

EDITORIAL

We are facing local environmental degradation in the forms of air and water pollution, land degradation, destruction of forest and bio-resources as well as global environmental problem such as rapid climate change. Global climate change has been the greatest environment-development problem facing the human kind today. Climate change though, a global problem in nature, it has severe local impacts, particularly on the lives and livelihoods of the poor people in the developing countries.

Mitigation (reduction of GHG emission) is the main response to stop human induced rapid climate change. There have also thinking and limited actions to reduce climate change risks and vulnerability through adaptation to climate variability and climatic extreme events. BCAS and IIED (International Institute for Environment and Development), London with partners arranged an international conference on Community Based Adaptation (CBA) to climate change in Dhaka to share the emerging approaches and practices of CBA. Over 150 participants and climate change experts from all the continents attended the third CBA conference. The main feature article of this Bangladesh Environmental Newsletter (BEN) describes the process and outcomes of the conference.

The second lead article of this BEN features on air pollution problem in Dhaka city and how it affects the child health. The article has been prepared based on a recent study findings of the Dhaka Shishu Hospital. A brief report is also made on the recently completed UN-Conference of the Parties in Copenhagen which has been criticized for its poor outcomes. We hope the next climate conference in Mexico will be successful in delivering a legally binding and fair climate deal. We wish a happy New Year 2010 to our valued readers. ❀❀❀

The Third CBA Conference held in Dhaka: Adaptation Approaches and emerging Practices shared

Bangladesh has been in the frontline in fighting against climate change. The local communities have resilience in adapting to the changes, but they need greater adaptive capacity to address emerging and future risks and vulnerability to rapid climate change. Community people need further awareness, right information, new knowledge, resources and technical as well as policy and institutional supports to fight against global climate change which have severe local impacts affecting the lives and livelihood of the common people particularly in the developing countries. Good policy should be based on good science and local knowledge which may lead to successful community actions towards climate change risk reduction. This was the main conclusion of the third international conference on Community Based Adaptation (CBA) to climate change, which was held in the Dhaka.

The third CBA conference was held at the Sheraton Hotel in Dhaka, Bangladesh, from 18-24 February 2009 (the previous two CBA conferences were held in 2005 and 2007). The event was organized jointly by the Bangladesh Centre for Advanced Studies (BCAS), the International Institute for Environment and Development (IIED) and the RING Alliance of Policy Research Organizations. The aim of the event was to share the latest developments in adaptation planning

and practices at different levels and disseminate knowledge among stakeholders, with a view to integrating adaptation into national and international development programmes.

The event consisted of three days of field visits to observe community-based adaptation (CBA) initiatives in Bangladesh. This was followed by three days of interactive workshop discussions in Dhaka. More than 150 participants

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Severe Effects of Air Pollution on Child Health in Dhaka City

In Bangladesh, air pollution in urban areas has reached an alarming level. The poor are the most vulnerable to environmental degradation including air pollution. The increasing number of vehicles and their emission is the key source of air pollution in the Dhaka city. Emissions from small industries in residential areas and construction of high rise buildings are implicated with air pollution. Smokes from the brick-kilns in the suburb also add pollutants to air. Other pollutant of the city air is particulate matter, either total suspended particulate or respirable particulate of less than 10 microns in diameter and ozone formed as a result of atmospheric reaction between HC and NOX in presence of sunlight.

Children are the worst victims

Children's breathing rate is more than adults-as a result they absorb more pollutants, and retain them in the body

for longer period, their blood-brain-barriers are not well developed and immune systems are weak and therefore they are more vulnerable to intoxication. Air pollution causes both short term and long term effects on children e.g. breathing difficulty, immunosuppression, allergy and asthma/wheezy bronchitis, pneumonia, bronchiolitis, IUGR, LBW, pre-term delivery, developmental anomaly and delay, acute and chronic neurological effect, tearing difficulty, school failure, headache, kidney disorders, anaemia, cancers, skin, eye, ear, nose and throat problems. Air pollution interferes with the development and growth of a child and in women at reproductive age indirectly affects foetal growth and development.

Dhaka Shishu Hospital (DSH) has a large Out Patient Department (OPD) where approximately 500 children

Contd on page 6

Climate Conference in Copenhagen and Beyond

The Copenhagen Climate Conference was the culmination of years of works to follow-up the Bali Action Plan and the Kyoto Protocol. These two processes were outcomes of the long extended climate negotiations to reduce GHG emission and climate risks. The Copenhagen Summit, held during 7-18 December 2009 in the Danish capital, was attended by all 192 member states of the United Nations. Over 120 Heads of Governments also attended the high level meetings of the COP-15 and demonstrated their great interest and commitment to United Nations Framework Convention on Climate Change (UNFCCC). The whole world having been made conscious about the grave threats of climate change expected a legally binding agreement in Copenhagen to reduce GHG significantly, particularly by the industrialized countries. Unfortunately the governments of the world those, who represented in the COP-15, failed to deliver a comprehensive and fair climate deal.

The COP Processes

The COP process is essentially an inter-governmental process under the UNFCCC. Hence, all the Governments (e.g. member states of the UN) are responsible for the negotiations, but these negotiations take place mostly in political groups of nation states. The main negotiations were held around four key building blocks which include: i) shared vision for halting dangerous climate change by limiting temperature rise through mitigation measures meaning urgent actions for GHG emission reduction; ii) adaptation means how to live in changed climate by reducing risks from both climate variability and climatic extremes; iii) technology generation and transfer for both mitigation and adaptation; and iv) funding and capacity building of the poor developing countries to address climate change and its impacts. In addition, two Ad hoc Working Groups on Long-term Cooperative Action (AWGLCA) and Implementation of KP (AWGKP) also worked closely and tried to influence the negotiation processes and outcomes.

Bangladesh Perspectives in the COP-15

A large delegation of negotiators from Bangladesh led by Prime Minister Sheikh Hasina participated in the COP-15. The Bangladesh delegation could successfully draw the attention of the negotiating parties and global audience about the vulnerability of the country to climate change impacts and strongly raised the demand for

resources for adaptation and disaster risk reduction. The Prime Minister Sheikh Hasina and Dr. Hasan Mahmud, State Minister for Environment and Forest of the Government of Bangladesh supported by the members of Government and non-Government actors, made laudable contribution to the plenary session discussions as well as in other forum in relation to LDCs and Most Vulnerable Countries (MVCs). The Bangladesh delegation had succeeded in establishing its own



Dr. Atiq Rahman, Executive Director of BCAS was making a presentation on Bangladesh Vulnerability to Climate Change at a side event in the main Convention Centre, Copenhagen
Source: BCAS

vulnerability as well as a leadership role of LDCs and MVCs. Further Bangladesh's position not to cross 1.5°C as the maximum temperature increase also found its position in the

Contd on page 6

Capacity Building Initiative by BCAS in Copenhagen

As part of a Capacity Building Initiative (CBI) for climate negotiation, BCAS organized a briefing meeting for a number of Bangladeshi negotiators and participants of COP-15 in Copenhagen, Denmark on 9 December 2009. The objective of the meeting was to improve understanding of the COP-15 participants about the COP process under the UNFCCC; different elements of the draft negotiating text, negotiation process and positions of different negotiating groups including the G-77 and China, LDCs and Most Vulnerable Country (MVC) groups. A half-day briefing meeting was held at the conference room of the hotel Phoenix Copenhagen.

The meeting was attended by six Members of the Parliament representing the major political parties in Bangladesh; senior editors and environmental journalists from both print and electronic media; civil society leaders and NGO representatives. Chaired by Dr. Atiq Rahman, Executive Director of BCAS, the briefing session was addressed by Dr. Saleemul Huq, Senior Fellow of IIED, London, Mr. Saber Hossain Chowdhury, MP and the Chairman of the All-party Parliamentary Committee on Environment and Climate Change, Mr. Mahfuz Aman, Editor of the Daily Star, Mr. Kha Ma Harun, Deputy Director General of BVT and Ms. Mahbub-Ara Gini, MP.

Dr. Atiq Rahman welcomed the participants and gave a short introduction about the CBI, its objectives and expected outcomes. In this speech, he also elaborated the COP process, the key focus of COP-15 in Copenhagen and why it was very important to implement the Bali Action Plan and agreeing a fair climate deal towards the Post 2012 climate regime as well as how to negotiate and influence the COP decision process.

Dr. Saleemul Huq, spoke about the different streams of negotiations and the key positions of the negotiating blocks (Anex-1 countries, European Union, LDC and G-77 etc.) from his past experiences. He also shared the IIED and BCAS initiatives to build capacity of the COP negotiators, observers and participants towards taking the position and voices of developing countries, LDCs and MVCs including Bangladesh. He mentioned that COP-15 in Copenhagen was very important to formulate the architecture of future climate deal as well as agreeing an ambitious and fair climate deal for the second commitment period when the first commitment of KP expires in 2012. He hoped that COP-15 will take the negotiation at a higher level and the role of the leaders and negotiators from the South and LDCs would be very critical. They have to understand the right issues in the various negotiating blocks and try to influence the other countries and negotiators to build consensus on issues like mitigation, adaptation, technology and funding for LDCs and MVCs This was followed by a question and answer session.

The Devastating Cyclone *Aila* hit Bangladesh: Huge Damages to Environment, Natural Resources and Livelihood Assets

Cyclone Aila hit the south western coast of the country on 25 May 2009 with incessant rainfall accompanied by strong wind and tidal surge. Killing over 300 people and washing away thousands of homes as wind driven tidal surge inundated vast areas of coastal land. Packing winds of up to 90 km an hour, the storm roared into Satkhira, Patuakhali, Bagerhat, Khulna, Jessore, Barisal, Bhola, Barguna, Pirojpur, Jhalokathi and Laxmipur. Thousands of People were homeless as tidal waves leaping up to 13 feet high rolled on to those coastal districts. The waves damaged river and flood control embankments and dykes causing widespread inland flooding and submerged many villages in Khulna, Satkhira and Barisal.

Embankments breached

According to the report of Water Development Board (WDB) officials 1430 sq.km. of flood control embankment have been breached in Satkhira, Galachipa, Kalapara and

Patuakhali sader was washed away by the tidal surge. In Bhetkhali, Gabura, Joginagore and Protapnagore bordering the river linked with the sea, about 109 sq.km. of embankments have been totally washed away by the tidal surge allowing intrusion of saline water over vast areas that would remain submerged unless the embankments are either rebuilt or repaired. More than 20 fishing trawlers went missing with 400 fishermen on board and around 25 km. long embankment in Moheshkhali of Cox's Bazar was damaged and about 800 shrimp farms were washed away in



Cyclone Aila and the associated tidal surge inundated the coastal villages, up-rooted trees and breached embankment.

Source: BCAS

the tidal surge. More than 400000 people were isolated by severe flooding in coastal regions of Bangladesh and numerous villages were either completely submerged or destroyed by

Contd on page 7

SaciWATERs Staff Training held in Dhaka

A week-long staff training on Climate Change and Water: Vulnerability and Adaptation was held on 2-9 August 2009 in Bangladesh. The training was jointly hosted by the South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs) and Bangladesh Centre for Advanced Studies (BCAS) under the Crossing Boundaries (CB) Project, a regional research and capacity building initiative.

The staff training programme was organized mainly to develop teaching module through participatory sharing and learning process on water and climate change. The concepts and science of climate change, climate change impacts on water resources, and economic aspects of climate change were discussed in the training. Experts from Bangladesh, Nepal, India and Sri Lanka facilitated various training sessions that were held in a city hotel in Dhaka. The training was followed by a three-day field visit in riverine *Charland* in Gaibandha to see climate change impacts on water, agriculture and human health.

Partners of SaciWATERs

The participants of the training programme were the staff of CB (Crossing Boundaries) project's four academic partners. The academic partners are Centre for Water Resources

(CWR), Anna University Chennai, India; Nepal Engineering College; Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Sri Lanka and Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering Technology (BUET), Bangladesh. Each partner nominated two persons of their respective institutions for training. The total participants of the training program are eight in number.

The training programme was inaugurated by Dr. Atiq Rahman, Executive Director, BCAS. In his speech, Dr. Rahman said that climate change variability and extreme climatic events like floods and cyclone will affect the water sector very severely. It will affect the sources of water, its availability and quality, which will again affect agriculture, food security and human health. So, the government, academics and researchers must take these issues seriously and put their thought and action toward adaptation to climate change. Dr. Dibya Kanskar, Project Director of Crossing Boundaries also attended the inaugural session.

Technical Sessions

After inaugural session, presentations were made by experts on different thematic issues in several technical sessions. The participants discussed and

debated the issues after each presentation. These were very helpful for developing teaching modules on climate change and water. The technical sessions covered the following topics: i) Climate Change, linkages between Water and Climate Change; ii) Impacts of Climate Change on Arid, Coastal and Deltaic Ecosystems; iii) Impacts of Climate Change on Society: Economy, Agriculture and Livelihoods, Human Health, Gender and Social Equity; iv) Climate Change Risks and Vulnerability mapping and Analysis: Methodology and Tools for Adaptation; v) Adaptation and Mitigation: Structural and Non-Structural Approaches to Mitigation; Tools and methods of Adaptation to Climate Change; vi) Responses to Climate Change: Global, National, and Local; vii) Climate Change Mitigation Technologies and; viii) Economics Implications of Climate Change.

Field Visit

The participants also gathered empirical knowledge through field visits during 6-8 August 2009 in Gaibandha district. The team visited Jamuna river bank erosion, *Charland* and observed some local adaptation techniques in relation to flood, erosion and water scarcity. Finally,

Contd on page 7

Feature

Contd from page 1

representing governments, non-governmental organizations (NGOs), community-based organizations, research institutions, UN agencies and development organizations participated in the conference, along with grassroots and development practitioners and the media.

During the three days of site visits, participants journeyed to six climate affected areas in Bangladesh to observe CBA in action. Locations included: drought prone areas in the Chapai Nawabgonj District of northwest Bangladesh; flood and river erosion areas in the Gaibandha District, also in northwest Bangladesh; flood and water-logged areas in the Gopalganj Districts in south-central Bangladesh; regions prone to increased salinity in the Satkhira District in the southwest coastal region of the country; the coastal Districts of Noakhali and Lakshmipur in the southeast; and the southwest Bagherhat District, prone to increased salinity and cyclones. The subsequent three days of workshop discussions in Dhaka were structured around several technical and plenary sessions. The sessions alternated between technical and plenary sessions, and each of these sessions consisted of presentations and discussions on one or more themes relevant to CBA.

Reports from the technical sessions were presented in the subsequent plenary session, where panelists made further comments on the themes under discussion. The technical sessions addressed: methods and tools in designing CBA; adaptation measures and practices related to agriculture; women and children education and awareness for adaptation; advancing

adaptation through communication for development; mainstreaming and partnership for adaptation; disaster and climate change; and urban adaptation. A final technical session was held on scaling-up adaptation, and this was followed by a concluding high-level plenary session attended by the Planning and Finance Ministers of Bangladesh.

ADAPTATION AND DEVELOPMENT LINKAGES

Climate change is considered to be one of the most serious threats to sustainable development, with adverse impacts expected on the environment, human health, food security, economic activity, natural resources and physical infrastructure. Global climate varies naturally, but scientists agree that rising concentrations of anthropogenically-produced greenhouse gases in the Earth's atmosphere are leading to changes in the climate. According to the Intergovernmental Panel on Climate Change (IPCC), the effects of climate change have already been observed, and scientific findings indicate that precautionary and prompt action is necessary to stop dangerous climate change and address its adverse impacts at local, regional, sectoral and community levels.

While mitigation has traditionally been the pivotal issue for many climate change experts, adaptation to the effects of climate change is now acknowledged as necessary for responding effectively and equitably to the impacts of both climate change and climate variability. In recent years, adaptation has become

The Third CBA Conference Adaptation Approaches and

a key focus of the scientific and policymaking communities and is now a major area of discussion in the multilateral climate change process. Adaptation has been implicitly and explicitly linked with development focused action. The developing countries are disproportionately vulnerable to climate change and they lack adaptive capacity. Development processes and trajectories will be affected by the rate of climate change, and this is especially important for developing countries.

INAUGURAL SESSION

The event began with an opening ceremony on Wednesday evening, 18 February. Atiq Rahman, Executive Director, BCAS, welcomed participants and said the conference would provide an opportunity to exchange experiences, adding that climate change is the greatest threat facing mankind. Nojibur Rahman, Additional Secretary, Government of Bangladesh, and Director General, Department of Environment, said adaptation was critical for the short and medium term, and that CBA plays a vital role in building resilience. He emphasized an inclusive approach towards building community resilience through a mix of local knowledge and state of the art scientific technologies. Saleemul Huq, Senior Fellow, International Institute for Environment and Development (IIED), provided an overview of the current status of adaptation, and explained the role of CBA within that framework. Noting the need for both mitigation and adaptation, he said adaptation was now well accepted in the policy-making domain and would constitute one of the four pillars of the post-2012 framework. The inaugural session was addressed by the State Minister for Environment, Mostafijur Rahman and Einar Hebogard Jensen, Ambassador, Royal Danish Embassy, Dhaka.

PLENARY AND TECHNICAL SESSIONS

Besides inaugural and concluding sessions, 14 technical sessions were held on relevant areas. On Sunday, 22 February, in climate change science and adaptation session, Dr. Ian Burton, University of Toronto, presented the findings of the IPCC's Fourth Assessment Report. He stated that the latest science is less encouraging than previously anticipated, with more rapid and intense changes occurring than had previously been predicted. He called for reassessing the term "adaptation,"



Dr. Saleemul Huq, Head of the Climate Change division of IIED, London was speaking in the plenary session of the conference in Dhaka

Source: BCAS

noting that it is primarily viewed as a local concern, and suggested that, like mitigation, it should also be treated as a global issue. He used rising sea levels and the associated possible displacement of millions of Bangladeshis as an example of the need to broaden the scope of adaptation from the local to the international level. Burton urged participants to keep in mind that key issues shift quickly and new problems are bound to arise. He also cautioned against maladaptive practices and highlighted the need to minimize palliative adaptation.

Dr. Saleemul Huq, IIED, discussed the evolution of the concept of adaptation to global climate change, focusing on the connection between adaptation and mitigation. He noted that although adaptation can never reduce impacts to zero, the avoided costs offered by mitigation can, emphasizing that mitigation is a first step towards adaptation. Huq then focused on the often unclear distinction between adaptation to climate change and adaptation to climate variation. Atiq Rahman, BCAS, discussed linkages between CBA and development, noting that CBA simultaneously addresses poverty and risk reduction from climate change. He emphasized the importance of climate justice and reiterated that mitigation is the best form of adaptation. He noted that Bangladeshi farmers have suffered huge losses because of the current financial crisis, and said the unfairness of climate change is compounded by mismanagement of the banking system.

CONCLUDING PLENARY

On Tuesday, 24 February, Dr. Atiq Rahman, BCAS, opened the concluding high-level session with a recap of the workshop's discussions and activities. It was addressed amongst others by Finance Minister of Bangladesh, Abul Maal Abdul Muhit, Planning Minister, Air Vice Marshal (Retd.) AK Khandaker, Mr. Rezaul Karim, Secretary of the Ministry of Environment and Forest and climate change adaptation experts from home and abroad. Dr. Atiq Rahman, in his speech, highlighted the importance of

KEYNOTE ADDRESS

On Sunday evening, 22 February, Nobel Laureate Muhammad Yunus addressed the conference. He said that, while necessary, adaptation is not the answer. He labeled 2008 as a year of crises, pointing to the financial, food, energy and environmental calamities. He suggested that in the aftermath of these crises, a reconstitution or adaptation of the existing system would be unacceptable, and called for the construction of a new one. He argued that the next financial system must be based on an inclusive ideology. He lamented that contemporary economic teachings have convinced much of humanity to see itself as selfish by nature, and called for the mainstreaming of social businesses with altruism at their core. Yunus concluded by illustrating how such businesses are already a reality, having worked to deliver micronutrients to undernourished children and clean water to the impoverished in Bangladesh.



Climate change experts exchanged greetings with Nobel Laureate Dr. Muhammad Yunus during the conference
Source: BCAS

mainstreaming climate change into development policy. Dr. Saleemul Huq, IIED, lauded the exceptional analytical quality and practical relevance of presentations and participation at the workshop.

Terry Cannon, IIED, London challenged everyone to go beyond their comfort zones at the community level and come up with new ideas, and reflected on how the arrival of significant funding might alter CBA work and approaches. He emphasized that, when scaling up interventions, participatory approaches may not always be possible, and said merit and profit-based approaches would need to be utilized. Dr. Ian Burton noted the failure to communicate the adaptation message effectively, and said adaptation was a new entry point for social change. He said three adaptation myths had been overcome, namely that adaptation was local, that it was antithetical to mitigation, and that it was defeatist.

Kristie Ebi, an IPCC author, emphasized on the challenge of transforming CBA into more iterative forms and processes that can be operationalized. She also stressed the importance of consulting modelers to ensure long-term CBA project sustainability. Rezaul Karim, Secretary, Ministry of Environment and Forests, GoB noted that adaptation was Bangladesh's primary concern and emphasized the importance of increased public awareness on this issue.

Abul Maal Abdul Muhith, Minister of Finance, Bangladesh, said the newly-elected government's manifesto had placed the environment high on the agenda. However, he felt that, to date, CBA has not yet received adequate attention in Bangladesh. He said the issues of air pollution and future mass migration require more attention in development planning. Muhith supported the proposal to create a special Bangladeshi envoy for climate change negotiation.

A.K. Khandaker, Minister of Planning of Bangladesh, noted Bangladesh's position on the front lines in the battle against climate change and emphasized the importance of undertaking more work to study the linkages between climate change, growth and poverty. He stressed the importance of recognizing the different methodologies required for both short-term and long-term adaptation planning and projects.

Bringing the workshop to an end, Dr. Atiq Rahman discussed the way forward and pointed to the significant progress made since the previous CBA conference. He emphasized good science is the basis for good policy leading to collective and community actions towards community adaptation. He also suggested that addressing climate risk reduction through advancing CBA and poverty reduction must be undertaken simultaneously. ❁

- Based on a report prepared by IISD from Canada

Climate Conference in Copenhagen and Beyond

Contd from page 2

draft Copenhagen Accord.

The Poor Outcomes – a draft Accord

The Copenhagen Climate Conference has been criticized for its weak process and poor outcomes. The draft accord does not reflect a global aspiration in terms of setting target for GHG reduction and concrete actions by the developed and newly emerging economies to avoid dangerous climate change in the near future. However, the draft accord acknowledged that climate change is one of the greatest challenges of our time and emphasized on strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities. It recognized the scientific view that the increase in global temperature should be kept well below 2 degree celcius on the basis of equity and in the context of sustainable development and urged for long-term cooperative action to combat climate change. The accord also recognized the critical impacts of climate change and the importance of response measures for the poor and vulnerable countries to reduce risk and their vulnerability. But it miserably failed to set targets or allocations for GHG reduction by the annex -1 countries to limit temperature rise. Further, though the draft accord recognized the urgency and importance



Partial view of the participants of a seminar on Climate Change and Development, which was jointly organized by IIED and BCAS in Copenhagen during the COP-15

Source: BCAS

of adaptation measures in poor countries, but failed to commit adequate funding for the vulnerable countries those who are the main victims and are not responsible for the global climate change.

Way Ahead

The Copenhagen Accord remains weak and incomplete. But the process must continue resulting in a “legally binding agreement” in Mexico. We want to see

great leadership in Mexico who will certainly come out of their narrow national and group interests, political and economic interest and must agree to ensure deeper cut in GHG emission as well as commit adequate resources for adaptation and capacity building for the poor and developing countries and thus will safe the mother earth and her people. ❀

- A. Rahman and D. Mallick

Severe Effects of Air Pollution on Child Health in Dhaka City

Contd from page 1

(particularly low income group) with acute and chronic problems are seen everyday. It has been seen that children with respiratory problems particularly “wheezy chest” and acute respiratory infection (ARI) and also childhood malignancies have increased over time.

ARI and wheezy chest in DSH

Children presenting with ARI or wheezy chest in the Medical Outpatient Department (MOPD) were followed-up from 1996 to 2000. Seasonal variation and trends of these condition over time was observed for analysis. The table 1 shows a growing trend of ARI and wheezy problems over the years.

Tabel-1: Percentage of patients attending MOPD of DSH with ARI

Year	Winter November- February		Summer March-June		Monsoon July-October	
	ARI	Wheeze	ARI	Wheeze	ARI	Wheeze
1996	39	21	35	10	25	8
1997	48	25	42	10	32	9
1998	52	33	45	15	35	11
1999	56	42	54	24	41	15
2000	56	45	55	27	45	19

Source: Dhaka Shishu Hospital, 2009

Discussion

Although Dhaka City has been described as having a high level of ambient air pollution, it is not clear if the problem is widespread or localized, as well as whether it is exclusively caused by traffic. Several industries scattered in the residential areas e.g. battery recycling, tannery, aluminums recycling, skin-dyeing etc. are also implicated with air pollution. Smokes from the brick-kilns in the suburb and emission from the construction of high rise building also add pollutants to air. It is claimed that lead concentration in Dhaka air has decreased but there is difference in opinions. The vehicles are not equipped with catalytic converters/diesel filters which remarkably increased in the ambient air. This will have adverse effects on human health affecting our heard respiratory and nervous systems.

The study shows that samples from auto-rickshaw stand had 400% and 745% higher than accepted thresh-hold Volatile Hydrocarbon Compound; levels of aromatic hydrocarbons (known carcinogens) are much higher; level of

toluence is 50-100 times higher than thresh-hold limiting value; and level of benzene in one sample is 500 times higher than found in San Francisco.

The study further says that the reproductive health of women is endangered due to lead poisoning by the battery recycling industries at Kamrangirchar and Waiseghat slums.

Conclusion

Good health and human well being requires the maintenance of life support systems such that clean air and water. The right to breathe clean air and drink clean water is fundamental. Government must act promptly to ensure these basic human rights. We have environmental act and law but we lack enforcement of the act and law. Environmental audit is necessary including air quality monitoring. Civil society, professional groups and conscious citizens must work together to build awareness and put pressure on government so that the enforcement machineries work properly for clean air and better environment in the cities. ❀

- R Mobarak, NZ Khan and M Alauddin

Workshops & Seminars

Seminar on Water and Climate Change

“Living in a safe environment must be considered as a fundamental right of people and should be incorporated in the constitution of Bangladesh in addition to the existing fundamental rights,” said Mr. Saber Hossain Chowdhury MP and chairman of the Parliamentary Committee on Environment while addressing a seminar on Water and Climate Change in celebration of the World Environment Day on 5th June 2009 at the Osmani Memorial Hall, Dhaka.

The seminar was jointly organized by the Department of Environment (DoE) of the government of Bangladesh, Bangladesh Centre for Advanced Studies (BCAS), Water Aid Bangladesh (WAB) and Bangladesh Poribash Andolon (BAPA). Dr. Dwijen Mallick, Research Fellow of BCAS made a keynote speech on Impact of Climate Change on Water Resources in Bangladesh while Mr. AM Kamal Uddin of DoE spoke on the theme of the Day titled World Environment Day – Your Planet needs You! Presentations were also made by WAB and BAPA representatives on the theme. Dr. Atiq Rahman, Executive Director of BCAS, Mr. AHM Regaul Karim, former Secretary of the government of Bangladesh and Dr. Khairul Islam, Head of WAB addressed the seminar amongst other. ❀

Contd from page 3

SaciWATERs Staff Training

the participants were asked to develop teaching module for their institutes based on presentation and field experiences. The draft modules were shared in the closing session, where Dr. Dibya Kanskar, Project Director, Crossing Boundaries, Khondaker Mainuddin, Senior Fellow of BCAS and Mr. Golam Rabbani, Project Focal Point of BCAS were present.

The Key Outcomes of the Training

- Participants got better understanding about impacts of climate change on water resources which would provide them necessary knowledge to teach their students;
- Participants gained practical knowledge about climate change impacts through field visit and exchange with local community; and
- The main outcome of the training was development of teaching modules. ❀

- Mehrab Chowdhury



Dr. Dibya Kanskar Project Director, Crossing Boundaries is seen with the Participants and Resource Persons of the Training Programme

Source: BCAS

Contd from page 3

The Devastating Cyclone Aila hit Bangladesh:

the flood water and many People were missing throughout the country.

The areas and districts were affected by the cyclone Aila in West Bengal of India includes East Midnapur, Howra, Hoogly, Burdwan, South 24 Parganas and Kolkata. In the West Bengal state more than 100000 people were left homeless and 100 embankments were breached by the storm and vast areas of inland were flooded causing huge damage to assets and resources including damage of standing crops on 50000 hectares of agricultural land.

Environmental and Health Situation

The health official in Bangladesh confirmed a deadly out break of diarrhoea with 7000 people being infected. Another out break of water born disease like dysentery and skin disease had infected thousands of people and an estimated 20 million people were at risk of post disaster diseases due to Aila.

The Sunderbans was inundated with 20ft. of water for which it is assumed that dozens of the tigers were feared to had drowned in Aila's storm surge along with thousands of deer and crocodiles.

The affected people in the regions faced

the main problems of hunger, poverty and scarcity of food and safe drinking water. All fresh water sources including ponds and tube wells were badly affected.

Aftermath Situation

Almost 250000 Aila survivors in six unions of Dakope, Koira and Shyamnagar upazillas had remained marooned and had to live in temporary shelters along roadside and embankments for months.

Aila survivors face a longer recovery period than those of cyclone Sidr because of inundation of their houses, agricultural land, roads and embankments for longer period. The embankments continues to collapse at old and new points with every new moon tide and heavy downpours despite continuous repair. The trail of the devastation left the cyclone Aila is still quite visible in most part of the Shyamnagar and Ashashuni upazillas of Satkhira and Koira and Dacoep upazillas of Khulna. Even months after the cyclone the affected families are trying to rebuild their lives against the onslaught of the continuing fresh water crisis and the recurring collapse of the damaged embankments.

Limited Response Measures

Soon after the cyclone storm Aila, a team of Bangladesh Navy was deployed

to the affected regions. The Red Cross also quickly responded to supplying water purification tablets and other relief items. The Deputy Commissioner of Satkhira district allocated ten tones of rice as immediate relief fund for the affected people of the district. The government also allocated TK. 12.3 million and 2500 tones of rice for the affected areas.

ICDDR-B sent an emergency medical team to the south west Bangladesh in response to the diarrhoea out break taking place in the affected areas. An estimated 2000-3000 patients suffered from diarrhoea everyday in the affected areas. The medical expert team of ICDDR-B gave treatment and supplied necessary medicines among the Aila victims in Koyra Dakope, Satkhira and Dumuria.

World Food Programme and World Health Organization supported the government's initiatives. NGOs and civil society organizations also made some efforts in relief and rehabilitation, but the people are still suffering and many of them could not recover from their assets and livelihoods losses. They need long term supports for recovery of their livelihood as well as taking preparedness for disaster risk reduction. ❀

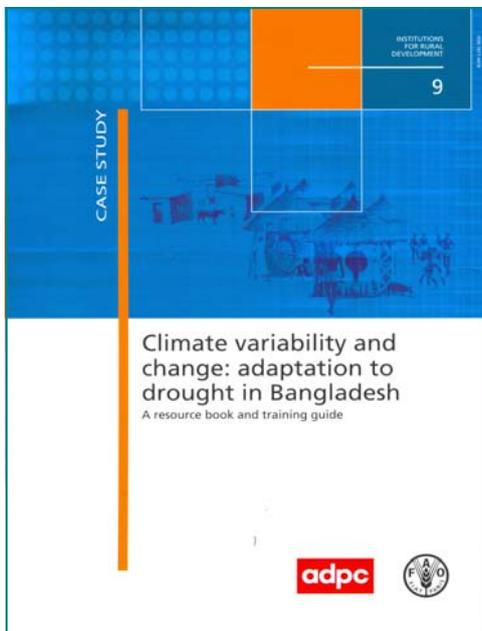
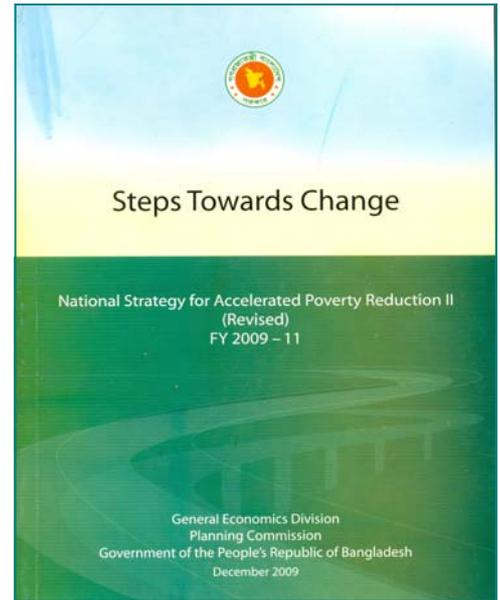
- G. Jilani

Publications

Steps Towards Change: National Strategy for Accelerated Poverty Reduction II

Published by: General Economics Division, Planning Commission of the Government of the People's Republic of Bangladesh
Published in 2009

Step Towards Change- National Strategy for Accelerated Poverty Reduction-II for Fiscal Year 2009-2011 (Known as PRSP-2) has been revised by the Government of the People's Republic of Bangladesh recently. It was revised in the light of government's development vision. The revised PRSP-2 outlines a comprehensive medium-term strategy for poverty reduction through fostering pro-poor economic growth and efficient macro-finance management, creating employment opportunity and enhancing productivity in all sectors with targets of benefiting the extreme poor, women in poverty, landless poor and other vulnerable groups. The PRSP-2 has a key focus on climate change and disaster risk reduction since climate change impacts are obstructing poverty alleviation in Bangladesh. The report has six broad chapters which give development vision of the government of Bangladesh, current poverty situation, a roadmap for pro-poor economic growth and strategy for accelerated poverty reduction.



Climate Variability and Change: Adaptation to Drought in Bangladesh A resource book and training guide

Authors: Selvaraju Ramamasy and Stephan Baas
Published by: ADPC and FAO, Published in 2007

The impacts of increasing climate variability and changes are global concerns, but in Bangladesh, the impacts of climate change are very severe and visible where a large number of poor people are chronically exposed to climate change risks. The Food and Agriculture Organization (FAO) of the United Nations with Asian Disaster Preparedness Center (ADPC) undertook a Livelihood Adaptation to Climate in Variability and Change in drought prone areas of Bangladesh. They have published this resource book based on their research findings which is a very useful guide for training and capacity building for agricultural extension workers and development professionals to deal with climate change impacts as well as promote adaptation in agriculture. The book has six chapters on climate variability and change, drought and its impacts on agriculture, risk assessment and adaptation options to agriculture.

Editorial Board: Dr. Saleemul Huq, Dr. Atiq Rahman, Dr. Dwijen Mallick and Golam Jilani

Produced by: Bangladesh Centre for Advanced Studies (BCAS)

House 10, Road 16A, Gulshan - 1, Dhaka 1212, Bangladesh

Tel : (880-2) 8818124-27, 8852904, 8851237, Fax: (880-2) 8851417

E-mail: info@bcas.net Website: www.bcas.net