and Sarawak.

Timber smuggling has been reported in the Philippines. According to one estimate, nearly 4 million cubic metres of logs worth hundreds of millions of dollars were smuggled to Japan, South Korea and Taiwan from the mid-1970s to the mid-1980s.

tropical timber trade of Papua New Guinea. From 1982-88, the estimated amount of foreign exchange and tax revenue lost through transfer pricing in Papua New Guinea was US\$100-US\$270 million and US\$30-US\$80 million, respectively.

To avoid taxes and to facilitate transfer pricing and smuggling, the illegal timber trade also resorts to under-grading, under-measuring and under-valuing. Tree species are also mis-classified to avoid taxes, to circumvent harvest or trade restrictions, to gain market access for lesser-used species and to facilitate transfer pricing.

Cumulative estimates of losses through unpaid forestry taxes in Indonesia over the last decade surpass US\$1 billion. In 1991, one company was fined US\$5.6 million for illegally felling over 91,000 cubic metres of timber in an adjoining concession and in a protected area. Despite the fine