

In collaboration with Centre for Alternatives

GREENING BANGLADESH

The green green grass of home...

Romanticizing the future?

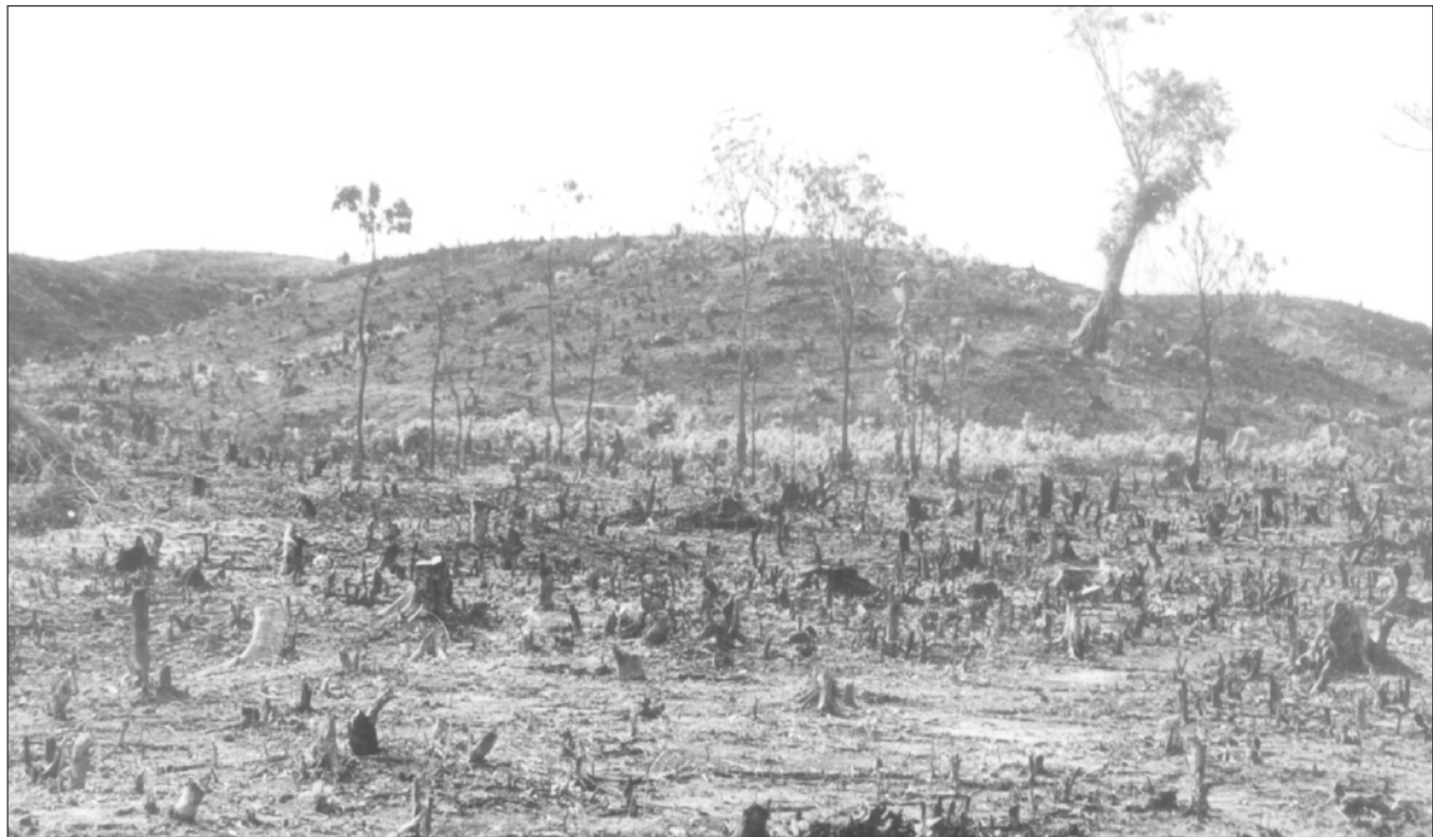
FROM THE ALTERNATIVES DESK

TOM Jones' longing for the green green grass of home is a universal one. Anyone listening to the tune cannot help thinking of the vast green fields - full of fresh air, full of spirited life. In our case the longing for greenery is more than romanticizing the past. It is, in fact, nationally and if I may add is also constitutionally sanctioned. I am indeed referring to the national anthem and the solemn pledge for a golden Bengal in the midst of season fullness of greenery and freshness of air. But alas, the significance of the anthem is little understood, less so is the pledge for a creative rebuilding of the country by harmonizing our life and living with Nature. Three factors could easily be identified for this:

Firstly, the craze for modernity and the concurrent craze for urban development remain inimical to the task of greening Bangladesh. Some will still remember how a military regime got into the business of expanding existing roads in the capital city of Dhaka by cutting down age-old trees. Some will also remember that it required a sustained civil protest to stop a democratic regime from turning a park full of trees into a place full of cement, iron and brick. Put differently, modernist regimes, be they military or democratic, lack the will and the wisdom to prioritize greenery or the environment over development.

Secondly, the returns from greenery are long-term and less obvious, although the same cannot be said about developmental activities devoid of ecological and environmental concerns. Often returns from the latter are so huge and tempting that both policymakers and consumers are ready to sacrifice the environment and settle for short-term pecuniary gains. Dam building, embankments, human settlements in forests are good examples in this context. Despite their harmful effects on the greenery of the land, economic and political lobbies, both national and international, join hands to profit from such activities. Often the World Bank, forest ministry officials and nationally elected legislators, including local touts and other 'intermediaries,' are found tied up in an unintended, semi-conscious nexus, engaged mainly in quick profiting at the expense of the environment.

Finally, the absence of greenery in both thought and action and that again, in areas ranging from school education to policymaking. Merely by lamenting the absence of green in our everyday life and living, including governmental policymaking will not do. What is required instead is a paradigm shift, indeed of the kind that will place the environment at the centre, not merely in physical terms but also, and more importantly, in intellectual and moral terms. We are somewhat fortunate that we have Tagore and his lyric (also now 'nationally and constitutionally sanctioned') to back us up in this quest. But then, romanticizing the past is what we do the best. The need of the hour, however, is to creatively romanticize the future.



'How green was my villey! Will it be again, ever...?'

Greening Bangladesh: Saving environment globally and educating our offspring

ISLAM MD. HASHANAT

VERY recently, while visiting Rangamati Lake with Mr. André Berg, an agro tourism specialist from Italy, one thing I have learnt by heart: how to love the environment and our earth. Actually we were playing through the lake to reach Shuvolat, which took about an hour by engine boat from Parjatan area of Rangamati. On our way, we took various types of fast food and drinks and enjoyed the beauty of the nature. Suddenly, unconsciously, I threw the waste packet of my chips to the lake water. To his utter surprise Mr. Berg shouted at once "Noble, how can you do that?" At first I could not realize what happened, then I understood what mistake I had committed. Mr. Berg couldn't believe how I could throw that packet into the water being an educated citizen especially working in the tourism sector. I was amazed more than I was ashamed. He asked the packet to stop and turned back. He collected the packet by himself and put it in the wastebasket. During the next few minutes he talked about the general consciousness of the European people regarding littering in the public area, either on the road or in water. I understood from his action how they try hard to keep the environment clean. We are unconscious and do not even try to become friendly with nature and the environment. Since then I always try to do something for saving the environment and at least to educate and urge my fellow mates not to destroy the environment and the earth.

In recent years it has become a major subject to relate Environmental issues in teaching. Teachers all round the world are using the environmental theme as a means of linking the classroom to the world. The environmental problems are threatening the earth and we need to find ways to help. The main purpose of the environmental issue-based instructions can reflect our deep conviction that the subject matter needs to be taught for its own sake as well as their recognition of its intrinsic appeal to motivate and involve the teenagers and other learners in learning and helping out to save our dear earth.

Today, on the eve of "The World Environment Day" I would like to draw the attention of those who love nature and of course, human beings to educate our offspring in this regard. But before going to the depth of the matter, let us find out what is happening globally in the context of environment.

Our environment includes human society as well as nature. Recent studies show how this mother nature is endangered for the activities of human beings. The environmentalists and the scientists work hard to find the reasons for global warming, deforestation, greenhouse effect, ecological balance, etc. and try to give us the solution to protect the nature of this earth.

The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers and sea with dangerous and even lethal chemicals. Air pollution is a common hazard in both industrial and developing countries. One of the most dangerous forms of air pollution is acid rain. Acid rain results from the release into the atmosphere of sulfur dioxide and nitrogen oxide. Electrical generating plants, industrial boilers, large smelters, and automobiles are among the chief source of these emissions. The gases react with water droplets, forming a diluted mixture of sulfuric acid and nitric acid, and it is this mixture that returns to earth in the form of acid rain, mist or snow. Pushed by the wind currents, the acid rain often falls to the ground far from its point of origin. Recently acid rain killed vast stretches of forest in Canada, the United States, and central and north Europe. In Europe nearly every species of tree is affected. Acid rain has acidified lakes and streams, rendering them unable to support fish, wildlife, plants or insects. In Sweden at least 40,000 of the 90,000 lakes have been affected, and in the United States one in five lakes suffers from this type of pollution.

Another most common and dangerous form of air pollution is "gases" such as carbon dioxide (from deforestation and the burning of coal, oil, natural gas and fossil fuel). Carbon dioxide level within the atmosphere during present time is increasing at an alarming rate. Scientists estimated at least seven billion tons of carbon the states are pouring down each year into the atmosphere. The increased amount of carbon dioxide causes increase of global mean surface temperature about 2°-3° Celsius. Results of the global warming would be more dangerous because moisture in the soil evaporates at higher rates with the overall temperature rise. The deserts are expanding for this as it has already happened with the Sahara desert of Africa. And, for the same reason habitats of some animals have started shrinking and range of insects are expanding. It would become another threat to the world as WHO (World Health Organization) predicts that malaria and dengue fever could reach epidemic levels. Bangladesh is a burning example in this regard, as our people fell victim to this deadly fever in the recent past and precautions are yet to be taken for the prevention of this disease.

High above the earth's atmosphere there is a thin veil in the stratosphere called the ozone layer, which protects the earth from the sun's destructive Ultraviolet (UV) ray. This protective layer is being damaged by chemicals known as chlorofluorocarbons (CFCs), which are released into the atmosphere by the daily use of such industrial and household products as refrigerators, air conditioners, foam insulation, cleaning chemicals, and food packaging. The CFCs rise into the ozone where the sunlight

decomposes them, releasing chlorine. The chlorine attacks the ozone, thinning or making a "hole" in it and allows more UV rays to penetrate the earth. Over exposure to UV rays can increase the risk of skin cancer, weaken the immune system and damage the retina. It is estimated that in the United States alone one in six Americans will develop skin cancer as a result of over exposure to UV rays.

For the same not only the human beings are at risk, so do the animals, plants, and the environment in general. With the thinning of the ozone layer, UV rays can penetrate the oceans, and can seriously reduce the yields of economically important crops such as soybeans, cotton and rice.

As the question comes of animals, plants and the whole environment, we recall the above words of Mahatma Gandhi. When a plant or animal is gone forever, we say it is extinct. Although extinction is a natural process, in today's world it is happening at an alarming rate. Experts estimate that one species - plant, animal

projects that water level of seas and ocean will rise from 25-95 centimetres by the year 2100 and 30 centimetres by this century. In such case a low-lying nation like Bangladesh will lose about 20% of her land from the coastal area. Not only land will be submerged under the sea, but also encroaching salt water will contaminate sweet water supplies of the coastal zone and farms of the same land. And such disastrous climate change could cost a country like Bangladesh a lot. Because of the rise of sea levels, heat waves, flood, drought, water logging and hurricanes may occur more rapidly than ever before. That is the reason the industrialized and affluent nations set national or regional limits of releasing carbon dioxide, the chief suspect in any kind of global warming.

Another main reason for global warming is deforestation, whereas protecting all the forests is one key to our survival on this planet. Saving of the forestland is necessary for the continuity of earth's living organisms including human beings as well as existence of the earth

"Man has gone to the moon but he does not know yet how to make a flame tree or a birdsong. Let us keep our dear countries free from irreversible mistakes which would lead us in the future to long for those same birds and trees." --Anonymous

or insect becomes extinct every day. At that rate, within next 20 years one-fifth of all species could be extinct.

To prevent wildlife in the United States from becoming extinct "Endangered Species Act" was passed in 1973. It established two categories of species in trouble: **endangered** and **threatened**. Endangered are those species where so few numbers are left on the brink of extinction, and threatened are those, if not protected, they are likely to become endangered. The African elephant is one of approximately 1,117 species on the endangered list, and there are more than 4,000 species waiting to be put on the list. To reduce elephant poaching and collapse the market for ivory, in 1989 the Convention on International Trade in Endangered Species (CITES) banned the ivory trade. However, poaching continues. We human being are the real danger with all our greed.

Let's come back to our **global warming** factor again. The impact of warming on water and water bodies are more severe. **Rising water**, resulting from melting polar icecaps and water expansion from the increasing warming are the most widely anticipated consequences of a warming world. The United Nations Intergovernmental Panel on Climate Change (IPCC)

as a whole. Deforestation is mainly induced by increase in population worldwide and especially more on forested tropical countries. Among other reasons of deforestation are natural calamities like fire, earthquake, erosion from the volcanoes, avalanche, ice storm, insects and pests, drought, excessive rainfall, flood, etc.

Natural calamities are beyond our control, but the other reason for deforestation, rapid growth of population, is definitely in our control. Human activities such as logging, mining, farming, for getting building materials, for construction of houses, conservation of forest land for making grazing lands for livestock are some of the primary reasons for clearing forests by people in the earlier days. But with the growth of population and with their changing demands and invention of various consumer goods and services for meeting ever increasing unlimited human demands forest lands are being used for various purposes. Previously, approximately 60% of the earth's surface was covered with forest. But today forests occupy about 30% of earth's land surface. And, in Bangladesh it is now alarming, only 8% of the whole country is now forest.

Actually deforestation started between

1800's and 1900's due to industrial revolution and due to logging activities vast amount of forest have been cleared mainly in the tropical countries. From then deforestation proceeded at an alarming rate. From 1950 to 1973 about 7.7 million acres (20,000 square kilometers) have been destroyed. In 1973 about 20% of the earth's land remained with forest. It has been estimated by the environmentalists that the world's forest land might be reduced to approximately 14% by 2020 and due to faster population growth, this will be more in tropical countries. The approximate rate of tropical forest destruction every year is about 50,000,000 acres in Latin America and South Asia.

Since 1970's, due to rapid and increased deforestation of tropical forests some unique species of plants and animals and wild lives have been totally destroyed or have become extinct before the consequence of such extinctions could be realized. This also caused "Green House Effect" resulting in global warming due to fewer amounts of oxygen and more of carbon dioxide release in the air.

We know that ecological pattern of the earth as a whole is largely influenced by forests. Forests exercise great influence in the continuity of life in earth's living organisms including human beings by flowing solar energy among different levels of consumers, i.e. living beings, by cycling different chemicals, minerals and gases through the ecosystem. Forests also help the soil develop, provide suitable environment for the wild life habitat, prevent soil erosion and flood, provide food and grazing land for livestock. Moreover, forests produce fuel, chemical and medical substances and valuable good for the economic development of any country of the world. Besides nature, scenic beauty, resources and peaceful pollution free environment of the forests provide opportunities for many recreational activities. So, during the holidays people go in forest areas for such activities as camping, hiking, fishing, picnicking, hunting or even just to spend a short while to look at the beauty of the nature, relax and enjoy.

As this is the case what did we do to protect the forests and the whole environment? Day by day deforestation continued at an alarming rate in the northern part of the country and consequently the places are turning into deserts. Coastal areas are facing natural calamities on regular basis. Therefore, it is high time to think and take necessary actions to protect the environment as a whole. And, it will be wise to start such activities with our offspring, as they are the future of the nation. Those, who are still very tender, we have to mould their mind in a way that through out their lives they will remain friendly to the mother nature and do every possible thing to save the earth.

As the environmental issues are already there in the syllabus of some classes in different

levels of their studies, why not make it compulsory to do something practical with them? I would like to urge the educated people of the country to take the responsibility in this respect and lead the mass to the same way. Through proper education, both theoretical and practical, we can enlighten our next generation and guide them to act supportively for the cause of saving the environment from every kind of danger. If we could include "Greening" as a practical activity in the schools and colleges, it will help solve the problem of deforestation and also will make the offspring more conscious about the importance of the nature. Questions may arise as to what would happen to all other problems such as air, water and sound pollution, overall global warming, rise of the sea-level water, dangerous gases that threaten human lives? Yes, we can fight against all of them, but as we belong to a poor Third World country, knowing all our limitations, we have to start with the most basic of the environmental problems, that is, deforestation. If we could solve the problems of deforestation a good number of other related problems will be solved automatically. And, it will be easy for us to help our younger generations to encourage them to plant a tree and make our country green again as it was before. If every student of our country at school or college levels put one tree of their own and take care of that for at least up to the growth of the same, we will find our country green and picturesque. The "Greening" activity could be started at school level and in the school premises they could plant trees. There are ample opportunities in most of our schools to plant a few good value trees, by turn, which would be asset for them. Students of every class should take part in practical activities regarding the "Greening" project of the school and by turn they will work. It must be ensured by the teachers that every single student is participating in such activities. Even the students, who show best performance, could be rewarded for their work. In few schools in the city area where the facility of planting a tree is not available, they could at least make various tubs of different plants and on regular basis could take care for the newer plants and tubs. It could help them understand the importance of Green Bangladesh and at the same time will provide them a better-decorated classroom.

We however can come to the conclusion of our discussion by saying that we should realize before it is too late that we have to save our own environment for our own survival. It is the right of our children to have a better environment to grow up in. We hope that we could see the Green Bangladesh again in our lifetime. Let us hope for the best.

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Greening Bangladesh: A green policy-management framework

MIZAN R. KHAN

RED-PHOBIA of the Cold War era has given way to a Green-amour, apparently manifest in recent years in the greening of national and global agenda. Management of greening in a country like Bangladesh is a new area, with not much of past experience. There are two steps in policy formulation: choice of an overall goal and selection of instruments to achieve it. The steps are linked with political process, as selection of both the goal and the instruments have political ramifications. The task is compounded by inter-linkages in the conditions of land, air and water and the time lag between actions and effects. With its physical and socio-economic parameters, Bangladesh can be said to present a test case of sustainable development. Almost half of US population living in a territory 65 times smaller tends to surpass the carrying capacity both of source and sink functions of Nature. Thus the importance of a sound policy-management framework cannot be overemphasized. Though environmental management has become a priority issue in Bangladesh, looking into the reality with green lens, one finds serious lacunae in both the policy and institutional frameworks.

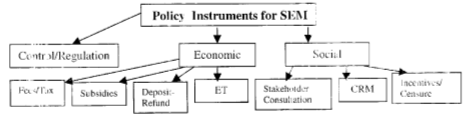
Environmental Policies/Laws: During the last decade, successive governments have adopted a plethora of policies and laws. These include the National Environment Policy (1992), National Environment Action Plan (1992), Forest Policy (1994), Forestry Master Plan (1993-2012), Environment Conservation Act (1995), Environment Conservation Rules (1997), draft National Conservation Strategy (1997), Environmental Court Act (2000) etc. Further, the National Environment Management Action Plan (NEMAP) has been prepared with participation of grassroots people. There are the follow-ups of NEMAP, such as the UNDP-supported Sustainable Environment Management Program (SEMP), CIDA-supported Bangladesh Environment Management Project (BEMP), World Bank supported Air Quality Management Project (AQMP) etc. But the state of environment today does not match this impressive array of policies, because the latter are not

grounded on a sound process and workable instruments to realize the intended output/impact.

The policies/plans sound mission-like, with statements of pious objectives, rather than real directions. The policies prescribe Dos and Don'ts, rather than giving guidance to follow through. Let us take just one example: National Environment Policy (NEP). With 6 broad objectives, the NEP contains 3 to 7 policy statements for each of 15 sectors of the economy, totaling 69 sweeping statements. They are too broad in nature, with no prioritization and no indication either of the tools or the institutional capability needed for their implementation. There is a companion Environmental Action Plan, also presented in a sector-wise fashion. Again with no prioritization, EAP identifies the GoB implementing agencies for each of the 120 actions it proposes. It should have contained a logical and sequential action plan, based on considered choices/trade-offs, against which to allocate scarce resources human, financial and material.

Policy Instruments: Most of what the EAP proposed is *regulatory* in nature. The regulatory regime, with almost 200 laws, has bearing on the environment, both direct and indirect. The ECA is a detailed instrument of control and regulation. But standards and penalties often are not enforceable, efficient and effective in most cases. Reality in Bangladesh speaks for itself! Industrial world and even many developing countries now apply more of economic and social instruments for sustainable environment management (SEM). Market-based instruments like user fees/taxes, subsidies, deposit-refund scheme or emissions trading (ET) create competition for reduction of pollution/degradation level through internalizing the externalities, giving the right signals for the production/consumption processes. Based on the "polluter pays principle," many countries have successfully introduced green/carbon taxes. Our last budget contains some incentives/tax provisions encouraging/discouraging some imports. One should expect the coming budget will further this process.

Social Instruments are stakeholder consultation, community-based resource management



and social incentives, censure etc. In Bangladesh policies/laws are drafted by ministries, vetted by Cabinet and stamped by Parliament. There is hardly any substantive debate yet on environment in Parliament. But policy-making is a political process entailing costs and politicians are in a better position to distribute costs/benefits among electorates. Public inputs beyond Parliament into policy-making are not yet a substantive phenomenon. Going to the yet-to-be-operational environmental courts for litigation should be taken as the last resort in a fractious polity like Bangladesh. Further, public disclosure through media of firms' environmental performance based on Rating has proved highly successful in Indonesia and elsewhere. This instrument rests on reputational incentives. Experience shows that pioneer green companies in the North already reap better dividends than the laggards. This tool can be applied to firms and GoB agencies to induce behavioral change. In like manner, the system of public recognition to tree growers can be extended to other sectors, such as agriculture, industries, education/advocacy, etc.

With no alternatives available, the poor are hard on the environment, so cogently argued in Our Common Future. Neither regulation nor taxes reach them, since 'folk-ways' always over-power 'law-ways.' Therefore, the key to controlling harmful activities in the traditional sector is to provide economic alternatives/incentives to communities to protect their immediate environment. Only then will the government-imposed penalties have any effect, because peer pressure from community leaders is more effective than from the government. The model of joint forest management (JFM) in West Bengal, initiated in the early 1970s by Dr. Ajit Banerjee, a forester, is a case in point. With a higher population density than in Bangladesh, JFM based on the principle of 'care and share' has proved highly successful in regenerating natural forests. The care is based on group responsibility and social fencing. In

contrast, with half the population density in the 1960s, forests there were severely degraded. JFM, highly acclaimed by the World Bank, has been widely replicated across India and beyond. Thus, it is not population pressure, but erosion of customary rights of the poor due to privatization/privatization of natural resources that explains the problem.

In Bangladesh, community participation in resource protection has been accepted as a management tool at the policy level. But the statements lack clarity and direction, and are full of ambiguities. For example, the Forest Policy states the need of establishing a triangular partnership among the Forest Department (FD), the people and NGOs, but how the partnership will function is not explained. The result was an unhappy marriage between the FD and Proshika in Tangail in the mid-90s. The Project Proforma of Participatory Forestry (PF) in the Sal Forest Belt stipulates yearly-renewable lease with the participants, but in a long-gestation activity like forestry, one-year agreement with no renewal for years is ludicrous! In no way it ensures security of tree tenure, key to success in PF. It is yet to be appreciated that in poor areas protection by foresters warrants more of investment of their time/resources beyond forests, into the survival needs of fringe communities. In Thailand or the Philippines, communities are given forest leases for 25 years, with provision of renewal. It may be noted that Bangladesh have the third highest deforestation rate in the world, after Haiti and Jamaica. This fact alone should engender a policy of inclusion, not exclusion as in custodial management.

Discussion on community rights/management deserves a reference to the Hill Tracts. Intensification both of ethnic violence and environmental stress there is largely the result of conflicts between communal systems of resource management and government conception of property rights. Age-old values coupled with restricted private property rights of tribals set in the CHT Manual of 1900 and SATA of 1950 constrained their schooling in individualism and private property culture. *Cultural relativity* operates not only in defining what constitutes a resource, but also in

defining what constitutes a regime of resource management. Any functioning bundle of property rights must possess a moral grounding in the communities' socio-cultural milieu. Therefore, any success in the Peace Accord is likely to depend, more than anything, on devising appropriate locale-specific models of resource management.

Conflicts in Sectoral Policies and Lack of Coordination: Conflicting policies are legion. Sectoral policies for agriculture, forest, fisheries and livestock have recommended introduction of alien species without considering its harmful impact on endemic species and ecosystems. For example, a number of alien fish species released in the past into closed water fisheries, found their way into open water habitats, posing serious threats to native species. The Fisheries Policy provides for export of turtles and other species, contradicting NEP. Emphasis of Agriculture Policy 1999 mostly on rice, wheat and maize is not facilitative to conserving the crop diversity. While NEP discourages use of chemical fertilizers, the Agri-policy focus on intensive method using agro-chemicals will have a negative impact on environment.

As environmental issues are crosscutting, there are overlapping jurisdictions and conflicting mandates among agencies. For example, about a dozen ministries and two dozen agencies are concerned with land management. Conservation of fisheries suffers because of ownership conflicts between the Ministry of Land, which owns over 10,000 *jalmahals* (wetlands), while the Ministry of Fisheries looks after the management of fisheries. Despite a directive from the Prime Minister, the Fisheries Ministry is yet to get hold of some wetlands for their conservation and sustainable management. The MoL used to lease them to private parties who exploited them unsustainably for profits. Thus, lack of consistency in sectoral policies and coordination seriously hampers environment management. This problem was looked into by the now-stalled SEMP Component of Policy and Legislation, implemented by the World Bank. As one of the tasks, it initiated establishing Environment Cells (EC) among 17 line ministries. Given proper support, the full-blooded

ECs could avoid overlapping, policy conflicts, establish coordination and marry environment and development.

Institutional Structure, Manpower and Budget: Existing structure suffers from inactivity, manpower and budgetary constraints. The National Environment Council, headed by Prime Minister and the EC of NEC headed by Minister of Environment and Forest remain virtually non-functional. This deprives the green agenda of political blessings from the top. With a gigantic task of ensuring a clean environment, the manpower and budgetary provisions of MoEF and DoE (together about 50 officers/technical hands and Tk.3 cr/yr) are peanuts compared to sectoral ministries. The MoEF is manned mainly by admn cadres and the problem is accentuated by their frequent transfer, even after getting environmental training. The current level at 5% of public expenditure on all environment-related activities is quite low. This is even discriminatory, as majority of people depends on natural resources for their livelihood, income and employment.

There is a Planning Cell in MoEF, which is more short of required personnel. The Cell should be upgraded as Policy Planning Cell, with recruitment of experts from multidisciplinary background, who are able to coordinate and lead the ECs of line ministries. As one of the oldest agency, FD has the personnel strength, which in partnership with fringe community should be able to protect and enhance state forests. No addition of staff will do better policing unless the management strategy is changed. The long-needed Division of Social Forestry is not yet in place. A Department of Conservation or at least a Division within the FD should be created, since the issues are crosscutting and demand new policies/laws.

Environmental Diplomacy: Poverty is and should be articulated as the number one environmental problem. There are growing opportunities for vulnerable countries like Bangladesh if negotiations can be pursued forcefully. It is a technical and knowledge-intensive affair and delegations

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