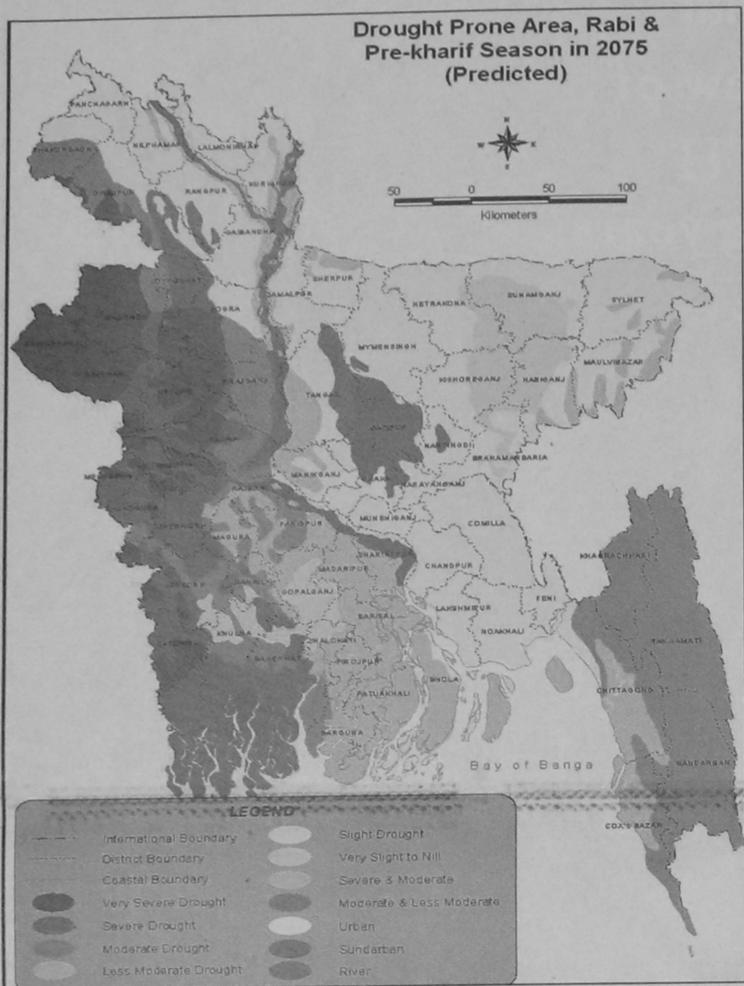


The time for action is now



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CLIMATE change is the greatest threat to the mankind in the 21st century. Bangladesh has been identified by the world scientists as one of the most vulnerable and potentially one of the most severely impacted countries by climate change including extreme weather events. The challenges of climate change are multi-dimensional, multi-sectoral, immediate as well as long term. The causes of climate change are global in nature while the impacts are felt locally, often extremely. Poor are the most vulnerable to climate change in developing countries.

Many scientists have concluded that cyclones such as Sidr have been linked to climate change. The enormous, forceful and devastating cyclone Sidr, hitting the coast of Bangladesh in November 2007, has killed several thousands of people and devastated the lives of over 30 million people. This has reconfirmed the IPCC assertion that it is the poor of developing countries who are most vulnerable to the onslaught of climate change and its impacts. The low-lying coast of Bangladesh has been frequented by severe cyclones, almost one per decade but Sidr exceeded all previous onslaughts because of its width of coverage and wind velocity. This intensification of cyclones is also consistent with prediction of Fourth Assessment of the Inter-governmental Panel on Climate Change (IPCC).

The world of climate change is shifting rapidly with surprises as well as asserting its severity on the planet. The IPCC and former US Vice President, Al Gore, were awarded the Nobel Peace Prize of 2007 for their contribution to the work on climate change. This hopefully is the last nail in coffin of the climate skeptics. Thus climate change has little controversy over the severity of impacts and causes. But exact location of impacts is difficult to predict.

Climate is changing rapidly
The global climate is changing

far more rapidly than anticipated earlier. Over the last few years, weather related extreme events such as floods, droughts, cyclones, heat stress and wild fires have affected all parts of the world. Even the silent ice caps of the Arctic are melting faster. The mountain glaciers are retreating at an unprecedented rate. Climate change impacts have been already visible across the world in various forms. This is demonstrated through recent extreme climatic events around the world. The current century is expected to see warming due to many anthropogenic activities quicker than at any time in the past 10,000 years. It seems that we cannot prevent climate change today and it will affect the basic elements of human life including food, water, health, fodders and fuel. Climate change will have adverse impacts on human, social and natural systems and sub-systems in different ways and magnitudes.

The developing and poor countries including Bangladesh would be the most vulnerable to the adversities of global climate change due to its geophysical location, poor socio-economic development and lack of capacity to address the impacts. The IPCC Fourth Assessment report warns us about the devastating impacts of climate change and identified the following key impacts for the Asian and African regions.

Box 1: Some impacts of Climate Change on the most vulnerable countries.

In Africa, by 2020, between 75 million and 250 million people will be exposed to increased water stress. Agricultural production and access to food will be severely compromised.

In Asia, by 2050, decreasing fresh water availability in most areas could put more than a billion people at risk. Increased deaths and illness are expected from diarrhoeal diseases due to flooding and drought and also from cholera due to higher sea temperatures.

In the Small Island Developing States, rising sea

level and increased storm surges will threaten the homes and livelihoods of communities, forcing some to migrate permanently.

Source: IPCC 2007
Devastating Climate Change Impacts in Bangladesh

Bangladesh is facing various climate changes impacts and climate related extreme events due to its location and being a nascent and extremely flay delta. The country is located between the great Himalayas Mountains in the North with large river systems and the Bay of Bengal in the South. Recently, the country is experiencing various climate related natural disasters and extreme events like prolonged and repeated floods in the northern and central parts, severe cyclones and salinity in the coastal districts and drought in the northwest parts. These are affecting physical environment, ecosystems and natural resources bases severely almost every year. The climatic events have deadly consequences on agriculture and food security; water, human health and human security. The super cyclone Sidr and the frequent and prolonged floods of 2007 are the obvious recent examples of such extreme events. The country experienced 30%-40% loss of crops last year and majority people are facing food insecurity now due to severe flood and Sidr.

Bangladesh experiences over flow of water causing floods in the monsoon and scarcity of water in the dry season due to change in hydrological patterns, rainfall and regional water flow patterns. These have been linked with global warming and climate change. This situation will be aggravated as climate warms further resulting in severe droughts, cyclones and increasing floods as well as sea level rise in the South.

It is apprehended that the possible sea level rise will affect the country by inundating coastal areas of Bangladesh. A 30-45cm sea level will affect the coastal ecosystems, water and agriculture and food production. But this will also dislocate about 35 million people from coastal districts by the year 2050. For a 30 cm sea level rise, it anticipated that next 30 year's development investment would be wiped out in Bangladesh. These may create severe problems in rural livelihood, local, regional and sectoral development as well as in sharing scarce resources (land, water, forest and fisheries) and thus it will enhance rural to urban migration and social conflicts in near future. The emerging climate refugees will put enormous pressure on urban economy and infrastructure (housing and communication) as well as on basic services such as water supply, power, health and sanitation.

Climate change and its associated events will affect the natural resources and common property resources such as fisheries, mangroves and other forests, which provide livelihood supports for the common people and the poor. This will increase poverty and today's poor will be turned into extreme poor tomorrow if we do not take appropriate and urgent measures now. The non-poor people could be thrown into poverty due to climate extremes as demonstrated by Sidr and floods. So, all the poverty alleviation and sectoral development (agriculture and food, water, health, infrastructures etc.) efforts by the government and NGOs may be jeopardized. Climate change impacts may affect achieving of the MDGs in developing countries like Bangladesh, particularly the goal one i.e., eradicating poverty and hunger. So, instead of making poverty history, climate change may make pov-

erty permanent in developing countries. This is enough reason to take urgent actions on climate change.

Immediate and urgent responses to address climate change and its impacts

Bangladesh is one of the lowest contributors of GHG both as a nation and on per capita basis. We are not at all responsible for the global climate change, but we are mainly the victims. We as a country, which can do very little to tackle the causes of problem. Hence, we have to work collectively with the world community. The UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol under the Convention give us the scope and structure to work together and raise our voice to the global community and influence global decision making in our favor. However, Bangladesh has to work with the alliance of Group-77 and LDC to achieve good results from the Conference of the Parties (COP) negotiations to reduce GHG emission and lower the risk from the impacts climate change on people, society, economy and ecosystems.

Global Policy and Negotiations

Bangladesh's future depends on reducing the risks of climate change for that it must demonstrate leadership in the global negotiating process. It is fortunate that Bangladesh has few of the world's leading institutes, scientists and negotiators. The Govt. of Bangladesh must:

Ensure harmonization between its own agencies such as Ministry of Environment and Forests and Ministry of Foreign Affairs and develop a strong national position demanding compensation

Develop own negotiating strategy

Influence international partners countries to support Bangladesh in its efforts

Organize training and enhance manpower for better negotiation and international climate diplomacy

Promote the Bangladesh cause as a victim and impacted country in all international fora

Internalize and prioritize climate change in all its own development efforts.

Broadbased awareness raising

The urgent response to address climate change would be to build greater awareness about the causes, impacts, vulnerability and consequences of climate change at different levels including community people, local actors, national government and relevant departments, policy and programmes, private sectors, NGOs, and development partners. People can initiate both mitigation and adaptation measures at institution, community and personal levels. We have to raise voice in the international forums to make the developed countries take urgent actions for reducing GHG emission as well as compel them to compensate the vulnerable communities. Orientations and structured training courses on climate change issues should initiated urgently.

Mitigation and adaptation to climate change

There are two main approaches to address climate change and its impacts. These are mitigation i.e., drastic reduction of GHG emission for halting dangerous climate change and adaptation to address its impacts. Mitigation is the main response measure to prevent future impacts of climate change and consists of

acts such as switching from using coal to petroleum to natural gas (the least polluting fossil fuel) or better still switching gradually with evolving technologies from fossil fuels to renewable energy (such as solar or wind), as well as generally reducing energy use and increasing energy efficiency. The development processes need to be significantly decarbonised. Mitigation is the best form of adaptation.

Adaptation is certainly no substitute for mitigation. Any delay in reducing emissions will only increase the need and cost of adaptation, and increase the risk of runaway global climate change. Though the country emits very little CO₂ and GHG currently, it may emit more in future since we are pursuing quick economic growth pathway. Bangladesh has limited mitigation opportunity at present as it is not a major emitter. Despite that, the government of Bangladesh has created the Designated National Authority (DNA) through which Clean Development Mechanism (CDM) projects could be developed. Examples of mitigation projects in Bangladesh can be:

Solar energy in all areas not likely to be electrified by the electricity grid soon

- Promotion and of CFL bulbs across all institutions and infrastructure. If done rapidly Bangladesh will not need to produce additional electricity immediately
- Improve energy efficiency in industries, such as sugar mills, brick kilns, thermal power plants etc., and reduce losses in transmission
- Popularize improved stoves and biogas plants. These can be bundled into good CDM projects; and
- Better use of waste to generate organic fertilizers and electricity.

Adaptation

Adaptation entails efforts to deal with the unavoidable impacts of climate change (due to the failure of mitigation efforts). In recent years, adaptation has gained in prominence as an important response measure (especially for poor and vulnerable countries) since it became clear that some impacts are now unavoidable in the short to medium term. The poor and vulnerable countries like Bangladesh need greater adaptation capacity to reduce climate risks. Adaptation to climate change should be long term responses to deal with anticipated long-term effects of climate change on lives and livelihoods of people as well as social and natural systems of a country or a region. The adaptation to climate change is to be integrated with the relevant national policies and strategies as well as in the socio-economic development process, sectoral development,

natural resources management and livelihoods promotion efforts. The approach of integrating adaptation to climate change could include but is not limited to the following:

Mainstreaming adaptation into all development policies and projects.

Developing tools and methodologies for undertaking adaptation actions in ecosystems and sectors and demonstrate appropriate adaptation projects. Bangladesh is emerging as a global leader in this area conducting adaptive capacity assessments and developing adaptation strategies at the country, regional, ecosystem and local levels.

Ensuring the establishment of financial resources for adaptation activities, and assessing the sustainability of programmes and the adequacy of funding sources; discussion must be initiated with donors and development partners.

Establishing partners and networks on adaptation with the scientific community and research institute, private sector and NGOs

Linking of adaptation to disaster risk reduction strategies and activities and leveraging the synergies that exist between the two processes; and ensuring the development and transfer of effective and appropriate adaptation technologies for the national, programme, sectoral, ecosystem and community levels.

Greater integration of climate change issues

One of the most important tasks is to integrate climate change issues into relevant policy, programmes and sectoral development process so that the impacts of climate change can be reduced to a great extent. The government should immediately take a long-term multidimensional plan to face the impending challenges of the climate change and set up a proficient institutional body to deal with the matter. Climate change issues should be incorporated into the daily activities of all ministries and departments as well as into all the big challenges for Bangladesh on the way to the eradication of poverty. The government of Bangladesh has initiated a National Action Plan of Adaptation (NAPA), which has been an initial and limited step towards integration of climate change adaptation into sectoral and regional development processes. The government has to take a further bold step for institutional integration to address the climate change and its impacts.

Collective action

We see serious lack of recognition of and activism in climate change issues, particularly among the NGOs, researchers and civil society groups in Bangladesh. This happens because of the complexity of the issues. But there is an indication of a good beginning of a

recently formed Bangladesh Climate Development Forum by some research organizations and NGOs. We must initiate greater collaboration among the civil society actors through further research, awareness, policy advocacy and campaign against climate justice. This entails involving civil society groups, NGOs, media and relevant actors to strengthen both the government departments and the capacity of the vulnerable communities to address the impacts and reduces their vulnerability.

Conclusion

Climate change is an issue of consumption, production and environmental justice. Civil society can play a key role in influencing governments and other stakeholders to make decisions in favour of the planet. It is the right of poor countries to meet their development needs and dignity. Efforts for freedom from hunger, injustice, terror and political repression will be threatened by climate change all over the world. No part of the planet is free from this danger. Climate security is a global affair. Climate change is an issue of global justice and must be addressed now.

Last year, the Norwegian Nobel Committee awarded the Peace Prize to the Al Gore, former Vice President of the USA and the IPCC for their great efforts and contribution to build awareness and generate scientific knowledge about man-made climate change as well as to lay the foundations for the urgent and long term measures to halt dangerous climate change and address the devastating impacts of global climate change. The Nobel Committee highlighted the potential risk between accelerating climate change and the risk of violent conflicts for various scarce resources including fresh water across the regions, countries and communities.

Bangladesh's future survival and development depends on its capacity to confront and reduce the risks of climate change. The time for action is now. Any delay will only increase the risks. Most of Bangladesh responses will depend on global decisions to reduce GHG and enhancement of funds for adaptation. So we must master all efforts to make climate change a priority in our foreign and economic affairs. At the same time we must do our level best both in adaptation and mitigation. We must demand our rightful compensation from the developed and industrialized countries under climate change regime.

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