International Conference on Bangladesh Environment (ICBEN) January 14-15, 2000

Dhaka Declaration on Bangladesh Environment

The International Conference on Bangladesh Environment, ICBEN 2000, held on January 14-15 2000, in Dhaka brought together over 500 Bangladeshi participants, from various segments of the society, both home and abroad. The Conference was organized jointly by POROSH (Poribesh Rakka Shopoth), BEN (Bangladesh Environment Network of non-resident Bangladesh citizens) BUET (Bangladesh University of Engineering and Technology) and CEN (Coalition of Environmental NGOs). Another about 60 organizations, including Universities, Research institutions, professional associations, government agencies and above all NGOs dealing with environment joined as co-organizers. Deliberations held in 20 technical sessions, in five parallel streams, yielded a set of recommendations for action by the people and the Government of Bangladesh. These recommendations were adopted as The Dhaka Declaration on Bangladesh Environment.

These recommendations summarized as a three level (international level, at over-all national level and at civil society level) Program of Action is presented below.

Attached to the Declaration are (i) the brief proceedings of the conference and (ii) a note on follow-up arrangements.

I. ACTION AT INTERNATIONAL LEVEL

Conscious that the overall environment of Bangladesh is threatened by various global activities;

Noting that although Bangladesh's contribution to greenhouse gas emissions is insignificant it will still be severely affected by climate change resulting in uncertainties in weather pattern that may cause both floods and droughts, and significant rise in sea level due to global warming that could inundate the low lying areas of the coastal belt;

Noting also that although Bangladesh's contribution to Ozone depletion is insignificant it will nevertheless face its consequences;

Concerned that rapid growth in industrialization in the region could generate Acid Rain in Bangladesh;

Being aware that deforestation in the Himalayan region means disaster for Bangladesh in terms of increased flooding and sedimentation;

Affirming the urgent need for a basin-wise development of water resources of the Ganges- Brahmaputra-Meghna Region comprising India, China, Nepal, Bhutan and Bangladesh;

It is recommended that

1. Bangladesh plays an active role and be a vigilant participant in negotiations and reviews of various international conventions and protocols specially those concerned with global climate change, ozone layer depletion and acid rain.

2. All out efforts are made for ensuring a basin approach for management of water resources of the *Ganges-Brahmaputra-Meghna* Region especially for flood management and to halt deforestation.

II. OVER-ALL NATIONAL ACTION PROGRAM

Item I: GENERAL ISSUES

Being convinced that environment management is inherent in all facets of life and in all sectors of the economy and environment planning must encompass total development enterprise of the nation;

Noting that environment protection measures are all inter-related and need to be coordinated skillfully;

Recognizing that poverty at times force destruction of the environment; poverty alleviation, therefore, must receive high priority in development strategy;

Recognizing also that population growth is the greatest threat to environment; population and health sector planning, therefore, should continue to be vigorous in development strategy;

It is recommended that

- 1. In every activity, environmental impact is weighed carefully.
- 2. A comprehensive and easily accessible database on environmental initiatives is set up; a web-site dedicated to environment is organized.
- 3. Public awareness through environmental education is ensured.
- 4. Local initiatives are given due attention and involvement of local people in all stages of a project, as appropriate, is strictly ensured.
- 5. All officials of government and semi-government organizations are given adequate training in environmental issues.
- 6. Capacity for participation in international negotiations and for preparation for a decennial review of Rio Conference is developed rapidly and the trained manpower is harnessed for the job on a continuing basis.

Item II: Ground Water Contamination - Arsenic Poisoning

Being concerned about the level of arsenic contamination of drinking water from wells almost all over Bangladesh and prevalence of arsenic affected patients in acute arsenic problem-areas.

It is recommended that

1. Extensive as well as intensive public awareness program is launched urgently on the danger of drinking arsenic contaminated tube-well water and urging drinking of water from safe tube-wells and alternative sources including rain water harvesting.

- 2. Screening and monitoring of tube-wells for arsenic contamination is intensified.
- 3. Skills of doctors and health workers are enhanced in diagnosis of arsenicosis and in providing medical and health care for all affected patients.
- **4.** Rehabilitation and construction of surface water ponds, wherever possible, be taken up and they are protected and reserved for water supply with minimal treatment.
- **5.** Reliance on local expertise is ensured and a well-coordinated national program for handling the crisis is taken up.

Item III: Air Pollution

Being aware that the main source of air pollution in Dhaka and other cities of Bangladesh is the emission of carbon mono-oxide is by the Two Stroke Engine Vehicles (TSEV) and that these deadly vehicles are banned almost all over the world;

Stressing that TSEVs must be removed from the streets and roads of Bangladesh as soon as possible;

Recognizing that defective vehicles, especially buses and trucks, emit black smoke polluting the air and strict fitness examination and condemnation of defective vehicles can improve air quality;

Acknowledging that mass transportation in cities is a must for reduction of traffic congestion and there are plans for building rail transit, ring road and circular waterway for Dhaka;

Realizing that traffic congestion and idling of vehicles also increase air pollution;

Concerned that use of leaded gasoline is a serious threat to health and noting at the same time that steps are being initiated so that leaded gasoline is no longer in use.

Recognizing also that in addition to the direct negative impact on human health, air pollution is also potentially threatening to agriculture in the areas surrounding Dhaka.

It is recommended that

- 1. Environment-friendly mass transit system should be expanded and strengthened and ways should be found to put more vehicles for mass transportation in and between cities by improving road network.
- 2. June 30, 2002 is declared as a strict deadline beyond which TSEVs will not be allowed to ply in Bangladesh, either in cities or in rural areas. Strict ban is imposed on import of TSEVs from July 1, 2000 and those in service are converted into four stroke engine vehicles.
- 3. Conversion of all vehicles into CNG driven vehicles is promoted with the following targets:
 - a) conversion of all vehicles of the government or semi-government institutions by June 2001;
 - b) conversion of all scooters to CNG, if necessary by providing credit facilities; and
 - c) establishment of more CNG conversion facilities in and outside Dhaka, preferably in the private sector; licensing of more CNG supply pumps; and existing petrol pumps are given incentives to add CNG pumping facility

- **4.** Inspection of emission by vehicles is subjected to severe scrutiny and the ones that fail the emission test are taken off the streets immediately and without exception.
- 5. Parking of vehicles, especially of buses and trucks, on main roads, is strictly prohibited. At any crossroad, no vehicle is allowed to idle except to wait traffic lights. Stopping of vehicles at junctions to offload or pick up passengers or cargo is strictly prohibited.
- **6.** All commercial and high rise buildings must make provision for parking of vehicles within their premises. High rise buildings should be prohibited around road intersection and junctions.
- 7. Use of unleaded gasoline is made compulsory in the country as a whole.
- **8.** Modification of the Eastern Refinery to produce lead-free gasoline with high octane value should be given priority with immediate effect.
- 9. More roads are dedicated to only slow-moving or fast-moving vehicles in major cities.
- 10. Immediate study be undertaken to assess the impact of urban air pollution on urban and periurban agriculture in and around Dhaka.

Item IV: Protection of natural resources

Concerned that natural resources are being depleted or degraded by indiscriminate use of agricultural land, forest areas, water bodies, wetlands and limited mineral resources;

It is recommended that:

- 1. Adequate measures are taken to prevent soil erosion and preserve soil fertility including training of farmers on soil fertility management; and adequate measures are also taken for protection of hills and hill slopes.
- 2. Irrigation practices are improved to prevent waste of water during delivery and misuse of water.
- 3. Emphasis is given to Integrated Pest Management (IPM) and Integrated Plant Nutrition Management (IPNS).

Item V: Management of Rivers, Wetlands, Floods

Being perceptive that building of polders and embankments for flood management should be considered with great caution as they create many environmental concerns;

Recognizing that construction of any structure in rivers, canals and drainage channels or wetlands and retention pond areas can be hazardous to the environment

Conscious of the importance of wetlands as flood retention pond;

It is recommended that:

- 1. The existing rivers network and wetlands are preserved and developed by adopting an ecological approach.
- 2. Floodplain management is carefully planned and a combination of structural and non-structural measures is taken.
- Protection of haors and baors are undertaken and their conversion into arable land is strictly prohibited.
- 4. Environmental Impact Studies are carried out for all structural flood mitigation measures including building of polders and embankments; for all such projects a public hearing is conducted and local people are properly consulted.
- 5. Over drainage or complete drainage of wetlands is prohibited and obstruction of drainage channels is prevented through appropriate legal steps.
- 6. Consolidation of rural habitations or clustering of villages are encouraged for flood management purpose.

Item VI: Surface Water Contamination

Being aware that dependence on chemical fertilizer and pesticides for higher crop yields is contributing to surface water pollution;

Realizing that lack of proper sanitary practices is a major source of surface water contamination;

Noting that use of water sealed sanitary latrines is picking up in rural areas;

It is recommended that:

- 1. Reduction in dependence on chemical fertilizer and pesticides through promotion of *organic agriculture* is encouraged.
- 2. Use of undesirable fertilizers is discouraged and ban on undesirable pesticide is strictly enforced.
- **3.** Campaign for use of water sealed sanitary latrines for ensuring proper sanitation in rural areas, is further intensified and a target for full coverage by 2004 is achieved and discharge of untreated urban sewage is stopped.
- 4. Discharge of untreated effluents from industrial units into rivers or wetlands is stopped.

Item VII: Deforestation:

Being concerned that forests are being denuded at an alarming rate; and

Recognizing the importance of involvement of local communities in forest management;

It is recommended that

- 1. Preservation of the existing forests is strictly ensured and rehabilitation of denuded forest areas is taken up with involvement of local communities by giving them a stake in the initiative.
- 2. The ban on the use of firewood for burning bricks is strictly enforced.
- 3. For degraded mangrove forests an action plan for rehabilitation is implemented.
- 4. Social forestry programs are intensified and local government institutions are entrusted with the task of their implementation.

Item VIII: Loss of Bio-diversity

Being aware of the importance and value of the rich base of bio-diversity that exists in Bangladesh;

It is recommended that

- 1. Survey of floral and faunal bio-diversity of Bangladesh is expeditiously taken up.
- **2.** Endangered species are identified and efforts made to protect them from further depletion. Extinct species are introduced following proper conservation practices.

Item IX: Industrial Waste

Affirming that the Industrial Effluent and Emission Quality Standard promulgated in 1997 under the Environmental Conservation Act of 1995 should be strictly enforced;

Noting that environmental clearance is already a part of the approval process of any industrial project.

It is recommended that:

- 1. Appropriate standards for disposal of solid, liquid, and gaseous industrial waste is established and Environmental Courts are set up for their strict enforcement.
- 2. Properly registered professionals carry out environmental impact assessment.
- 3. Compliance of the environmental requirement is examined jointly by the enforcing authority and the representatives of the civil society.
- **4.** Waste minimization, pollution prevention program and environment management system are encouraged in industries.

Item X: Household Waste:

Stressing that polythene bags cause clogging of drainage channels and cause damage to environment as they are not bio-degradable;

Recognizing the local efforts in community based garbage collection and disposal have been successful;

Desirous of ensuring recycling of solid wastes as much as practicable;

It is recommended that:

- 1. Use of plastic materials where biodegradable materials can serve the purpose is prohibited and production of polythene bags is discouraged by fiscal measures.
- 2. Urgent attention is given to promote jute bags and adapt bio-degradable plastic.
- 3. Local models of community involvement in primary collection of waste are encouraged and adopted for all cities and towns. Municipality is made responsible for picking up garbage from community bins and its recycling, resource recovery and disposal by appropriate means.
- 4. Recycling of solid waste such as sorting of cans, bottles and glassware or paper and conversion techniques such as garbage to fertilizer, waste to recycled paper, waste plastics to new resin, green coconut residue to fuel, are encouraged.

Item XI: Medical Waste

Concerned that proper disposal of medical and hospital wastes are not practiced in Bangladesh;

It is recommended that

- 1. Medical waste and garbage of hospitals and clinics are kept separate and appropriate disposal system is instituted.
- 2. Location of hospitals and clinics in a built-up area, without ensuring a proper system for disposal of medical waste is prevented.

Item XII: Urban Management

Realizing that unplanned urbanization without basic urban amenities and institutions is rapidly deteriorating urban life as more people are rushing to urban areas;

Conscious that an urban catastrophe is threatening Bangladesh because of excessive air pollution caused mainly by transport vehicles, scarcity of safe water supply, non-availability of affordable serviced land for housing, limited and inefficient garbage disposal system and lack of proper sanitary facilities;

It is recommended that:

- 1. Proper implementation of development plans for cities and towns is ensured and they are regularly reviewed and updated; and environmentally sustainable plans are prepared for other urban areas for which such plans have not yet been prepared.
- 2. Effective coordination is secured among institutions involved in urban management.
- 3. Proper participation of stakeholders is ensured in urban management.

- 4. Settlement planning in urban areas takes into consideration physical, topographical and environmental issues in controlling land use density.
- 5. Efficient transport service, dependable garbage disposal system, adequate sewage disposal and sanitation arrangements and use of environment friendly technology in economic activities are promoted.
- 6. A user friendly information system for management of the environment is instituted.

Item XIII: Management of Dhaka

Concerned that Dhaka is growing fast without attention to the environmental concerns, magnitude of which are already mind-boggling, and will soon be a mega-city without basic amenities for its residents;

Aware that land use-zoning laws do not exist and building codes are not at all honored;

Noting that part of Dhaka is basically low-lying area and floods and water-logging are serious problems;

Recognizing that about a third of Dhaka dwellers are squatters and slum area residents;

Observing that the traffic problem of Dhaka is maddening as roads are too few; transport varieties are too many, both slow-moving and fast-moving; road junctions are used as parking areas and passenger and cargo loading points; commuting facilities are minimal; national highways do not have bypasses; traffic rules are not observed and; traffic controllers are thoroughly corrupt;

Realizing that Water Supply is far short of requirement; sewage disposal and storm drainage network are inadequate; garbage collection and disposal system is a cause for nightmare;

Stressing that the population growth rate of Dhaka is more than three times the national growth rate.

It is recommended that

- 1. The Dhaka Metropolitan Development Plan (DMDP) is implemented, properly reviewed and regularly updated.
- 2. The myriad of agencies with responsibilities for Dhaka that end up in inaction and obstruction to good management are coordinated for proper administration.
- 3. Zoning recommended in DMDP and Bangladesh National Building Code are enforced in Dhaka; open spaces, rivers, drainage channels and water bodies are adequately protected.
- 4. Flood retention areas as identified in Dhaka Flood Control Plan are declared as public areas and they are not filled up for any purpose.
- 5. Dhaka Cantonment and BDR Headquarters in Peelkhana are shifted to outskirts of Dhaka and the areas thus vacated are used properly.
- 6. Eastern flood protection polder is completed at an early date and adequate steps are taken for drainage from protected areas.

- 7. A mass transit system is expanded fast, a rail transit system is set up; a ring road is constructed using the polders; and a circular waterway is brought into operation.
- 8. Sewerage system is expanded and improved; Water Supply system gets a go ahead with planned addition to supplies from the Sayedabad Project; measures to prevent system loss is taken up; and recycling of water considered at planning stages.
- 9. Disposal of raw sewage into the rivers around Dhaka is stopped.
- 10. Save Buriganga campaign is strengthened and illegal occupation of the river is undone.
- 11. Selective dredging of the rivers around Dhaka is undertaken for restoring the river's flow regime.
- 12. A number of slums or squatter colonies are converted into legal settlements for the poor; and some slums may be relocated but in close proximity of the city.
- 13. Measures for encouraging the migrants to urban areas to return to their villages and small towns and for resisting the pull of the cities are taken by improving living conditions, intensifying economic activities and creating employment opportunities there.
- 14. Hazaribagh tanneries are relocated out of heavily populated area and in the interim treatment plants for all the factories are built on a priority basis.

Item XIV: Legal and Management Aspects

Noting that legal and institutional framework for management of environment should be strengthened;

It is recommended that

- 1. The legal and regulatory framework for protection of environment is strengthened and the existing laws are strictly enforced;
- 2. Capacity of institutions responsible for environment management is enhanced and interinstitutional coordination and accountability are ensured;
- 3. Public participation in environment management is ensured.
- **4.** An optimal mix of market-based instruments and control for protection of environment is devised. Voluntary effort in standard setting is encouraged.
- **5.** Proper implementation of all international protocols to which Bangladesh is signatory is ensured and towards this a review of national legal and policy regime is carried out.

Item XV: Specific Action by Civil Society

At the Individual Level

Being aware that the entire responsibility for protecting Bangladesh environment is not of the Government alone and there are many things that each and every member of the civil society can do even at a personal level and without waiting for government action.

It is recommended that

1. Every citizen sets example of ensuring good environment in one's own home and immediate surroundings; and teaches the value of good environment to children, relatives, and friends; and refrains from environmentally harmful level as well as kind of consumption.

At the Local Level

Noting the responsibility of the members of the civil society extends to the neighborhood or the locality.

It is recommended that

2. Each neighborhood takes up programs to manage their own environment as far as practicable, without looking for any assistance of the government or the municipality.

At the National Level

Recognizing that the responsibility of the civil society extends to the national level;

Being aware that behind most of the polluting processes are vested economic interests and Governments often succumb to these interests and let pollution to take place and perpetuate.

Determined that the people of Bangladesh are capable of building up a strong social movement for protection of environment;

Convinced that a strong and robust environment movement is necessary to expose and resist vested interests and to persuade the government to adopt and implement environment-friendly policies.

It is recommended that

3. A citizens' body like POROSH will intensify a broad-based environment movement in Bangladesh and foster citizens' initiatives at the individual, local and national level on the stage that has been set out by the ICBEN-2000.