

Environment

Nurturing nature in the hill tracts

By Quamrul Islam Chowdhury

The people of the Chittagong Hill Tracts were far more vocal than those who had participated in the 26 grassroots workshops held across the rest of the country during the formulation of the National Environment Management Action Plan (NEMAP). The hilly people were so conscious about the dependence of their future on the health of the environment that they vigorously called for rapid implementation of the people's participatory environment management action plan for the CHT to help restore and maintain ecological balance.

GRASSROOTS-LEVEL people seized the opportunity. They took the lead this time around, pushing the consultants to the back seat. They enthusiastically pinpointed different sets of problems of different eco-specific zones of the three different hilly districts. They also came up with different sets of solutions. And in addition to that, they also pointed out the government bodies and other agencies, including those of the donors, who, they think, would be the most effective in implementing the solutions. They argued with each other over different strategies to shape a sustainable future. This was a sort of revolution that came about through a series of some 14 workshops held in the last three months. The wave went from Thanchi in Bandarban to Panchhari in Khagrachhari.

These people were far more vocal than those who had participated in the 26 grassroots workshops held across the rest of the country during the formulation of the National Environment Management Action Plan (NEMAP). The hilly people were so conscious about the dependence of their future on the health of the environment that they vigorously called for rapid implementation of the people's participatory environment management action plan for the Chittagong Hill Tracts (CHT) to help restore and maintain ecological balance.

Participants at four grassroots-level workshops in Bandarban identified some problems that were not aired at the six workshops in Rangamati district. Some of those were also not identified at the four grassroots-level workshops in Khagrachhari district. But there were some common problems shared by the hill districts.

"The face of Chittagong Hill Tracts will change," said K. S. Prue, a member of the royal family of Bandarban, adding that once the ball starts rolling, things will take a different shape and environmental problems will be resolved easily. "Preserve our forests, our heritage, our culture of conservation. The Hill Tracts is the finest jewel in the crown of Bangladesh," he said.

Daw Nai Marna at Thanchi, the first grassroots workshop on November 18, 1999, fully agreed with him. She, along with about 100 participants at that workshop, demanded early execution of the CHT-NEMAP. To them it meant an end to the encroachment into the deep forests of the most remote southeastern hilly area of Thanchi, which can be reached after a 15-hour journey by a motorised boat from Bandarban district town. From Thanchi to Panchhari people came up with their own environment plans. They participated in an unprecedented way. Everywhere 100 to 150 participants from seven different professional groups took part in the crafting of the CHT-NEMAP.

"It's a unique experience for me to actively participate in such a workshop to help formulate our plans," said Anew Marmar, Headman of Manikchhari, Dipali Chakma, a farmhand of Matiranga, echoed Anew. Chang Khisa, former headmaster of Khagrachhari Government High School, warned, "Please don't play with us. Implement this environment plan without delay. Our hopes are high. Don't dash it."

The beauty of the formulation process attracted participants. The marvel of the consultation rests in the grassroots voice. The participants in all the workshops identified over 30 issues of concern, out of which 10 were common. The common issues identified were forest depletion, depletion of fisheries, scarcity of drinking water and irrigation water, health and sanitation, riverbank erosion, lack of environmental education and awareness and the malaria menace.

They further suggested massive afforestation, strict enforcement of laws, scientific cultivation on the hills, installation of ring-wells, tube-wells and deep tube-wells, re-excavation of ponds and rivers, water conservation, use of alternative sources of energy and creation of mass awareness.

The participants identified the main problems as lack of electricity, communication problem, unemployment, poor marketing facilities for agricultural and other produce, lack of cattle, attack by wild elephants, pigs and rats, killing of guest birds, pollution of river waters, jhum cultivation, and lack of mother and child healthcare.

The last workshop of the series held at the Khagrachhari Government High School was jointly organised by the Environment Ministry, the Chittagong Hill Tracts Affairs Ministry, the Regional Council and UNDP on February 26, 2000. The inaugural session was addressed by Director General of Department of Environment A. R. Khan, editor of *The Independent* Mahbubul Alam, Environment Ministry's Dr. Mahfuzul Haque, Chairman of the Forum of Environmental Journalists of Bangladesh Quamrul Islam Chowdhury, Deputy Commissioner of Khagrachhari Ashraf Makbul, Environment Ministry's Omar Ali and Sunil Kanti Bose and NEMAP-CHT Consultant Jana Bikash Chakma.

The process of framing an Environment Management Action Plan for the three districts of the Chittagong Hill Tracts was kicked off at Rangamati on October 26, 1999. The chairman of the Chittagong Hill Tracts Regional Council (CHTRC), Jyotirindra Bodhipriya Lama (Santu Lama), who presided over the preliminary workshop, emphasised the need for evolving a pragmatic environment management action plan to maintain ecological balance in the country's hilly region.

The participants present at the launching workshop also filled in the questionnaires (around 300) and submitted them to the facilitators. They were given more copies of the questionnaires with a request to get them filled them up by their friends, colleagues, neighbours and then mail them to the

Programme Management Unit, SEMP.

It was observed that people of these places responded very warmly and expressed deep appreciation for having been consulted prior to the preparation of the NEMAP-CHT. The active participation of women, headmen and karbaris, who appeared to be very keen to shape their future in an eco-friendly manner, made each of the workshops interesting and significant and offered ample grounds for hoping that environmental issues would be given due importance by the people of the CHT.

As the groups differ in their professions and livelihoods, their identification of problems naturally had some professional bias. For example, farmers focused more on problems of agriculture, such as water, pesticides, polythene bags and stampede by wild elephants, while the women put priority on drinking water and health/sanitation issues. The teachers focused on lack of education and environmental awareness, while the government officials identified absence of officials from duty stations, lack of communications and infrastructure and the land question as major problems. People's representatives and headmen/karbaris put priority on afforestation and alleviation of poverty, while the social workers identified poverty, deforestation, lack of education and drug addiction as major problems. Identification of priority problems was also influenced by the varied topography of the six thanas. For example, participants from Jurachari

and Longadu valley areas were concerned more with water level at Kaptai lake and irrigation problems, while participants of steep and hilly Barkal were concerned more with drinking water and livestock breeding. The solutions offered by the participants also reflect their educational levels. For example, tribals and local communities offered solutions based mostly on local resources and indigenous knowledge, while the government officials offered structural solutions like building of larger dams across the streams.

In all the areas, participants focused on issues that concern their immediate neighbourhoods, livelihood and security. Naturally, the problems mainly concerned the economic and physical survival of the local communities. Obviously the issues of deforestation, jhum cultivation, agriculture, fishing and health/sanitation were common to all the seven groups. The government initiative of expanding the Reserve Forest did not find favour with the participants. Instead, they suggested social forestry and community management. The hill people also put emphasis on settling the land disputes for sustainable environmental management of the area. As most of the local people are very poor and illiterate, they put the blame mainly on poverty and lack of education for environmental degradation. Instead of outright banning the age-old jhum cultivation, the participants suggested alternative options of employment and eco-friendly jhum cultivation, if there is any such thing.

Participants of all the six thanas surrounding the Kaptai Lake alleged that the PDB was not following the "Rule Curve" in maintaining the water level in the Kaptai Lake. Instead of 99 ft. MSL (mean sea level), 103 ft. MSL was maintained on 18 January 2000. Due to the high water level, farmers could not cultivate their rice fields. They suggested that water level be kept at 60 ft. MSL, allowing them to cultivate the fringe land. The participants in all the places suggested the option of storing rain and fountain water for satisfying the need of drinking water. Death due to malaria was identified as a major issue of concern everywhere. Headmen and karbaris raised the issue of poor agricultural production, lack of electricity and land erosion. They suggested that instead of MPs, their representatives should be included in the Forest Committee for issuing permits, and the Forest Department should be put under the Regional Council. The social workers suggested that the mother tongue of each tribe be made compulsory from grade three. They also opined that local tribal teachers should be recruited for primary and secondary schools. The teachers raised issues like flash floods, drought, difficulties in ploughing hillocks, etc. Government servants and the journalists mentioned issues like hill fire, unplanned agriculture and invasion of agrochemicals. They also said that unwillingness of the government servants to work in the CHT has created obstacles in the implementation of development projects.

Thus, the ultimate solution for environmental degradation in the CHT districts lies in the easing of heavy biotic pressure on natural resources. This has to be done through alleviation of poverty, creation of employment options, provision of health services and educational opportunities, and, above all, through settling the land question.

Participants at the workshop identified a set of key issues that pose threat to the environment.

Deforestation, denudation of hills and killing of wildlife: The participants alleged that as hills are khas land, people indiscriminately fell trees to meet their daily needs. They also blamed corrupt forest officials, traders, and persons involved in illegal cutting and trading of wood for denuding the hills.

Adverse effects of jhum cultivation: They pointed out that jhum is practised mainly by the tribal community on the upper ridges of the hills. It is a traditional method of agriculture. Tribal people and a good number of participants were against banning jhum cultivation. They suggested that other practices like terracing and use of jhum land for horticulture and cultivation of spices should be explored. The point that they underlined was that alternative means of livelihood for the jhumiya people should be provided before taking any action.

Poor communication system: At Thanchi, and also at Lama, people were much concerned about the poor communication system of the area, particularly the absence of a viable link with the district town. Some groups identified it as their first priority. The Shangu River is navigable only for five months a year. It takes 15 hours to reach the district town by motorised boats and two days by road. Roads being built by Bangladesh army are expected to be completed by 2002. The terrain is difficult and hills have to be cut for the roads. Some local people suggested the building of rope-ways, if possible.

Scarcity of drinking water: Very few tube-wells were seen in the three hilly districts. Ring-wells do work occasionally. People mostly drink jhiri (rivulets from the hills) water. They suggested that water could be conserved in the jhiri by putting up dams -- a very costly proposition, and far from environment-friendly. Others suggested facilities for year-round storage of rainwater.

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and judge. The Ministry of Environment and Forest and the Department of Environment will always depend on the co-operation and support of the civil society in its efforts to conserve and protect the environment in Bangladesh.

The writer is Secretary, Ministry of Environment and Forest

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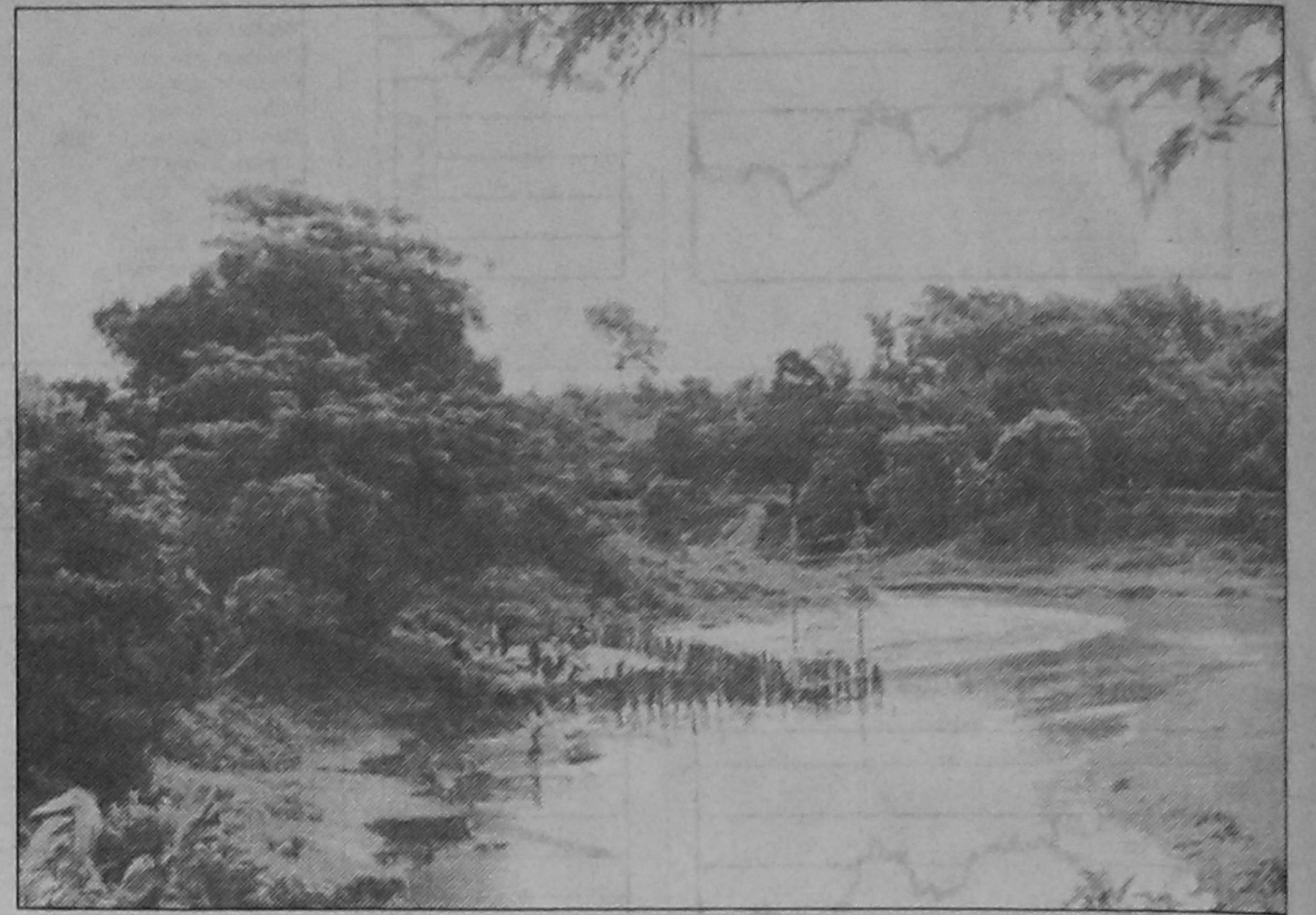
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Waking up to environmental needs

By Syed Marghub Murshed

BANGLADESH. Like many other developing countries in the world, discovered or rediscovered environment rather late. In the last decade of the 20th century, Environment is a subject that concerns everyone. Everybody has stake in matters that concern environment. The agenda of the government regarding environmental matters, in Bangladesh, has been prepared on the basis of consultations with the representatives of the country's civil society. The policies of the government on matters concerning the environment have often been formulated in response to initiatives taken by non-government environmental activists.

The government adopted its Environment Policy in 1992, not long after the great environment conference at Rio. Earlier, the Department of Environment was established, under the newly created Ministry of Environment and Forest. To formulate Environment Policy and oversee its implementation a broad-based National Environment Council was formed headed by the prime minister. In 1996 the government formed the National Conservation Strategy (NCS) in which guidelines regarding resource use have been spelt out. The National Environment Management Action Plan (NEMAP) was also prepared in 1996. Both the NCS and the NEMAP were results of interactive process-outcomes of consultative exercises in which efforts made to involve all stake-holders (particularly civil society representatives). The Environment

Conservation Act was passed by the parliament in 1995 and the rules under this Act were approved in 1997. For effective compliance of these rules and the provisions of the Environment Act of 1995, the government has decided to set up environment Courts. There will be two such courts in Dhaka and five others in the five other divisional headquarters of Bangladesh. They will deal with offences relating to the violation of environmental laws and rules. The Courts will be in place, it is hoped, before the end of the year 2000.

Taken in its entirety, environmental problem is a global problem that calls for a global response. The government of Bangladesh is firm to act in the interests of the environment at the national, regional as well as the global or international levels. At the global or international level Bangladesh has signed and ratified nearly all the major international protocols to protect the Ozone Layer, the Basic Convention on Trans boundary movement of Hazardous Wastes, the Convention on Bio-Diversity, the Ramsar Convention and the Framework Convention on Climate Change -- to mention, only a few. In various international forums, Bangladesh has acted with other developing countries to persuade the environmental culprits of the World, often referred to, euphemistically, as the world's developed countries, to pay for the damages they have caused to the environment of Planet Earth. Bangladesh has been, particularly, active in various conferences and meet-

ings of the Kyoto Protocol and the Framework Convention on Climate Change. Bangladesh as you are all aware, is among the countries that are highly vulnerable to the adverse consequences of Global Warming that is taking place because of Climate Change.

At the regional level through bodies like the SAARC and the Colombo-based South Asian Co-operative Environment Programme (SACEP), Bangladesh has been working together with its neighbouring countries to deal with environmental concern within South Asia. Bangladesh is trying to take lessons from the environmental experiences of neighbouring countries. We are trying to replicate innovative success stories like the waste to energy projects in India.

At the national and local level, the government has identified a number of important problems, important areas of concern and with the limited means at its disposal, if trying to cope with these problems. One such concern is air quality -- a very serious problem in urban Bangladesh, particularly in the city of Dhaka. The transport sector is mainly responsible for this problem. The mitigatory measures taken by government so far include imposition of heavy duties on the import of two stroke engines and the import of lead free petrol for petrol driven vehicles and low sulphur diesel for diesel driven vehicles. A great deal more, needs to be done to improve our urban air quality. Some of the measures, we hope we shall be able to take in near future, include

making CNG (Condensed Natural Gas) available to consumers in adequate quantities and encouraging import of CNG-driven vehicles, ensuring that all new petrol driven vehicles are equipped with catalytic converters and new diesel driven vehicles with particulate filters. Another serious concern is arsenic contamination in our ground water. The government, with its international development partners, is working, very seriously, to make arsenic free potable water available to the country's rural population. Our rivers and fresh water bodies are being continuously polluted by industrial waste and sewage. The Department of Environment has identified around 1200 old industrial units and have been polluting our rivers and other water bodies (they have been joined by a number new dyeing industries). The old leather industries, the old textile industries, the paper and pulp mills, the fertiliser plants and the battery manufacturing industries, are mainly responsible for the degradation of the water quality of the rivers flowing along Bangladesh's major towns and cities. We, in the government, are trying to address these problems through interventions. We hope that, when the environmental courts begin functioning, we shall be able to deal, more effectively with the polluting industries.

It is often said that the country's most environmental problem-prone area is its capital city. During the census of 1951, the population of Dhaka was under a quarter of a mil-

lion. In 1971, when Bangladesh became independent, it was 1.7 million. The population of the city is set to cross the 10 million-mark in about one year. The capital city has been the ultimate destination of the country's rural poor. In the years ahead, this migration to Dhaka from the rural areas, particularly from areas where poverty is endemic, will continue. According to certain projections, the population of the city in 2021, will be round 30 million life in Dhaka, which is already one of the world's most polluted cities can, in the not too distant future, become an environmental nightmare.

However, in my view, the most disabling factor that impedes the government's effort to upgrade our environment is the weakness of the Department of Environment. The Department of Environment is an inadequately staffed and insufficiently equipped agency of government shouldering a most serious responsibility. Steps have been taken to enhance its capacity to take on its burden but it remains and shall remain, in the foreseeable future, woefully short of manpower. According to CIDA experts (experts of Canadian International Department Agency) the Department of Environment in Bangladesh would need 15,000 functionaries, at various levels, to discharge its responsibilities in a proper manner. Responsibilities, that at present, rest on the shoulders of some 173 odd people (who include drivers and messengers) -- the need to strengthen the Department has to be recognised -- by all con-

cerned; by all who have a stake in the environment. The Department of Environment is expected to provide Environmental Impact Assessment clearances to all government projects; to all new industries, both in the private and public sector. It is required to monitor the environment status of all the industrial units operating in the country. It is supposed to oversee the activities of the transport authorities regarding vehicular emissions. It is supposed to work with local government bodies dealing with waste disposal. It has to represent Bangladesh at different international forums where environmental issues are discussed.

The department does have the legal instruments necessary to carry out the responsibility that have been assigned to it, but with the meagre resources and the extremely limited manpower at its disposal, it is indeed, very difficult for the Department of Environment to use its legal mandate, effectively. It is important for people to understand and appreciate the constraints under which the agency responsible for environmental conservation has to work. Environmental problems in the country are the cumulative effects of actions that had been taking place for more than four decades. The issues are well known, their remedies are also known. These problems will not disappear overnight. We have no magic lamp, no magic wand that make them go away.

As stated earlier, that the civil society has strongly influenced the country's environmental policies. Important gov-

Participants at the work-

shops identified a set of key issues that pose threat to the environment.

Deforestation, denudation of hills and killing of wildlife: The participants alleged that as hills are khas land, people indiscriminately fell trees to meet their daily needs. They also blamed corrupt forest officials, traders, and persons involved in illegal cutting and trading of wood for denuding the hills.

Adverse effects of jhum cultivation: They pointed out that jhum is practised mainly by the tribal community on the upper ridges of the hills. It is a traditional method of agriculture. Tribal people and a good number of participants were against banning jhum cultivation. They suggested that other practices like terracing and use of jhum land for horticulture and cultivation of spices should be explored. The point that they underlined was that alternative means of livelihood for the jhumiya people should be provided before taking any action.

Poor communication system: At Thanchi, and also at Lama, people were much concerned about the poor communication system of the area, particularly the absence of a viable link with the district town. Some groups identified it as their first priority. The Shangu River is navigable only for five months a year. It takes 15 hours to reach the district town by motorised boats and two days by road. Roads being built by Bangladesh army are expected to be completed by 2002. The terrain is difficult and hills have to be cut for the roads. Some local people suggested the building of rope-ways, if possible.

Scarcity of drinking water: Very few tube-wells were seen in the three hilly districts. Ring-wells do work occasionally. People mostly drink jhiri (rivulets from the hills) water. They suggested that water could be conserved in the jhiri by putting up dams -- a very costly proposition, and far from environment-friendly. Others suggested facilities for year-round storage of rainwater.

Malaria and water-borne diseases: At Thanchi, workshop participants witnessed the death of a child due to cerebral malaria. They suggested compulsory use of mosquito nets and introduction of health education among the local people. A Malaria Research Centre at Bandarban has been long over-

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