

## Feature

## Environment

# NEMAP: Some Criticisms and Responses

by Dr Saleemul Huq

THE National Environment Management Action Plan (NEMAP) is being undertaken by the Government of Bangladesh through the Ministry of Environment and Forest (MOEF) in cooperation with NGOs through the Coalition of Environmental NGOs (CEN) and Association of Bangladesh Environmental Action Groups (ABEAG) along with other groups, such as the Bangladesh Centre for Advanced Studies (BCAS) and Forum of Environmental Journalists (FEJB). During the last six months a series of twenty-three grassroots participation planning workshops were undertaken in different agro-ecological zones, six regional workshops, six professional workshops and a national workshop were held. At the national meeting, the Prime Minister congratulated the MOEF and NGOs on carrying out the NEMAP process and directed them to take the Draft NEMAP back to the people to get their endorsement of the final product.

The consultative phase of the NEMAP format was, thus, taken back to the people through six more regional workshops during September in order to get their feedback on the synthesis process. The document is to be prepared and circulated during the latter half of October.

As an innovative approach to participatory planning it had to face and overcome many methodological issues including: (i) How can a national plan be participatory when all citizens are potential stakeholders? (ii) How are people to be encouraged to give their opinions in a manner which can be analysed? (iii) How can geographical representations be ensured? (iv) How can the views of different professionals and socio-economic levels be accommodated? (v) How can such a large and diverse information base be synthesized into an action plan? (vi) How can the different parts of civil society be incorporated into such an action plan? These are only a few of the methodological problems that had to be grappled with. It is quite obvious that there is no single methodology which would satisfactorily deal with all the concerns expressed.

The steering committee, consisting of representatives from the government, NGOs, academia and media spent many hours and days struggling with these issues and tried to address them as adequately as possible within the time and resource constraints.

Understandably, the NEMAP process has been subjected to criticisms, some (if not all) of it also justified. These have come from many sources including the grassroots participants themselves, academics, government officials, NGOs, journalists and others. The NEMAP steering group consider such criticism not only as healthy but an integral part of the NEMAP process.

cess to allow it to learn from mistakes and make course corrections.

A number of criticisms were raised in a paper by Dr Zahir Sadeque, a former Professor of Sociology at Rajshahi University and currently Environmental Adviser to USAID. Dr Sadeque in his article has given a reasonably accurate description of the genesis of the NEMAP over the last few years and how the present participatory process came about. He then made a number of observations and critiques of the current phase

of the country. It was obvious that consulting all of the country's citizens was impossible, so a process was developed which was reasonably participatory and reflected all geographical, ecosystem, social groups, professional groups and had gender balance. Thus, twenty-three locations were chosen representing all the major agro-ecological zones, and NGOs were involved in organising workshops where around 70-80 participants were invited representing

It was by no means a "summary document". However, one of the useful feedbacks from the second round of consultative workshops was the strong emphasis on specific regional problems which had not been reflected in the list circulated.

### Finalisation of the NEMAP Synthesis Document

Dr Sadeque has rightly pointed out the difficulty of rendering such a wealth and density of information into a coherent and "prioritised" plan. It is inevitable that the process of synthesis will ren-

that the donors should have been consulted. I would take issue with him and say that NEMAP is a national plan and not a donor document.

Therefore, the one group who do not need to be consulted are the donors. Furthermore, the donors nowadays claim to "prefer national demand driven" plans and the NEMAP will be, if nothing else, certainly a Bangladeshi plan.

### The Role of MOEF

The Ministry of Environment and Forest must be congratulated on their open, cooperative and pro-active policy of participation in the process. They have responded magnificently to all suggestions for increasing public participation and awareness. They have also taken a continuous and strong interest in the contents of the document and have by no means been reticent in giving their inputs and opinions. It has been a real partnership between the MOEF and NGOs on the participatory process and between the MOEF and Resource Persons in the writing process.

### UNDP's Lack of Intellectual Leadership

Here, again I must take issue with Dr Sadeque's advice to UNDP to take intellectual leadership. In my view, and I believe this view is shared by UNDP, they have no place giving the intellectual leadership to NEMAP. The process is now completely Bangladeshi and that is how it should be. If it fails to satisfy anyone then that is the fault of the organisers and writers, but they will have to live with that. It is not for UNDP (or any other donor) to step in and take intellectual leadership from them.

It is also wrong of Dr Sadeque to imply that by (only partially) funding the NEMAP exercise UNDP somehow should exercise ownership over it and take over its intellectual leadership. The Government of Bangladesh and the NGOs together have contributed nearly half the total costs of the NEMAP participatory exercise in terms of manpower and other resources and the entire process has been carried out by Bangladeshis without any external input.

Finally, it is perhaps premature to be discussing the contents of the NEMAP document before it is finalised but it is a healthy exercise to engage in debates about what it should contain. What can perhaps be said with some degree of certainty is that the final NEMAP document will not satisfy everyone but hopefully it will be recognised as an important step forward, if not the last word, in participatory environmental planning.

The writer is Executive Director, Bangladesh Centre for Advanced Studies, a private, non-profit, research and policy institute which was involved in conceptualising and carrying out the NEMAP process with the Ministry of Environment and Forest.

## Desertification Convention: Will it Help at the Grassroots?

by Geoff Tansey

"My house was right here," said the old Yemeni villager. "The camels walked right in with bricks and grain through the big doors, but the doors are now covered with sand. We used to have camels with all our goods coming in. But now nothing."

All he can do today is lament the loss of his house and explain what happened. The dominant landowners sold the trees that grew all around for

nickies from Australia, says Milroy. They were lucky and it rained the next day. Now they have trees again.

The Yemeni villagers' experience of shifting sand dunes obliterating land and housing is the image conjured up by desertification. But it is a misleading image, true only in specific circumstances such as those in Yemen.

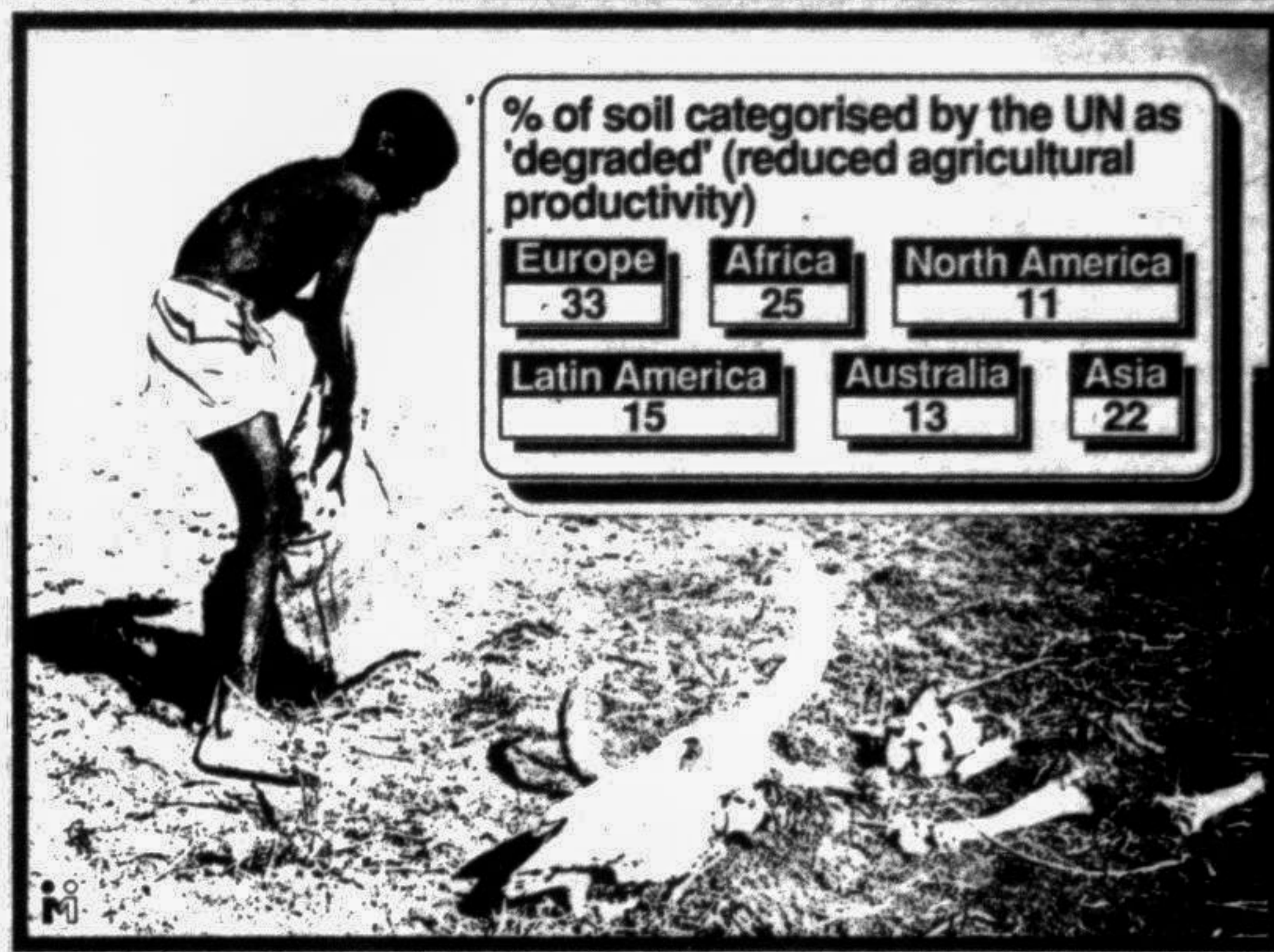
It is not true for much of

per cent of the population, are drylands potentially susceptible to desertification. Since the first desertification conference in 1977, the United Nations' estimate of the area affected has been cut by 50 per cent.

Thomas regrets that in the horse-trading at the Earth Summit in Rio de Janeiro two years ago climatic variation was added to human activities as a cause of desertification, which is defined in the convention as

As the UN-backed convention to combat desertification is opened for signatures in Paris in October, Gemini News Service brings the rhetoric down to earth with a look at experience in Yemen.

## Lost lands



building. After that, he says, the sand dunes came.

For 10,000 years all but the farmed areas of Yemen have been covered by trees. Even the hot, dry coastal and inland fringes of desert were thick with acacia until 30 years ago. This natural forest provided shade for grasses which bind the soil. It also provided a livelihood for people and their livestock.

"The goats and sheep don't hurt the trees," says livestock herder Salih. "They just jump on them and eat the seeds and leaves."

But in recent decades traders started buying the trees for charcoal, or landowners sold them for building materials. They earned more from such sales than from the rental paid by the livestock herders to graze their animals.

Clearing the land and attempting farming, with pump irrigation, caused damage and broke the fragile balance of these semi-arid areas. Desertification followed.

More than 1,000 square kilometres of desert have been created, according to World Bank reports on Yemen, says Tony Milroy of the Arid Lands Initiative (ALI), a small non-governmental organisation working with local communities in rural Yemen.

Salih's community still has trees to graze their goats on because they have maintained the traditional management practices which ensure trees are not cut down.

"Long ago when we came here our forefathers were banned from cutting trees," he says. "If you see somebody cutting, you stop him. You can fight him if you want. The government also helps us prevent the cutting of trees."

Other communities have organised their children to collect seeds, and local farmers are planting them directly into the denuded soil to re-establish cover using tech-

the area fringing the Sahara. There has been serious misunderstanding of how semi-arid areas adapt to the wide fluctuations in climatic conditions normal in those areas, says Dr David Thomas, a geographer at Britain's Sheffield University who has long experience in the arid and semi-arid regions of Africa and is author of the recently published book *Desertification: Exploding the Myth*.

Arid and semi-arid areas may have 15-20 years of relatively high rainfall, then a similar period with little rain. The vegetation dies off and the desert appears to advance. But when rain returns, so does the vegetation. People living in these semi-arid regions have also adapted, by moving their herds and varying their size, according to conditions.

It is when other factors affect the way land is managed that desertification arises: social and economic changes and population pressures may lead to overcultivation, overgrazing, deforestation and poor irrigation practices, any of which can trigger desertification.

These vary in different regions: desertification is not a single global problem with one solution but a problem with global dimensions, many causes and many solutions specific to the local conditions. So it has to be dealt with by local action rather than grand global and national plans, believes Dr Thomas.

The need for involvement by local people, building on systems used in many affected areas for centuries, plus the lack of an agreed definition of desertification — there have been more than 100 in the past 20 years — made it difficult to formulate and agree the international convention on desertification which is to be opened for signing in Paris on October 14-15.

About 40 per cent of the earth's land surface, with 20

"land degradation in arid, semi-arid and dry sub-humid tropics." He fears the introduction of climate — which is beyond human control — could be used to avoid supporting the local actions necessary to combat desertification, which is caused by people.

He gives the example of drought: it is a natural phenomenon about which nothing can be done. But choices can be made about how to work in drought-prone areas. It is the way this is done that affects whether or not drought turns into desertification. That is the key — enabling the use of systems that can cope with fluctuating climate and meet local conditions, which is what pastoralists have been doing for centuries. Officials used to consider that the way of life of the pastoralists was a cause of desertification; but today they are seen as good managers who are an integral part of the solution.

The provisions of the convention are broad and often vague but it acknowledges the seriousness of desertification and, unlike previous approaches, emphasises "the importance of ensuring the full participation of men and women at all levels in programmes to combat desertification and mitigate the effects of drought."

"Our research and documentation of practical success stories shows that grassroots initiatives that involve the real experts, local farmers, livestock herders that have subsisted in low-rainfall areas for millennia, can succeed and can be replicated at low cost without the involvement of outside expertise," he says.

Both he and Thomas are sceptical about the value of national plans and both want to see greater support and encouragement for non-government organisations able to work with local groups.

— Gemini News

## Environmental Audit: The Value-addition of a Clean-up

by Rimjhim Jain

TO aid industries in preparing their annual environmental statements, a new concept of waste minimisation circle (WMC), in which member units will share their expertise and experiences in resource conservation, is to be introduced soon by Indian industry associations, institutions and the government.

The statements, which are to be submitted annually to the respective State Pollution

WMCs were meant to increase awareness about the compulsory statement and to help small-scale industries that are struggling to arrange the wherewithal to conduct environmental audits.

Says K P Nyati, adviser, environment, Confederation of Indian Industries (CII), a WMC will comprise several units in the same industrial cluster — such as tanneries in Kanpur or electroplating units in Madras. Each WMC will be headed by

an entrepreneur who is a local opinion leader committed to environmental improvement, and will champion the cause of waste minimisation in the cluster.

AWMC will get audit training and advice from the government and industry associations. The maintenance of a log-book is expected to establish an auditing process which can systematically continue. "We hope that there will be a multiplier effect in the industry," says Nyati.

The WMCs will involve district industrial centres and the existing network of small industries' support institutions to generate a mass movement. Nyati says, "For the first time the government has introduced a proactive approach to the conservation of natural resources, rather than a command-and-control approach."

WMCs critics, however, anticipate problems. Argues SP Chandak, director, pollution control, National Productivity Council, "The environmental audit notification was hurriedly put into force without first creating the necessary back-up awareness and expertise which wide received operational contents in the same period."

The Indian government, being the first in the world to enforce audits, is not just a pioneer but one that leaps before it thinks," remarks the Delhi-based head of a leading pharmaceutical company.

The biggest hitch to the filing of environmental statements is their submission to pollution control boards. MEF officials assure that "the information contained in the statement cannot be used against the industry by the authorities. The consent mechanism — already exists to enforce compliance with environmental laws."

MEF reveals that not a single industry has been penalised yet. "Punishment would not be fair because not many

industries are even aware that such a law exists, nor are they qualified to hold an environmental audit," say officials.

Counters Chandak, "This awareness and expertise should therefore have been created before the notification was issued. Even the WMC scheme will be too localised to have an impact quickly."

The CPCB, however, contends that it will soon begin an extensive exercise to compile and analyse the data available with SPCBs. The industries will then be given feedback of an advisory nature.

Finally, only an analysis of the statements submitted will deliver a final judgement on whether the government was too hasty in forcing resource conservation, thus relegating it to a perfunctory form-filling exercise

wide received operational contents in the same period."

The Indian government, being the first in the world to enforce audits, is not just a pioneer but one that leaps before it thinks," remarks the Delhi-based head of a leading pharmaceutical company.

The biggest hitch to the filing of environmental statements is their submission to pollution control boards. MEF officials assure that "the information contained in the statement cannot be used against the industry by the authorities. The consent mechanism — already exists to enforce compliance with environmental laws."

MEF reveals that not a single industry has been penalised yet. "Punishment would not be fair because not many

industries are even aware that such a law exists, nor are they qualified to hold an environmental audit," say officials.

Counters Chandak, "This awareness and expertise should therefore have been created before the notification was issued. Even the WMC scheme will be too localised to have an impact quickly."

The CPCB, however, contends that it will soon begin an extensive exercise to compile and analyse the data available with SPCBs. The industries will then be given feedback of an advisory nature.

Finally, only an analysis of the statements submitted will deliver a final judgement on whether the government was too hasty in forcing resource conservation, thus relegating it to a perfunctory form-filling exercise

large tracts of low-lying arable land.

Low-lying islands like the Maldives and some Pacific atolls might disappear into the sea. And vast numbers of people living in the fertile deltas of Indonesia, Vietnam, China, Myanmar, Pakistan, Nigeria and South America could be forced to flee to higher ground.

By some estimates agricultural land use practices including deforestation, may be responsible for 30 per cent of all carbon dioxide emissions, 50 per cent of methane and perhaps as much as 90 per cent of nitrous oxide.

Livestock rearing and rice cultivation both release sizeable quantities of methane into the atmosphere, as do wild ruminants and natural swamps. Methane emissions from stom-

ach fermentation in cattle, sheep, goats and buffaloes account for an estimated one-fifth of the world's methane gas, or close to 3 per cent of total greenhouse gases.

Flooded rice cultivation in paddy fields produces an estimated 40 per cent of the world's total methane emissions and the use of mineral fertilisers contributes to the release of nitrous oxide.

The burning of forests to make way for crop and pasture gives off carbon dioxide and other gases which block heat from escaping the Earth's atmosphere and thereby contributes to global warming. It also robs nature of an important capacity to absorb carbon dioxide.

Information gathering on these and other activities has

## Global Warming Affects Poor Countries Most

by Ian Steele

GLOBAL warming is likely to have some positive spin-offs for food and forest production.

But according to the United Nations Food and Agriculture Organisation (FAO), it also threatens to widen the gap in living standards between the world's richest and poorest people.

A rise in the earth's temperature would push the climate zones and ecosystems of the middle latitudes between 200 and 700 kilometres closer to the poles over the next 200 years, enabling crops to be grown in areas which are presently too cold.

But the major beneficiaries of this move would be temperate zone countries like the United States and Canada which already produce much of the world's grain.

Unless crops and farming systems can be adapted to changing conditions arid and semi-arid nations are likely to suffer. FAO estimates that if the

A rise in earth's temperature would enable crops to be grown in temperate countries like the US and Canada which already produce much of the world's grain

Sahara desert shifted 200 kilometres southwards, the number of people which Sahelian countries could feed from their own resources would fall by 30 per cent.

FAO experts note, among other risks, that increased cloud cover could reduce photosynthesis and cause a drop in plant productivity. Reduced snow cover in higher altitudes could expose winter crops to more frequent frosts. Floods, droughts and intense mid-season dry spells could become more common, as would hurricanes and cyclones.

More variable rainfall and an increase in plant evapo-transpiration could reduce the effectiveness of some irrigation schemes. And an expected rise in sea level by up to one metre by the year 2100 could swallow

large tracts of low-lying arable land.

Low-lying islands like the Maldives and some Pacific atolls might disappear into the sea. And vast numbers of people living in the fertile deltas of Indonesia, Vietnam, China, Myanmar, Pakistan, Nigeria and South America could be forced to flee to higher ground.

By some estimates agricultural land use practices including deforestation, may be responsible for 30 per cent of all carbon dioxide emissions, 50 per cent of methane and perhaps as much as 90 per cent of nitrous oxide.

Livestock rearing and rice cultivation both release sizeable quantities of methane into the atmosphere, as do wild ruminants and natural swamps. Methane emissions from stom-

ach fermentation in cattle, sheep, goats and buffaloes account for an estimated one-fifth of the world's methane gas, or close to 3 per cent of total greenhouse gases.

Flooded rice cultivation in paddy fields produces an estimated 40 per cent of the world's total methane emissions and the use of mineral fertilisers contributes to the release of nitrous oxide.

The burning of forests to make way for crop and pasture gives off carbon dioxide and other gases which block heat from escaping the Earth's atmosphere and thereby contributes to global warming. It also robs nature of an important capacity to absorb carbon dioxide.

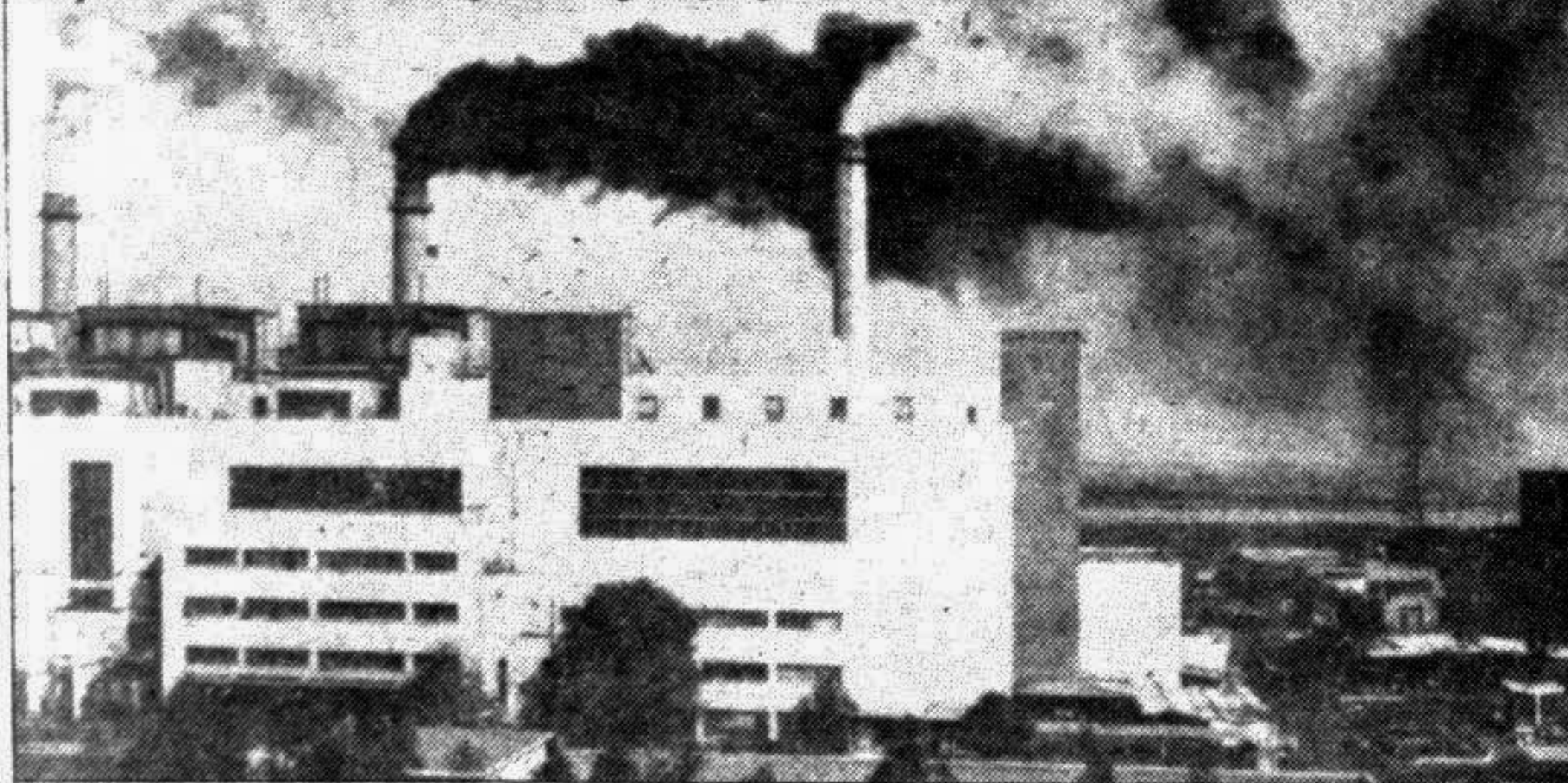
Information gathering on these and other activities has

been assigned to an FAO working group which will help countries establish national net emissions from agriculture. Exact date will be needed if a tradeable emission quotas system or a carbon tax system are to be implemented under a Framework Convention on Climate Change which was worked out at last year's landmark United Nations Conference on Environment and Development.

FAO has a Global Information and Early Warning System in place which combines the use of satellite remote sensing technology to study weather patterns and crop yields with an agrometeorological database which collects rainfall and temperatures patterns in developing countries. The Early Warning System alerts countries to conditions which threaten their food production or supply.

— Depthnews Asia

Corporate environmental responsibility: Lifting the smokescreen.



Control Boards (SPCBs) by September 30 this year for the previous financial year, will be prepared by conducting an environmental audit.

The environmental audit notification was issued by the ministry of environment and forests (MEF) in March 1992 and amended in April last year. The audit will take stock of the raw materials consumed, product output, wastes generated, methods of waste disposal, and the environmental impact of the industry on its surroundings.

A profile of the company's environmental management system, the status on compliance with standards and a study of the risks and waste utilisation will be drawn up.

an entrepreneur who is a local opinion leader committed to environmental improvement, and will champion the cause of waste minimisation in the cluster.

AWMC will get audit training and advice from the government and industry associations. The maintenance of a log-book is expected to establish an auditing process which can systematically continue. "We hope that there will be a multiplier effect in the industry," says Nyati.

The WMCs will involve district industrial centres and the existing network of small industries' support institutions to generate a mass movement. Nyati says, "For the first time the government has in-

would allow its proper implementation."

Admits Nyati, "With a first-time environmental audit costing between Rs 75,000-200,000 (US \$2,500-6,700) and taking as much as 15 months to complete, small scale industries are finding it difficult to cope."

Model audits in 120 industrial units in the 18 highly-polluting industrial sectors like cement, distillery and leather processing were conducted by Central Pollution Control Board.

Unfortunately, although the notification has been in force for the past two years, only 2,995 statements were filed up to December 1993, although 113,760 industries country-