Resolution

of the

Special Conference on Climate Change and Bangladesh Development Strategy: Domestic Policies and International Cooperation

Organized by

Bangladesh Poribesh Andolon (BAPA)

and

Bangladesh Environment Network (BEN)

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Keeping in view that

Bangladesh is likely to be the worst victim of climate change;

Bangladesh did not have any role in causing climate change;

Climate change is the result of the increased Green House Gas (GHG) emission by industrialized countries, starting with the First Industrial Revolution in mid-eighteenth century, and Bangladesh's contribution to the increased GHG concentration in the earth's atmosphere is close to zero;

Currently, increased GHG emission by large newly industrializing countries is exacerbating the climate change problem;

Although an international effort to stabilize climate is going on under the auspices of the United Nation's Framework Convention on Climate Change (UNFCCC), it will take considerable time to reach that goal, and meanwhile the atmospheric GHG concentration will continue to increase, climate change to a significant extent has now become inevitable;

Of all the long term future challenges that Bangladesh faces, climate change challenge is the gravest;

Efforts to deal with climate change have proceeded in two directions, namely "mitigation," meaning reduction of GHG emission, and "adaptation," meaning changing the economy etc. in order to live with the effects of climate change; and, to the extent that Bangladesh will be the worst victim of climate change, she has the scope to play an important role in the international effort along both these directions;

Since her emission volume is still very low, and the urgency of fast economic growth is acute, Bangladesh has been exempted from emission reduction undertakings under UNFCCC;

Industrialized countries, under pressure to mitigate GHG emissions, occasionally resort to various cunning strategies, and try to pass on the burden on to developing countries; It has been internationally agreed, in principle, that developing countries, which will be adversely affected by climate change, would be provided with necessary financial and technological assistance with regard to adaptation;

As of now, the attention of the government and climate change related non-government organizations is focused mainly on getting foreign financial assistance for adaptation; even though foreign assistance alone will not be enough for adaptation of Bangladesh to climate change;

The research findings arrived at by the Intergovernmental Panel for Climate Change (IPCC) are applicable to the world as a whole, and there is scope of considerable regional variation, so that it is necessary to conduct research specifically focused on Bangladesh in order to gauge the likely impact of climate change on her;

There are many dimensions along which climate change will adversely affect Bangladesh, and among these are:

- (a) Sea level rise will inundate a large portion of the land resulting in massive loss of habitation and livelihood, and rendering tens of millions of Bangladesh citizens as "climate refugees";
- (b) Even of the part that will escape inundation, will be affected seriously by salinity intrusion that will damage agriculture and flora and fauna, in general;
- (c) The loss of Himalayan glaciers due to global warming will dry up rivers in winter, while excessive precipitation will intensify summer flooding, so together climate change will destabilize Bangladesh rivers;
- (d) There will be a rise in the intensity, scope, and frequency of extreme weather events such as cyclones, tidal surges, etc;
- (e) Vector-borne diseases, including malaria, dengue, yellow fever and encephalitis will proliferate in warmer and wetter conditions, and many new types of diseases may arise and spread;

All in all, climate change will have a devastating effect on Bangladesh;

Confronting climate change's adverse effects of different dimensions above is a daunting challenge, and meeting this challenge requires change in policies in many important areas of the economy and social life of the country;

Among the changes required in domestic policies, the most important is the change in the approach to rivers;

Until now, Bangladesh has been following the *Cordon Approach* to rivers, under which flood plains are being cordoned off from neighboring river channels through construction of solid embankments (i.e. embankments without any openings);

The *Cordon Approach*, introduced in Bangladesh by the *Krug Commission* in the 1950s, is a foreign approach and is unsuitable for the deltaic conditions of the country;

Implementation of the *Cordon Approach* over the years has, on the one hand, aggravated flooding and created the new problem of waterlogging, and on the other hand, deprived floodplains of the beneficial effects of normal regular inundation; and further, Cordon Approach leads to aggradation of river channels and subsidence of floodplains;

Bangladesh is basically a delta, and its geological history shows that the most important protection it has against rising sea level is *sedimentation* caused by rivers, and yet by obstructing the process of sedimentation, the Cordon Approach weakens Bangladesh's natural protection against rising sea level;

Similarly, by restricting space over which the summer river flow can spread out, and by not helping to conserve summer water in the floodplains for use in dry winter, the *Cordon Approach* will aggravate the river destabilizing impact of climate change;

The *Cordon Approach* also cannot provide any protection against increasing salinity intrusion;

Instead of the *Cordon Approach*, what a deltaic country like Bangladesh needs is the *Open Approach*, which preserves and enhances the organic connection between river channels and adjoining floodplains, maintains process of sedimentation, and thereby allows Bangladesh to benefit from the natural protection that she has against sea level rise;

The *Open Approach*, furthermore, counteracts the river destabilizing effect of climate change by mitigating flood during summer, as river flow can spread over larger areas, and by conserving summer water and making it available during winter, so that the Open Approach can also act against rising salinity, which is expected to be more acute during the winter, when river flows diminish;

The *Open Approach* can therefore help counteract three (namely, submergence by rising sea level, destabilization of rivers, and salinity intrusion) of the five most adverse effects of climate change on Bangladesh; so that switching from the *Cordon Approach* to the *Open Approach* to rivers is the most important policy change that Bangladesh needs in order to face the climate change challenge;

Another important area in which Bangladesh needs to bring about policy changes in view of climate change is forests, protection and enhancement of which can help Bangladesh

significantly with regard to adaptation, and also allow her to contribute to the international mitigation effort;

The experience of the hurricane SIDR in 2007 showed the role that the coastal mangrove forests, *Sundarbans*, play in protecting the people of Bangladesh's coastal districts, which would otherwise have suffered much more loss of life and property; and this experience reinforces the necessity for preservation and expansion of *Sundarbans* and other coastal forests;

Preservation and expansion of forests is also necessary for protection of legitimate rights of the indigenous (*Adibashi*) peoples who live in forest areas; and conversely deforestation usually goes hand in hand with violation of rights of indigenous peoples, as has unfortunately happened in Bangladesh;

In addition to preservation of coastal forests, there are many other steps that need to be taken in order to prepare the coastal population against the rising incidence, scope, and intensity of cyclones and tidal bores that climate change will bring about;

Since the 1991 hurricane, Bangladesh has made progress in warning system, construction of shelters, and moving people to them, etc, even though this progress is not adequate in view of the climate change, and hence the country needs to increase the number and quality of shelters and promote change in the settlement pattern and cultivation and other livelihood practices of the coastal areas in order to adapt them to climate change;

Important changes are necessary in the *agriculture sector* of the country as a whole, and for that first comprehensive studies need to be conducted to determine the ways in which climate change will affect agriculture and to devise ways in which the adverse effects can be minimized and overcome;

Energy is another important sector, the policies of which requires serious re-examination in the light of the climate change, remembering very well that country's energy capacity has to be raised rapidly and significantly in order for the country to achieve necessary economic growth;

In expanding Bangladesh's energy capacity, emphasis needs to be given on the use of *renewable energy sources*, in particular on solar energy, with regard to which Bangladesh has a great potentiality in meeting household power needs of tens of millions of villagers who still await electricity, so much so that experts believe that Bangladesh can bring about a *solar revolution*, and in doing so Bangladesh can set an example in the international arena of following the *low-carbon-path to growth* and contribute to the global mitigation effort;

By bringing about the solar revolution, Bangladesh can, with regard to energy and for the majority of her people, leapfrog to the stage of renewable, bypassing the stage of fossil fuels, just as she has leapfrogged, in the area of telecommunications and for the majority

of her people, to the stage of mobile phones bypassing the stage of land (wired) telephones;

The solar revolution can also be helpful for Bangladesh's industrial revolution, because she already produces domestically all the components necessary for solar units, except the solar panel, and since Bangladesh has large amounts of high-quality sand deposits from which solar panels can be manufactured, she can, with appropriate policies in place, develop a large, new industrial sector producing all components of solar units, including solar panels; and the rise of this new industrial sector can be analogous to the rise of Bangladesh's garments manufacturing sector;

Important changes will be necessary in Bangladesh's *health sector* in order to meet the challenge of increased incidence of diseases resulting from climate change, as well as to find out through research and studies the new types of diseases that may arise because of climate change in the tropical conditions of Bangladesh;

Large absolute size and extremely high density of population is one of the main reasons why climate change will exact such a huge human toll in Bangladesh, and they increase Bangladesh's vulnerability by putting pressure on her physical resources, including forests, water, and arable land, and by pushing population to precarious sites for settlement:

Bangladesh did achieve some progress in bringing down the fertility and population growth rates, but even the current rates are too high, and more alarmingly, progress in bringing these rates down has faltered in recent years due to complacency, misguided policies, and lack of adequate funding and effort;

Stabilization and reduction of the population size is a pre-condition for Bangladesh to be successful in coping with the adverse effects of climate change;

The entire population of Bangladesh needs to be made aware and educated about the danger of climate change and its probable effects on Bangladesh; and to that end it is necessary to revamp the *curricula* of the countries educational institutions, beginning with that of the school level; and furthermore *capability for research* on climate change needs to be greatly enhanced through appropriate support to the country's higher educational institutions and other centers for research and study;

Even though climate change affects everyone, the economically disadvantaged sections of the population are affected most adversely, who tragically also has the least wherewithal to deal with these effects, so that there is a "*internal double injustice*" related to climate change, and unless conscious efforts are made to redress this internal double injustice, an unfortunate situation of "climate apartheid" may develop within Bangladesh;

An important role in helping Bangladesh to confront climate change belongs to non-resident Bangladeshis (NRB), particularly those who are residing in developed countries,

and they can do so by raising the awareness among the public of these countries about the devastating impact that climate change will have on tens of millions of people of Bangladesh, by providing concrete faces behind the abstract notion that the public of developed countries now have about the threat posed by climate change to far away tropical low lying developing countries;

The conference resolves to

(Actions at the international level)

Demand that the industrialized countries take immediate and effective measures to curb their GHG emissions in order to stabilize climate;

Demand that industrialized countries stop procrastinating with regard to actual reduction of GHG emissions and stop trying to pass on the climate change burden on to developing countries:

Demand that developed countries provide adequate financial and technological assistance to Bangladesh and other developing countries that are and will be affected adversely by climate change;

Demand that industrialized countries whose emissions have caused climate change provide necessary immigration opportunities to those in Bangladesh who will become climate refugees due to rising sea level and other adverse effects of climate change;

Demand that the climate assistance meant for Bangladesh be given directly to the Bangladesh government under the auspices of UNFCCC and not through intermediaries, such as the World Bank;

Demand that a "World Center for Research on Adaptation to Climate Change" be set up in Bangladesh;

Urge Bangladesh government to play an active role in UNFCCC and other international forums in demanding immediate deep reductions of GHG emissions by developed countries;

Urge Bangladesh government to build up necessary alliances with other developing countries and even developed countries which are more sincere in their effort to stabilize climate;

(Actions at the domestic level)

Urge Bangladesh government to undertake climate change and geophysical research so that it can adopt measures based on specific local forecasts;

Urge Bangladesh government to carry out a comprehensive review of development strategy in the light of climate change and reorient the country's domestic policies accordingly;

Identify climate change as a consequence of predominantly market based economic processes, and to urge Bangladesh government not to rely on market forces alone in dealing with climate change, but to develop a comprehensive social plan and provide leadership in implementation of that plan;

Urge Bangladesh government to discard the current *Cordon Approach* to rivers and instead adopt the *Open Approach* so that Bangladesh can deal effectively the problems of submergence, destabilization of rivers, and salinity intrusion;

Urge Bangladesh government to use the *Open Approach* to rivers in order to ensure minimum flow and navigability of rivers all through the year;

Urge Bangladesh government to undertake research in order to identify the changes necessary in the country's agriculture sector, to develop crops that are resistant to submergence, salinity, and extremities with regard to water supply;

Urge Bangladesh government to put emphasis on the use of renewable energy sources in meeting the country's growing need for power;

Urge Bangladesh government to make an all out effort to bring about a *solar revolution* that will enable to meet the household energy needs of tens of millions of Bangladeshi households who are yet to have electricity and to develop and new industrial sector producing the solar unit components;

Urge Bangladesh government to pay necessary attention to the environmental impact of power generation using fossil and other non-renewable energy sources, and in particular to the environmental impact of coal extraction and use;

Urge Bangladesh government to include climate change in the curricula of educational institutions, including schools, so that the younger generation grew up with necessary knowledge about this grave challenge;

Recommend that Bangladesh government takes step to open separate departments or institutes at the country's universities in order to promote necessary research and education on climate change;

Recommend that Bangladesh government sets up separate research centers on climate change, other than those at universities, and particularly in areas to be most affected by climate change, in order to promote research on the issue and disseminate findings widely among the citizens;

Recommend that a significant part of the additional budget allocated to the environment ministry be spent on research on climate change issues;

Urge Bangladesh government to make necessary changes in the health sector in order to prepare the country for the effects of climate change, and in particular to conduct research on the diseases that are likely to spread and new diseases that are likely to arise;

Recommend that Bangladesh government take steps to include possible effects of climate change on health in the curriculum of the country's medical and nursing colleges;

Urge that Bangladesh government discards any complacency regarding population planning and gears up the efforts to stabilize and reduce the population size of the country as soon as possible;

Urge the people of Bangladesh to realize the importance of reducing the population size in order to cope with climate challenge, to cooperate with the government initiatives in this regard, and also to take initiatives by themselves to bring down the population growth rate;

Recommend that Bangladesh adopts a more equitable development strategy, so that the weak and vulnerable are not discriminated against, and a situation of "climate apartheid" does not arise;

(In conclusion)

Hope that the unity of resident and nonresident experts, activists, government officials, non-government personnel, politicians, representatives of different professional, cultural, media, and social organizations, people from all walks of like, initiated through this conference will expand further in the future, and with time more people, organizations, and institutions will join this effort, and through the combined efforts of all, Bangladesh will move forward in meeting the climate change challenge;

Note that in different phases of the life of a nation different challenges emerge as the most important challenge; and that in the current phase of the Bangladesh, climate change has emerged as the most important challenge, just as the challenge of national self-determination was the most important challenge for the nation during the 1950s and 1960s;

Hope that just as the nation rose to the challenge of national self determination, engaged in a long struggle, and finally overcame it through the Victory in the Liberation War of 1971, so will the nation rise up to the climate change challenge, engage in a protracted struggle and will come out successful;

Note that while the government will have to play the main role in confronting climate challenge, the entire Bangladesh people, including all citizens' and non-governmental organizations will come forward;

Note further that media, both print and electronic, has a particularly important role in sensitizing the public about climate change and in guiding them to appropriate actions, and hope that the media will play its expected role;

Express happiness at the fact that non-resident Bangladeshis (NRB) have come forward to help Bangladesh meet the climate challenge and are playing an important role in raising the awareness by providing concrete faces behind the abstract notion that people of developed countries have regarding the climate threat faced by Bangladesh and other low lying developing countries;

Hope that NRBs will expand their climate effort in future and cooperation between NRBs and resident Bangladeshis (RB) will play an important role in helping Bangladesh meet the climate challenge;

Suggest that BAPA and BEN continue to remain engaged vigorously with the climate change issue, promote necessary research and campaign, and organize conferences like the current one on a regular basis.