

Meeting Memo
2nd General Discussion Event 2009
Climate Change in Bangladesh, Issues in Agriculture, Mitigation
and the role of Private Sector
Date: April 22, 2009
Venue: 'Katalyst' Conference Room
Organized By: IDE – Bangladesh & Winrock International

Participants:

| SI | Participant | Organization |
|----|---------------------------|---------------------------------|
| 1 | Mr. M. Alam | BCAS |
| 2 | Mr. William J. Collis | IDE – Bangladesh |
| 3 | Mr. Shyam S. Saha | IDE – Bangladesh |
| 4 | Mr. A.S.M. Shahidul Haque | Winrock International |
| 5 | Mr. Shah Abdus Salam | Development Wheel |
| 6 | Mr. A. B. M. Feroz Ahmed | Development Wheel |
| 7 | Mr. Md. Mahbubur Rahman | Eclectic |
| 8 | Ms. Shazia Ahmed | IFC-SEDF |
| 9 | Ms. Afifa Raihana | World Bank - IFC |
| 10 | Mr. Roger Cozens | Intercooperation |
| 11 | Mr. Md. Rashedur Rahman | Bangladesh Enterprise Institute |
| 12 | Ms. Farida Husain | Katalyst |
| 13 | Mr. Md. Maksudur Rahman | Plan International - Bangladesh |
| 14 | Mr. Tarique Rizvee | PRICE |
| 15 | Mr. Reza Iftekhar Patwary | PRICE |
| 16 | Mr. Tahsin Akbar | Coordinator - MDF |

Mr. Collis (IDE – Bangladesh) welcomed everyone present, gave introduction of the event and requested Mr. M. Alam of BCAS to give his presentation.

Presentation of Mr. M. Alam

The presentation of Mr. M. Alam of BCAS highlighted following issues.

1. The climate issues are mostly impacted in Bangladesh by
 - a. Rainfall & Surface water
 - b. Salinity
 - c. Flooding frequency
 - d. Cyclone/ storm/ tornado/ hurricane frequency
 - e. Level of sea level

The country's largest sectors – agriculture as well as other sectors will have severe impact because of this climate change. There are also scopes of public-private partnership for facing the impact of climate change. The partnership could work to address the issues of drought/ salinity/ lack of water supply through crop diversification, developing new varieties of seed, construction/ installation of polders etc.

2. The brief overview of the country pointed out that 80% of the country is in floodplain. 92% rivers in Bangladesh originated outside the country whereas only 8% from within the country. The climate is characterized by heavy rainfall, high temperature (around 30°) with seasonal variations. The country has diverse Agro-ecological system. South west region of the country is in Ganges plain and South-East is in the Meghna plain.
3. The trend of climate shows that the rainfall in dry season in northern region will decrease, shorter winter season and moderate to long monsoon season. Drought intensity will increase (in northwestern region), expansion of drought prone area and erratic behavior of rainfall and temperature will be prominent. The sea level will increase, thus increasing the saline region. The glacier retreat in Himalaya region will cause frequent flooding till 2050. After that no flood-water may not be available. The worst affected area will be Northwest region.
4. Increased flooding (3-5%) due to rainfall. Drainage congestion due to sea level rise. Sea level is due to rise by 62 cm. 25 polders will have drainage congestion and 13 polders will be overtopped by the water of peripheral rivers. Salinity of the area will increased causing 'Sundarban (mangrove forest) ' to move north. The flood inundation will be longer and during this time water level will be higher. Water logging and higher occurrences (every 20 years) of flood is expected. Due to drought, the soil of the country is expected to loose requisite level of moisturizer required to grow present varieties of crop. Impact of Ganges withdrawal will have impact on drought situation.
5. On mitigation issues, infrastructure will be required to build to combat rising sea level, salinity, drought etc.
 - a. Public-Private partnership is required in to meet the climate change challenges. More saline resistant crop/ seed will be required in future. Also as the flood will be more frequent, flood resistant crop/ seed varieties will be required.

- b. Private sector may utilize the situation by addressing issues in water availability, construction of infrastructure (water storage capacity, building boulder, irrigation equipments etc.), water gardening etc.

Discussion

After the presentation the floor was opened for the members for discussion. Following issues came up in the discussion.

1. The cost of infrastructure development will be quite high to meet the challenge of impending climate change. According to experience of Mr. Collis 400 to 500 million taka costs for the irrigation project in Chandpur project. It may cost upto 2 – 5 billion dollar for prepare poulder protection from flood. And this is not a one time cost. The system will have to be upgraded time to time.
2. Other then traditional crops, crops such as chick pea, wheat etc. could be introduced for cultivation. But this will have strong effect in food habit, social and surely political. Present verities such as rise etc. requires more water. On the other hand, crops like wheat require less amount of water for cultivation. Considering these factors, food chain will be affected. This affect may occur with in next 10-15 years.
3. The preparation canal/ ponds etc. for irrigation may not serve the purpose right. As the land area is used for holding water, crop area is decreasing. Therefore, farmers will have less area for cultivation.
4. Private sector, from now on, should be involved in infrastructure building to meet challenges of climate change, address salinity issues, develop/ marketing of saline resistant crop/ seed varieties.
5. Climate change may also bring in opportunities for Bangladesh. The 'Clean Development Mechanism' (CDM) may be applicable in countries like Bangladesh, that have less carbon emission then western developed and industrialized countries. Investment through this process can be used by privates sector for developing 'clean' technology for development. However, to address this opportunity, a shift in policy in national level will be required. The CDM was contested in the discussion event as 'not an appropriate policy for countries like Bangladesh'.
6. The climate change and its impact is required to be included in the policy by government. Due to climate change, food securities will be severely affected. Unfortunately the data/ information that the policymakers receive have data that are obsolete in nature. Many of the data are not available due to bureaucracy/ government policy etc.



7. Due to climate change, irrigation is one area which will need to be developed. The irrigation process should be determined on cases by case basis. An example in the event was shared, which says that in 'Char' areas rather than 'Shallow' pump and distribution through water line, sprinkler system may work better in this area.

Mr. Collis in his conclusion thanked all the participants and Mr. Alam of BCAS for his time.