



## EDITORIAL

*Climate change has emerged as the greatest threat facing the humankind today. The long arm of climate change is likely to undermine our development goals as well as set of fundamental human rights and basic securities including our right to life, right to food, water, health and livelihoods, right to land, properties and development. Climate change is deteriorating poverty situation and obstructing the achievement of the MDGs. Climate change induced extreme events, tidal inundation, salinity intrusion and onset of sea level rise will displace millions of people from their homes and habitats. These may lead to severe social conflicts in developing countries. The rich countries also could be affected by this in near future.*

*The problem was created and is being aggravated by human beings. We know the causes and grave consequences of climate change. We also know the solutions i.e., rapid reduction of GHG emission by the industrialized and rich countries as well as to explore how to live in a changed situation, which is adaptation. The UNFCCC has assigned us the common but differentiated responsibilities according to our capability. But the developed countries lack action seriously while people in poor countries are trying to adapt with the changing situation. They need resources and technology support from the developed world.*

*Copenhagen conference is a key milestone ahead, where we must prove our sincerity, firmness and leadership to reach a comprehensive and fair agreement for the post 2012 climate regime to save the planet and its people. In the main article, Dr. Atiq Rahman, has expressed his serious concerns and thought about the urgency of a fair deal in COP-15. We are also glad to publish another piece on Road to Copenhagen by Connie Hedegaard, Host of COP-15 for the readers of Clime Asia. This issue also published a number of articles which reflect South Asian positions and demands to the global decision process in Copenhagen.* ❀❀❀

## Seal the Deal in Copenhagen:

### The Most Vulnerable Communities demand Climate Justice

**Dr. Atiq Rahman**, Executive Director of BCAS and  
Chairman of Climate Action Network South Asia (CANSA)

The COP-15 Summit in Copenhagen is aimed at implementing the Bali Action Plan as well as to ensure the credible follow up to the Kyoto Protocol. Many meetings across the world from Heads of Governments, climate change negotiators, civil society groups, activists and the scientific communities are calling for the implementation of the Bali Action Plan. At the Copenhagen Bella Centre the parties to the UNFCCC Conference of Parties and the Meeting of the Parties to the Kyoto Protocol must seal a deal that significantly reduces greenhouse gases and save the most vulnerable from increasing climate risks.

The recent catastrophic and extreme climate events across the world including cyclones in the Bay of Bengal, typhoons and floods in Philippines and China, floods in UK, droughts in Africa and hurricanic storms in the Caribbean and Central America – all seem to confirm the worst predictions of IPCC Fourth Assessment Report. The recent global food crisis and virtual disappearance of the global rice market point towards greater forthcoming food related crises. This is also consistent with the impacts of climate change. The sufferers of all these are mostly the poor

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## The Challenges and Demands of the Climate Vulnerable Countries

The Forum of the Climate Vulnerable Countries organized a high level meeting in Maldives on 9-10 November 2009 in the backdrop of UN Climate Conference in Copenhagen. The Heads of the Governments and the Environment Ministers from Asia, Africa, Caribbean and Pacific regions including Bangladesh, Barbados, Bhutan, Ghana, Kenya, Kiribati, Maldives, Nepal, Rwanda, Tanzania, and Vietnam addressed the meeting and put forward a set of demands from the most vulnerable countries (MVCs). Dr. Saleemul Huq from IIED (International Institute for Environment and Development), UK spoke in the meeting as a climate

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## South Asia needs Greater Cooperation to fight Climate Change

It is already evident and widely accepted that the world is warming and a concerted effort is required in the coming years and decades to stabilize the global temperature rise far below 2°C above pre-industrial levels, and the consequent impacts of climate change on people and the biodiversity upon which they depend would be catastrophic. As a result of global warming, the type, frequency and intensity of extreme events, such as tropical cyclones, floods, droughts, heavy and variable precipitation, sea level rise are already being felt in South Asia; and will continue to intensify. With an area of about 4,29,16,000 sq km that

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**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@can-sa.net; web: www.can-sa.net

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## Bangladesh on the Road to Copenhagen

Connie Hedegaard, Danish Minister for Climate and Energy and the Host of COP-15

THE consequences of climate change are dire. And they are already taking place. Like Bangladesh, many other regions in the world will be hit hard by climate changes. Floods are getting more common, storms are getting tougher, and land droughts are getting longer. The melting of the ice caps in Greenland and the Arctic is picking up pace and sea levels are rising. The habitats of plants and animals are threatened. Food production is under pressure. All over the world the weather is changing.

The respected English economist Lord Nicholas Stern has predicted that millions, perhaps even hundreds of millions, of people could be climate fugitives by 2050, fleeing from flooding, water shortage, famine, and natural disasters.

As if that wasn't enough, climate change is on the verge of a tipping point. If left unbridled, the temperature rise may trigger effects that will increase the pace of changes dramatically and make the damages irreversible. According to Nobel Laureate and head of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations, Dr Pachauri, we have only ten years to turn the boat.

IPCC - which consists of more than 2000 scientists and researchers - has concluded that it is more than 90% certain that human activity has contributed to global warming. The temperature rise is caused by increased amounts of greenhouse gases in the atmosphere, not least CO<sub>2</sub>. The emission of CO<sub>2</sub> is mainly related to

use of fossil fuels such as coal and oil.

Under any circumstance, we need to think smarter in the future: In 2050, we will be 9 billion people living on this earth, and 8 of these 9 billion will be living in areas that we today call the developing world. To me, this makes it obvious that the economic growth simply needs to be a sustainable growth. The resources in the world are scarce. Being as energy efficient as possible and finding new smarter energy solutions are imperatives of the years to come. And it underscores that tackling climate change is also a question of ensuring growth, development and security.

Not every aspect of the challenge of climate change will be overcome once and for all in Copenhagen. But if everything works out, the conference could go down in history as the moment where the leaders of the world united and took a significant step towards stopping the dangerous and destructive climatic changes.

To host such an event is a great honour. In 2009, Denmark takes on this task humbly, and well aware that no matter how hard we try we have no guarantee for success. We will work for an ambitious result, and as hosts will listen and mediate. That is why a conference like "Bangladesh on the road to Copenhagen" in Dhaka is important to us. Together with the Honourable State Minister of Environment and Forests and a group of both Bangladeshi and international key decision makers, we shall discuss the tasks ahead of us.



Ms. Connie Hedegaard, Danish Minister for Climate and Energy

While Bangladesh is one of the most vulnerable countries in the world when it comes to climate related hazards, I truly believe that Bangladesh -- partly for that very reason -- is internationally leading when it comes to know-how on climate adaptation. Bangladesh is truly a very important party in the coming negotiations. I feel convinced that Bangladesh is well on its way to Copenhagen.

**End note:** Ms. Connie Hedegaard visited Bangladesh in February 2009 and she contributed this piece to the Daily Star, a leading National English Daily Newspaper in the country. We take the privilege to reprint the article for the readers of Clime Asia in the backdrop of the UN Climate Conference in Copenhagen. ❀

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## A Call to save the Himalayas

The Nepalese delegation will be heading to COP15 in Copenhagen with a call to "Save the Himalayas" from the adverse impacts of climate change. The majestic Himalayas - the "water towers" of Asia - are the source of Asia's largest rivers and support the lives of billions of people downstream. However, with increasing temperatures, the Himalayan glaciers have begun to retreat at an alarming rate, thus changing river hydrology and landscapes and forming dangerous glacier lakes. Similarly erratic rainfall patterns have started to affect millions of people who depend on nature and natural resources for their livelihoods, and triggered natural disasters. Although Nepal's contribution to GHG emissions is very low, but it is one of the most vulnerable countries.

A status paper aimed to prepare Nepal's position during COP 15 and beyond states that "Annex I Parties must reduce their emission at least by 45

percent by 2020 from their 1990 levels, and developing countries except LDCs should also commit mitigation actions." The report further states that as mountain ecosystems are more vulnerable to climate change, Nepal should lobby to raise this issue strongly and also take the lead in forming an alliance of vulnerable mountain countries. The Nepalese Government, together with other partners, is thus organizing a "Summiteers' Summit to Save the Himalayas" on 11 December 2009 to mark the International Mountain Day. On the occasion, summiteers of Himalayan peaks from around the world will join hands with celebrities and the public to march through the streets of Copenhagen and discuss the challenges faced by the Himalayas. Nepal hopes to attract global attention on the plight of the Himalayas through this and other similar events.

While urging developed nations to drastically reduce emissions, the main issue for Nepal will continue to be adaptation. It will look towards commitments from developed nations for massive increase in immediate and long term support, particularly for most vulnerable countries for implementation of the NAPAs. In this context, it is calling on developed countries to contribute at least 1% of their GDP to adaptation fund and earmark 75% of the adaptation fund for LDCs.

Nepal is also considering declaration of its "intent to follow a Green Growth Path towards Carbon Neutrality by 2030." A concept note on this has been prepared by one of the Ministries and it is being discussed at high level meetings. ❀

Bhushan Tuladhar  
Board Member, CANSA and  
Coordinator, Climate Change Network  
Nepal

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## *Urgent and combined efforts for* **Fighting Climate Change and Poverty**

We are living in an increasingly unequal and unjust world with the highest amount of wealth and highest number of people living in extreme poverty, who suffer from food insecurity, malnutrition, ill health, joblessness and social insecurity. We are also facing the ever biggest environmental and developmental problem – global climate change, which poses serious threat to human security and civilization. Rapid climate change is a man-made catastrophe. Over the last decades there have been growing scientific evidences of human induced climate change.

The various negative impacts of climate change are being felt severely, particularly in the poor and developing countries. Climate change has increased global food insecurity, hunger, poverty and inequity at regional level and within many societies. Climate change displaces people in many affected ecosystems (coastal zone, river basin and drought prone areas) and enhances rural to urban migration in many countries. Thus it increases social conflicts in the developing countries. In his recent statement, Dr. Achim Steiner, UN Under Secretary General has said, “Large number of people are already on move, with millions more are expected to follow as evidence of climate change mounts”.



*Climate change enhanced food insecurity, hunger and malnutrition in Africa and Asia*

*Source: BCAS*

### **Linkages between Climate Change and Poverty**

Climate change is happening faster than the scientists predicted with grave consequences at local and regional scales. Thousands of people die every year as a direct result of climate change and related events. Those who survive climate shocks are often driven deeper into poverty because of the impacts on their livelihoods, health and social security. The challenge to end poverty is bigger than ever in the contexts of climate change.

The poor are the most vulnerable to climate change impacts because of their lack of capacity. The effects of climate change are sometimes direct such as loss of crop yields and food insecurity, water scarcity and growing health risks. The poorest people within the society are critically vulnerable to natural disasters and any severe climatic event that disrupt their lives and livelihoods, because the poor have least capacity to cope with changing

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## **Widening North-South and South-South Divide: WTO-Bad Blood in UNFCCC Negotiations**

**Shakeel R Ahmed, SDPI, Pakistan**

COP15, will it be successful or another Cancun among the Nations. Decisions of COP15 will articulate the future pathways of negotiations. It is hard to say, whether these decisions will enhance the actions or inactions, engagement or disengagement, settlements or regrets. Now some people start talking about the bad blood of WTO is creeping into UNFCCC negotiations. Question is - what this bad blood is and why it is creeping into UNFCCC negotiations? Can we afford this bad blood in UNFCCC?

In WTO negotiations big players delayed the decisions regarding their responsibilities. Commitments made by North were never fulfilled and they adopted innovative ways to

escape from their commitments. They complicated the whole stuff. For example, commitments regarding tariffs, subsidies reduction or elimination and capacity building were intentionally delayed. They played tricks and kept developing countries busy by shifting subsidies from one box to another, complicated formulas for tariff reduction, base year identification etc. North pushed the division in South into groups and sub-groups. Now in WTO, South is divided in many groups and sub-groups. Same dirty game has been started in UNFCCC negotiations.

Annex1 countries are resisting ambitious commitments to reduce the emissions, adaptation fund,

technology transfer and financial assistance. Annex1 countries under the Kyoto Protocol promised to reduce their emissions from 25-40 percent taking 1990 as base year. However, Annex1 countries are not acting according to their commitments. Canada, Australia and USA are among the main culprits. Canada and Australia are neither behaving responsibly nor showing interest in reduction of GHG. USA, even after signing the agreement did not fulfill the commitments.

Base year for cut in emissions is bone of contention between South and North. North is trying to hide behind South.

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## Climate forced Migration: A Massive Threat for Coastal People in Bangladesh

Bangladesh with its over 150 millions of people is highly vulnerable to climate induced hazards, including Sea Level Rise (SLR), cyclone and storm surge, salinity intrusion, drought, temperature and rainfall variations. The geographical location and low lying characteristics of the country makes it more susceptible to climate induced threats. The super cyclone *Sidr* in 2007 killed about 10,000 people and caused huge damage of agriculture, fisheries, forestry, health and water supply and sanitation. A very recent cyclone *Aila* not only killed people but also displaced thousand of coastal people in 2009.

### Projection of Sea Level Rise

The Intergovernmental Panel of Climate Change estimates that climate change would contribute to 0.6 meter or more of global SLR by 2100 (Nicholls et al., 2007). The new estimates show that the global SLR due to climate change would be around one meter or more by 2100. But according to a World Bank report, Bangladesh would face 30 cm to 50 cm SLR in 2030 and 2050 respectively. A recent report shows that there is a trend of increasing sea level rise at Hiron Point near Sundarban by 5.3 mm/

year during 1977 to 2002. Some of the other stations along the Bangladesh coastline also show increasing trend of SLR.

### Climate forced Displacement and Migration

Millions of people of the coastal area of Bangladesh are under threat of climate change and climate variability issues. Many people are already displaced from the coastal zone due to increase of erosion of the river banks and cyclone and storm surge. According to a recent report, Bangladesh would loss about 15 percent of its landmass and displace over 35 millions of people from 19 districts in case of one meter SLR in this century. The following two case studies provide some glimpse about climatic induced migration:

#### Case Study 1: The Migrating People

*On 21 February, 2007 Henry Chu, Staff Writer of the Los Angeles Times reports "Climate Change laps at Bangladesh's shores... rising oceans is already a reality there, and thousands of people could be displaced. Global warming has a taste in this village. It is the taste of salt. Only a few years ago, water from the local pond was fresh and sweet on Samit Biswas's tongue. ...for one meter sea level rise, there will be 35 million people displaced*

*by the middle to end of the 21<sup>st</sup> century. One Mr. Borhan, the leader of a small coastal community in Bangladesh said that "Anybody in my island hardly uses any petrol, gas or coal. We never get on a car or plane. Why should I or my children drown because somebody else wants to have a good life? Where is the justice in this?" (Rahman, 2009; extracted from the article on Implications of Anthropogenic Climate Change on Human Rights)*

#### Case Study 2: Displacement of 95 families from one out of 19 coastal district (Satkhira) due to Cyclone Aila

*Cyclone Aila hit the coastal districts on 25<sup>th</sup> May 2009. It actually affected about 3 millions of people of Bangladesh, India and Myanmar. In Bangladesh, Coastal Island Nijhum Dwip and houses of 25000 residents were completely submerged during this extreme event. It has been reported that 95 out of 497 families of Gabura Union (the lowest administrative unit of the country) under Shyamnagar Upazilla of Satkhira district had to migrate permanently to other places (LEDARS, 2009). Most of them left for the nearest urban areas (Khulna, Jessore) and some of them directly came to Dhaka. Where is the place for the rest in future? Where is the hope? ❀*

*Md. Golam Rabbani, BCAS*

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## Bangladesh at COP 15: Geo-Politics and Negotiation Dynamics

Bangladesh as one of the most vulnerable countries (MVCs) to climate change has been actively taking part with the ongoing round of multilateral negotiations under the Bali Action Plan of the United Nations Framework Convention on Climate Change since the thirteenth Conference of Parties held in December 2007 in Bali, Indonesia. Bangladesh, the showcase of climate change and one of the MVCs, negotiates as part of the Least Developed Countries (LDC) Group, G-77 and China that combines all developing countries including LDCs, Association of Small Island States (AOSIS) and African Countries. Since December 2007, the LDCs, AOSIS and African Countries have been upholding progressive positions with less power, their bigger group G77 and China has been negotiating with a moderate position holding much power against

the developed countries e.g. US, Australia, Japan, Canada, and EU.

In some cases, especially on the progress of negotiations and emission reduction by major emitters like China and India - LDCs, AOSIS and African Countries have implicit support for developed countries but were unable to express their opinions against political allies of G-77 and China. The prime focus of negotiations around 'Shared Vision' includes what should be the so-called 'long term' target for human being in this century while limiting temperature increase, reducing greenhouse gas emissions and concentration of greenhouse gases in the atmosphere and by when the emission would be at peak. Following the position of LDCs and AOSIS Bangladesh has been asking that a climate agreement limits temperature

increases to as far below 1.5 degrees Celsius as possible, while the G77 & China is calling for limiting temperature well below 2 degrees Celsius. To achieve this, Bangladesh in line with AOSIS and LDCs is demanding that global emissions peak by 2015, and fall quickly thereafter to ensure that total global emissions are reduced to at least 85% below 1990 levels by 2050.

Under 'mitigation' pillar, as medium term target for emission reduction, Bangladesh is reiterating the positions of LDCs and AOSIS that developed country parties must reduce their emission 45% by 2020 compared to 1990 levels. The LDCs and AOSIS have called for financial support of 1.5% of developed countries' GDP (which is approximately US\$600 billion

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# CANSA strengthened its Network and Activities

Climate Action Network South Asia (CANSA), in last eight months, has been on the driving seat to pursue “climate change and development” issues both internally within the region and outside the region. It has been a great challenge as well as opportunity for CANSA to continue with a credible platform so that South Asian civil societies could come together and speak out on climate change issues. Triggered by the Climate Change negotiation processes as well as on the basis of the importance of South Asian countries’ effective presence in those negotiations, CANSA envisaged that without creating a credible niche for South Asian civil societies, it would not be possible to make a dent in “Climate Change and development” discourse. In that regard, strategically CANSA has moved very fast in activity mode.

One of the major strategies of CANSA is to outreach civil societies in all South Asian countries. This process has been guided by two broad targets: establishing a strong voice of South Asia in negotiations and contributing to CAN international policy advocacy and lobby work; secondly, targeting SAARC towards a regional cooperation at least from Climate Change perspectives. Country level lead organizations initiated high profile activities and this is leading to having an acknowledged platform on climate change issues.

The network has been involved in numerous activities in this year and few of the following activities reflect the momentum:

- **Review Consultation of CANSA Members on World Bank Climate Change Strategy:** This consultation, as the first stepping-stone for CANSA, was organized to review World Bank’s regional climate change strategy. The recommendations, came out of this consultation, were

disseminated with various regional as well as International bodies.

- **South Asia Capacity Building Workshop:** was organized to bring on board all the new organizations working on climate change. This was an excellent opportunity to showcase the work already happening in each country of South Asia and also to link the ongoing grassroots work with International advocacy activities.
- **CANSA General Assembly:** The member organizations came together to rework on Governance Structure of network to ensure broader ownership on network activities. New CANSA Board was elected with good representation from national member organizations and modest representation from International NGOs. Efforts were made to ensure good mix of new and old individuals in the Board to ensure institutional memory and new ideas.
- **Outreach Consultations at National Level:** CANSA initiated a pro-active approach and conducted outreach activities in the form of meetings in Bangladesh, India, Pakistan, Bhutan, Sri Lanka and Nepal. In Nepal during our Capacity Building sessions, we achieved the objective of outreach. Outreach Meeting in Maldives will be scheduled next year.
- **Marking 100 Days to Copenhagen:** CANSA Organized an ICE Stunt on 28th August to mark the 100 days countdown to Copenhagen in New Delhi. The event was covered very well by Media. The stunt was concluded by a Press Conference by India CANSA Members.
- **NGOs Consultations on addressing Climate Change from SAARC-an intergovernmental body for regional cooperation:** The NGOs were mobilized in parallel to South Asian

Environment Ministers Meeting in Delhi and discussed the Bali Action Plan in context of South Asian priorities. This was first opportunity when South Asian Stakeholders came together to discuss regional climate change issues.

- **Negotiations of Climate Change:** CANSA Members are following negotiations in all UNFCCC talks organized in Bonn, Bangkok and Barcelona. The colleagues acted as interface between country negotiators and International NGOs.

## Future Plan:

- Contributing South Asian priorities in International policy making processes and thus during COP 15 and its related follow-up, CANSA aims to raise South Asian voice in all activities ranging from policy advocacy to popular mobilization. A support base will be created towards South Asian governments and civil societies to analyze immediately the day to day out come and communicating this to wider audience including key South Asian negotiators.
- Review of Copenhagen COP in the context of South Asian priorities and positions: CANSA will meet immediately after COP 15 to assess the outcomes of International Negotiations in the form of Copenhagen Deal. the review is to ensure that Climate Change is taken as a priority next year at all levels within South Asia and NGOs are well prepared for SAARC Summit next year April in Thimpu, Bhutan.
- COP15 Debriefing sessions at Country level in January 2010: Country CANSA leads have been and will continue organising debriefing sessions in respective countries to ensure that more new colleagues understand the complex issues and use the information in their day to day organizational work. This also ensures wider engagement.
- This year CANSA has been working primarily on International agenda and would work extensively early next year to identify and frame its regional agenda that should feed in its International activities. Thus series of background papers on key issues will be the priority for network.
- Regional Consultation on Climate Change in March 2010: CANSA in collaboration with Oxfam will organize a regional consultation before SAARC summit. The objective of this consultation is to highlight the importance and urgency of regional cooperation. The network will follow up SAARC outcomes very closely and will plan its next strategy. ❁

Palash Kanti Das and Jahedul Huq



Participants of the CANSA Capacity Building Workshop held in Kathmandu, Nepal in July 2009

Source: BCAS

# Seal the Deal in

## The Most Vulnerable Communities

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communities across the world. A recent FAO report suggests that currently one billion people go hungry every day. Three factors, responsible for this, are market failure, poor global governance and impacts of climate change. In fact, climate change itself represents one of the greatest economic and market failures in the history and is also a failure of global governance.

### **Annex-1 must act now**

The industrialized countries must take the responsibility for financing the global regime of the GHG reduction, adaptation and providing technologies. Any serious efforts to raise a significant global fund is often responded by a knee-jerk reaction that Industrialized Governments have no funds. But recent history testifies otherwise.

When the recent financial crises became evident due to callous, irresponsible mismanagement of a number of sectors including banking, insurance, housing etc. Trillions of dollars flowed as subsidies and incentives as economic stimulus. Huge funds were made available in the USA, European countries, Japan, China and others to save these financial institutions who mostly supported the rich and demonstrated irresponsible financial modicum and poor management. So when rich suffer, funds are found but when the poor suffer and are bound to continue to suffer due to impacts of climate change, funds are not available.

It is a question of urgency, priority and decision. Copenhagen must see huge funds on the table and this deal must also be sealed.

### **Climate Victims**

The victims of today and tomorrow are the poor across the world, particularly in the Least Developed Countries (LDCs). The leaders of the LDCs and Small Islands Developing States (SIDS) and poor countries of Africa are amplifying their voices through the formation of an informal emerging group of the most vulnerable countries (MVC). Their communities are already suffering from sea level rise, food shortages, human displacement and increasing threats of social conflicts.

### **Greatest Strategic Threat**

Climate Change is rapidly emerging as the greatest strategic threat. Over three hundred million people are likely to be displaced, who are mostly from the developing world. The industrialized countries, who are mostly responsible for the forthcoming climate change catastrophe must bear the responsibility of rehabilitating these displaced people in the geographical areas of their own respective countries. This mitigation challenge is going to be even greater than some of the climate related extreme events. So, time is running out fast for completing a “just” and “legally binding” deal at Copenhagen. This agreement must ensure:

- a) Rapid reduction of GHG by the industrialized countries within shortest the possible time;
- b) A massive (at least one hundred billion dollars annually) fund where more than 50% should be allocated for adaptation, particularly for most vulnerable communities and poor countries;

- c) Provision of required technologies as free or at a concessional rate both for mitigation and adaptation from industrialized countries to developing countries; and
- d) Start the process for managing massive climate induced migration.

### **Limit to Adaptation**

Adaptation is a need for today, but can not be a long term solution of climate change. The imperative of GHG emission forces many communities to adapt now in their habitats; continue agricultural productivity, infrastructural damage management, public health protection, disaster risk reduction and addressing climate induced migration. But adaptation has limits. When ecosystems or human societies collapse, the adaptation potential has come to an end. Hence, we must build resilience in human and natural systems to reduce the risk and vulnerability from of climate change impacts through reducing the GHG emission drastically and providing risk reduction strategies and actions.

### **Climate Politics : Poor US Leadership**

The United States of America was the greatest stumbling block towards achieving the Kyoto Protocol objectives in relation to GHG reduction. The change in the USA administration and the emergence of President Barak Obama has indicated some progress. But the legislative requirements of the decision making process of USA have blocked the global progress of a climate change deal. The USA internal politics has been externalized as a retarding force in the global decision making. The USA's recent offer of a 17% reduction of GHG by 2020 from a baseline of 2005 does not deceive the world. This is equivalent to less than 5% reduction from 1990 level. This basically means that USA intends to achieve the Kyoto target of 5% reduction of 2012 by 2025. This is a great and grave injustice that US has done to planetary decision making process and has lost credibility significantly of being a serious world leader.

### **Europe : Early Efforts**

European Union committed to reduce 20% by 2020 from the baseline of 1990, which also falls far short of the IPCC requirements as the impacts of climate change are happening so fast that we are reaching a tipping point earlier in the near future. China, the



Drought and frequent crop failure in Africa force people to migrate

# Copenhagen: demand Climate Justice

greatest future emitter (though currently a global average per capita emitter) has declared its own carbon-development index, which will need carbon reduction even further and decarbonize its development process.

## **Emerging Economics, LDCs and MVCs**

The very recent meeting of the four major developing country emitters (namely, China, India, Brazil and South Africa) was right to call on industrial countries to reduce GHG, but they have also to demonstrate their sincerity and commitment for GHG reduction for a safer world.

The LDCs and most vulnerable countries (MVCs) should also explore low-carbon sustainable development paths and enhance their adaptive capacities to reduce climate risks and vulnerabilities. For this, a major funding drive must be one of the key objectives of the Copenhagen deal. The 10 billion dollars discussion in the Port of Spain in the Commonwealth Summit and the earlier announcement of hundred billion dollar per year up to 2020 by the UK Prime Minister Gordon Brown are merely numbers, which must be realized in the Copenhagen deal. Also preferential access to this fund by the most vulnerable countries and poor communities must be ascertained. Fund management has a frustrating history for poor countries in their recent experience and hence, this must be managed independently, efficiently with urgency and in a proper manner under the guidance of the UNFCCC.

## **Both Poor and Rich must adapt**

The emerging experiences from adaptation practices and country based actions show that adaptation will be context specific but its learnings will have generic value. Pro-poor and climate risk-reducing practices must be the focus of adaptation investment. The achievements of poverty eradication efforts must be protected from the cruel hands of climate change impacts. The threats faced by the farmers of today from the climate change impacts due to erratic rainfall, enhanced flooding, droughts and cyclones make their accumulated knowledge from previous generations sometimes non-functional.

## **New Knowledge Continuum**

A new knowledge continuum must emerge which will connect local experiential knowledge with the global scientific knowledge of climate change. The rapidity with which climate change impacts are being



*Drip irrigation practice has been introduced in drought prone areas in Bangladesh as an adaptation option*  
Source : BCAS

manifested makes this new knowledge accumulation urgent and challenging. Hence there is a need for collaborative and participatory research where multidisciplinary scientific community will work with the vulnerable community and innovate appropriate responses, technologies and processes.

## **The Poorest pay the highest Costs**

The poorest are paying the highest costs with their lives, livelihood and health risks. The developing countries are acting and keenly waiting for resources to mainstream climate change into their development process. A lot needs to be done in this area in each country. Climate change will affect almost all aspects of their development process. Hence incorporation of climate change into development is not a choice, but an obligation for their survival, particularly for the poor of each country, particularly in LDCs, SIDS and the poor countries of Africa.

## **Mitigation first and Adaptation too**

The industrialized countries must lead by examples of rapid and drastic mitigation, resources contribution, technology transfer and capacity building of the poor and vulnerable countries. Any delay in doing so will cost them heavily in the near future. In Copenhagen the parties must decide on a fair and just deal. The risks of failure will be costly not only for the poor, but also for today's rich who face unprecedented instabilities in one global system. Climate change is a global phenomena and Copenhagen must succeed in a global deal including all states with no exception or renegades.

## **Copenhagen- a Key Milestone**

Copenhagen Summit will come and go. It is a milestone. Success will

depend on the sagacity, sincerity and seriousness of our global leaders. Days of hiding behind, or sitting on the fence is over. As Ban Ki-moon, UN Secretary General recently said "We have read the science. Global warming is real, and we are a prime cause. .... We must set an agenda – create a roadmap to the future, coupled with a timeline that produces a deal by 2009. In this, it helps to have a vision of how the future might look if we succeed".

Such milestones have come and gone in Rio De Janeiro in 1992, at Kyoto in 1997, at Johannesburg in 2002 and in Bali 2007. Aspirations were created and frustrated time and again. A few rich countries are beneficiaries of the GHG emission. The victims of GHG accumulation and consequent impacts are becoming more visible. Frustration, because of indecision and inaction by the USA and inadequate actions by the other industrialized (Annexed) countries, is increasing. If this frustration is not contained, the global community will face severe conflicts and greater instability that is unprecedented in the recent human history.

## **Get a Deal or face Destabilization**

The destabilization will not spare the rich. So we must seal a fair and just deal in Copenhagen. The basis for this is a "climate justice framework". Continued, urgent and sustainable efforts, rapid GHG reduction, significant fund and technologies transfer from developed to developing countries and protection of the most vulnerable are the essential criteria of a fair climate deal. The history will judge the success of Copenhagen summit. Either we all swim, or sink together. Copenhagen deal is not only a challenge, it is an opportunity also. All the parties must rise to take this opportunity for a safe and fairer world. ❀

## The Challenges and Demands of ...

change expert. Dr. Saleemul Huq is an Editorial Advisor of CANSA. In his speech, Dr. Huq emphasized on the vulnerability and enormous challenges of the MVCs to address both impacts of climate change as well as to continue development. With reference from the IPCC 4th Assessment Report, he listed four groups of most vulnerable countries, which include: countries in polar region, small islands developing states, African poor developing nations and countries in Asian mega deltas in Ganges and Mekong basins.

Dr. Huq called for bringing the leaders from all major groups of vulnerable countries to bring their concerns and voices to the international arena. He also hoped that the leaders of the most vulnerable countries would put forward their demands for a fair outcome in Copenhagen for taking urgent actions both on mitigation as well as adaptation. The following are the highlights of the Declaration of the Climate Vulnerable Forum.

*We, Heads of State, Ministers and representatives of Government from Africa, Asia, Caribbean and the Pacific, representing some of the countries most vulnerable to the adverse impacts of climate change:*

*Alarmed at the pace of change to our Earth caused by human-induced climate change, including accelerating melting and loss of ice from Antarctica, Greenland, the Himalayas, Mount Kilimanjaro and Mount Kenya, acidification of the world's oceans due to rising CO<sub>2</sub> concentrations, increasingly intense tropical cyclones, more damaging and intense drought and floods, including Glacial Lakes Outburst Floods, in many regions and higher levels of sea-level rise than estimated just a few years ago, risks changing the face of the planet and threatening coastal cities, low lying areas, mountainous regions and vulnerable countries the world over;*

*Asserting that anthropogenic climate change poses an existential threat to our nations, our cultures and to our way of life, and thereby undermines the internationally-protected human rights of our people – including the right to sustainable development, right to life, the right to self-determination and the right of a people not to be deprived of its own means of subsistence, as well as principles of international law that oblige all states to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction;*

*Conscious that while our nations lie at the climate front-line and will disproportionately feel the impacts of global warming, in the end climate change will threaten the sustainable development and, ultimately, the survival of all States and peoples—the fate of the most vulnerable will be the fate of the world; and convinced that our acute vulnerability not only allows us to perceive the threat of climate change more clearly than others, but also provides us with the clarity of vision to understand the steps that must be taken to protect the Earth's climate system and the determination to see the job done;*

*Recalling that the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change;*

*Underlining the urgency of concluding an ambitious, fair and effective global legal agreement at COP15 in Copenhagen;*

*Gravely concerned at reports of a downgrading of expectations for COP15 and calling therefore for a redoubling of efforts – including through the attendance in Copenhagen, at Head of State- or Head of Government-level, of all States, and especially of major industrialised nations and all major emerging economies;*

*Emphasising that developed countries bear the overwhelming historic responsibility for causing anthropogenic climate change and must therefore take the lead in responding to the challenge across all four building blocks of an enhanced international climate change regime – namely mitigation, adaption, technology and finance—that builds-upon the UNFCCC and its Kyoto Protocol;*

*Taking account of their historic responsibility as well as the need to secure climate justice for the world's poorest and most vulnerable communities, developed countries must commit to legally-binding and ambitious emission reduction targets consistent with limiting global average surface warming to well below 1.5 degrees Celsius above pre-industrial levels and long-term stabilisation of atmospheric greenhouse gas concentrations at well below 350ppm, and that to achieve this the agreement at COP15 UNFCCC should include a goal of peaking global emissions by 2015 with a sharp decline thereafter towards a global reduction of 85% by 2050;*

*Emphasising that protecting the climate system is the common responsibility of all humankind, that the Earth's climate system has a limited capacity to absorb greenhouse gas emissions, and that action is required by all countries on the basis of common*

*but differentiated responsibilities, respective capabilities, and the precautionary principle;*

*Underscoring that maintaining carbon-intensive modes of production established in 19<sup>th</sup> Century Europe will incur enormous social and economic cost in the medium- and long-term, whereas shifting to a carbon-neutral future based on green technology and low-carbon energy creates wealth, jobs, new economic opportunities, and local co-benefits in terms of health and reduced pollution;*

*Convinced that those countries which take the lead in embracing this future will be the winners of the 21st Century;*

*Expressing our determination, as vulnerable States, to demonstrate leadership on climate change by leading the world into the low-carbon and ultimately carbon-neutral economy, but recognising that we cannot achieve this goal on our own;*

*Now therefore,*

*Declare our determination, as low-emitting countries that are acutely vulnerable to climate change, to show moral leadership on climate change through actions as well as words, by acting now to commence greening our economies as our contribution towards achieving carbon neutrality,*

*Declare that, irrespective of the effectiveness of mitigation actions, significant adverse changes in the global climate are now inevitable and are already taking place, and thus Parties to the UNFCCC must also include, in the COP15 outcome document, an ambitious agreement on adaptation finance which should prioritise the needs of the most vulnerable countries, especially in the near-term,*

*Call upon developed countries to provide public money amounting to at least 1.5% of their gross domestic product, in addition to innovative sources of finance, annually by 2015 to assist developing countries make their transition to a climate resilient low-carbon economy. This grant-based finance must be predictable, sustainable, transparent, new and additional – on top of developed country commitments to deliver 0.7% of their Gross National Income as Overseas Development Assistance,*

*Underline that financing for mitigation and adaptation, under the authority of the Conference of Parties to the UNFCCC, should be on the basis of direct access to implement country-led national Low-Carbon Development Plans and Climate Resilient Development Strategies, and the process to allocate and deliver the finance must be accessible, transparent, consensual, accountable, results-orientated and should prioritize the needs of the most vulnerable countries,*

*Further underline that fundamental principles and issues relating to the survival of peoples and preservation of sovereign rights are non-negotiable, and should be embedded in the Copenhagen legal agreement. ☀*

accounts for a population of about 1.3 billion spread in seven countries - Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, the region is extremely vulnerable to increases in the frequency and intensity of heat waves and heavy precipitation events. These changes are already having major impacts on the economic performance of South Asian countries and on the lives and livelihoods of millions of poor people. The indicators of climate change impacts are visible in the region as frequent and intense disasters in last few years that have caused severe damages to agrarian economy of countries, depleting its natural resources, increasing pressure on infrastructure and mounting pressure on already vulnerable livelihoods of marginal and small entrepreneurs.

### **'Endangered' Regional Development**

In spite of all the pressures, for the past decade, South Asia has been the second fastest growing region in the world, after East Asia with economic growth averaged over 5 percent. However, the poorest segments have not tasted the fruits of economic growth, and it is a point to be noted that this region is home to 40 percent of the world's poor, most of who live in rural areas. Despite considerable progress, the region continues to face fundamental constraints on sustainable development including inequitable economic growth; persistently low levels of human development; low status for women; feudal social structures that are reflected in political power relationships; the absence or weakness of local government and the exclusion of most of the population from decision making and access to basic services; unabated environmental degradation; and failure of institutions to sufficiently integrate environmental and social development considerations into economic policy objectives.

As a result of climate change, the impacts could hamper the achievement of many of the Millennium Development Goals (MDGs), including those on poverty eradication, child mortality, malaria, and other diseases, and environmental sustainability; and much of this damage would come in the form of severe economic shocks. In addition, the impacts of climate change will exacerbate existing social and environmental problems and lead to migration within and across national borders. Despite progress since the early 1990s on economic reforms and

developments in environmental institutions, countries in the region will again be plagued by huge problems that will increase the vulnerability of poor people by manifold towards any unprecedented disasters bringing cumulative impacts in terms of livelihoods, food, income and energy.

### **Regional Integrated Action on Climate Change**

Actions towards climate change are therefore no longer secondary and long-term response options only to be used as the last resort. In the region, countries like Bangladesh, Bhutan, Nepal and Maldives are already and need to do more on adopting adaptation induce development policies. Adaptation is now prevalent and for those communities already vulnerable to the impacts of present day climate hazards, an urgent imperative. Successful adaptation must be accomplished through actions that target and reduce the vulnerabilities poor people now face. This approach calls for a convergence of four distinct communities who have long been tackling the issue of vulnerability reduction through their respective activities—disaster risk reduction, and climate change, environmental management, and poverty reduction. Bringing these communities together and offering a common platform—and a shared vocabulary—from which to develop an integrated approach to climate change adaptation can provide an opportunity to revisit some of the intractable problems of environment and development. The starting point for this convergence is a common understanding of the concepts of adaptation, vulnerability, resilience, security, poverty and livelihoods, as well as an understanding of the gaps in current adaptation approaches. Taken together, they indicate a need—and an opening—for adaptation measures based on the livelihood activities of poor and vulnerable communities. This places the goal of poverty reduction at the centre of adaptation, as the capabilities and assets that comprise people's livelihoods often shape poverty as well as the ability to move out of poverty.

Similarly, the big countries like India, Sri Lanka and Pakistan while scaling up their actions on adaptation also need to add mitigation in their climate agenda. The action on mitigation will bring long term opportunities with

reduced dependence on fossil fuels. It is in interest of all to ensure a uniform economic growth and bridge the rich-poor divide. The self dependence on energy production will start a new era in the development of region and will lead towards regional cooperation.

### **Geo-politically sensitive South Asia needs greater Cooperation**

The political structure of a country affects the environment of the region to a great extent. It has both positive and negative impacts. People's participation in the political process ensures that they are involved in decision-making and the judiciary. It provides the people with access to resources and the responsibility of ensuring their protection. The development of political and governance institutions in the region have been slow, largely owing to an informal society which depends on kinship and patronage. This disregard of institutions has made social and economic transitions unpredictable, thus leading to mis-governance even in democracies.

The South Asian nations have seen numerous water sharing disputes: between India and Pakistan over the tributaries of the Indus, between India and Bangladesh over the release of water of the Ganga through the Farakka Barrage, and between India and Nepal over the Gandak. With no formal or shortsighted agreements governing these issues, sporadic tensions over the release and sharing of water had been common. Recent years, however, have seen some softening of stands by the governments concerned.

South Asian countries have to go a long way in incorporating a model system of governance. The requirement is that of an enlightened democracy where the powers understand their obligation as true representatives of the people and not their masters, and in turn, the people realise their duties and responsibilities. To make their voices heard in the community of nations, the South Asian countries have to ensure cooperation in all aspects of governance for addressing climate change at all levels. ❁

*Sanjay Vashist, CANSA Director of Programmes*

*and  
Palash Kanti Das, Board Member of CANSA*

## Fighting Climate Change and Poverty

situation and reduce their risks. Again, poverty sometimes increases the level of vulnerability, because the poor often live in places and have livelihoods that are susceptible to natural disasters, economic crisis and it limits their ability to cope with or recover the shocks.

### ***Food Insecurity of the Poor***

Climate change poses serious threat to agricultural productivity, particularly in developing countries. Both climate variability and the climatic extreme events like drought, flood, cyclone etc., are affecting agricultural productivity and food security in Asian and African countries. Global wheat production has decreased sharply in the recent years because of increasing maize cultivation destined for bio-fuel production for the rich countries. The poor and marginal sections of people are mainly the victims of this situation. In this context, Prof. Amartya Sen observed that the stomachs of poor are competing with the fuel tanks of the rich.

After the recent cyclone *Aila* and the associated tidal surge hit Bangladesh and West Bengal in India in May in 2009, thousands of people are living on the broken embankments without much food, water, good shelters and in various social insecurities in Bangladesh even after six months of the cyclone. Poor became extremely poor and many non-poor have thrown into poverty and food insecurity by the destruction of *Aila*.

### ***Human Displacement and Social Conflicts***

The possible sea level rise will affect low lying and coastal countries. Millions of people would be displaced

from their homes, occupations and livelihood and many would be thrown into poverty. It will enhance rural to urban migration and generate social conflicts in near future. International migration policies and programmes are to be reformulated in the light of influx of climate refugees particularly from the developing countries. Assistance should be provided to enable people to stay within their own community and culture before people are forced to move. Local and regional scale rehabilitation and resettlement are to be advanced before the on set of sea level rise to a greater extent. The *Aila* affected displaced-people need greater rehabilitation and resettlement supports in Bangladesh.

### **The key Challenges and urgent Action**

The key challenges are enormous which include: a) to stop climate change through urgent mitigation measures and create effective framework for post 2012 commitment with greater participation of both developed and developing countries to halt dangerous climate change; b) explore how to live in a warmer climate which is now unavoidable; and c) promote low carbon economy and life style of rich who do the most harm through luxuries and over consumption. Addressing climate change, eradicating poverty and promoting economic growth and political stability all demand the same solutions.

We hope the upcoming UN Conference on climate change in Copenhagen in December will come up with a comprehensive legally binding agreement supported by

political will of the nation states, particularly of the developed countries including the USA. Besides mitigation, the conference may also take strong decisions for adaptation measures and funding for the poor countries, food security, poverty reduction and addressing climate refugees. These are all inter-related and deserve collective efforts to fight together. Hence we strongly demand:

- Urgent mitigation action with 90% reduction target by 2050 by developed countries and wider participation of emerging economies in post 2012 climate regime;
- Making climate change adaptation a top agenda in the COP/MOP
- Adaptation fund to be raised for actions on ground to protect poor and their livelihoods;
- Food assistance for already climate vulnerable communities in developing world particularly in Africa and Asia;
- Poverty Reduction Strategies in developing countries must take into consideration climate impacts and take measures to protect the poor and their livelihoods;
- DRR strategies are to be improved considering the intensity and frequency of climatic extremes;
- International migration policies and programmes are to be reformulated in the light of influx of climate refugees, particularly from the developing world; and
- Building greater solidarity among all actors and raising voice of the vulnerable communities against global climate injustice. ☼

*Dr. Dwijen Mallick*

## Bangladesh at COP 15:

annually), in addition to the current level of Official Development Assistance (ODA). On technology development and transfer, Bangladesh called for an IPR (Intellectual Property Rights) waiver for MVCs for the technologies essential of adaptation and mitigation. Although it was opposed by many countries while tabled few months back, now a days a good number of countries have been supporting the demand. Bangladesh should continue its persuasion in coming days.

Considering the above-mentioned situation, non-government actors and

civil society from Bangladesh are asking the Government of Bangladesh to-

- Develop a clear position paper to guide its delegation;
- Identify and initiate political dialogue among MVCs active within G77 & China and influence technical negotiations in and outside G77 & China;
- Influence LDCs and AOSIS for holding joint public events during negotiations to disseminate the priorities of the MVCs;
- Influence LDCs and AOSIS for placing their demands explicitly in

the G77 & China meeting as well as in the plenary meetings of AWG-LCA and AWG-KP;

- Focus on global media and enhance dialogue with global level non-government actors; and
- Finally, besides negotiations, engage its members of delegation with huge number of side events in Copenhagen to mobilize peoples' opinions in favor of Bangladesh and MVCs. ☼

*Ziaul Hoque Mukta, Member Secretary, Campaign for Sustainable Rural Livelihood, Bangladesh. The write up dose not reflect the opinion of the organization he works with.*

## Workshop - Seminar

The Third International Conference on **Community Based Adaptation (CBA)** to Climate Change was held in Dhaka, Bangladesh from 18 February to 24 February 2009. The event was organized by Bangladesh Centre for Advanced Studies (BCAS), International Institute for Environment and Development (IIED), London and the RING, an Alliance policy research organization. The aim of the conference was to share the latest knowledge, development in adaptation planning and practices at different levels and disseminate knowledge among the key stakeholders and actors with a view to integrating adaptation into national and international development strategies and programmes. Over 150 participants representing governments, UN agencies, research and policy institutes, NGOs, media and development organizations participated in the conference and field visit in five climate affected zones in Bangladesh. ❀



*Dr. Atiq Rahman, Executive Director of BCAS is addressing the inaugural session of the CBA Conference in Dhaka. Dr. Sleemul Huq, Dr. Ian Burton and Mozaharul Alam are also seen*  
Source: BCAS

### Contd. from page 3 **Widening North-South and South-South Divide:**

Developed parties are trying to put commitments on South for reduction in GHG. Japan's Prime Minister recently first announced that Japan will remain committed to 25 percent reduction of GHG emissions by 2020. Japan will take 1990 as base year for cuts in GHG emission. Later on Japan tried to tie its reduction commitments with major emerging economies.

Bali Action Plan puts direct responsibility on developed parties for financial assistance and technology transfer to developing, least developed and small island countries to adapt and mitigate climate change. South showed their interest and commitment to mitigate, if developed parties fulfill their commitments and promises. Bali Action Plan was adapted with hope that developed parties will honor their commitment and will provide required financial assistance. However, developed parties never provided required financial help for mitigation. Technology transfer remained contentious issue. Developed parties are bringing Intellectual property Right in debate on technology transfer. IPRs are hindering debate on technology transfer. Developed parties also promised to build capacity of developing, least developed and small island countries to adapt and mitigate.

Developed parties are playing tactics to avoid or delay their

commitments. Amount of financial help needed by developing parties is still under discussion. Developed parties ask South to take voluntary steps to mitigate and adapt without conditional to financial help and technology transfer from developed parties.

South is in negotiations to get a fair deal from UNFCCC negotiations. South is advocating very strongly to come up with an acceptable, fair and concrete deal. From Bali Action Plan, South is asking developed parties to help them on voluntary mitigation and adaption programmes. South also gained some success at Bali as a group and pushed North for some commitments. It was the pressure from South which compelled North to commit some thing.

However, now there seems that South is on disintegration path and new groups and sub-groups are emerging. Grouping and sub-grouping will damage the cause of South in future. There is no way to deny special and different needs of countries, which are more important to every party. Some countries needs more help as compare to other countries. Small island countries are at the danger of extinction. Climate change in least developed and developing countries will shrink the livelihood opportunities, which will enhance the incident of poverty. Extent of these impacts of climate change is unequal for individual countries.

However, disintegration will not help the cause of South. There is strong need to look for synergies among the needs of all parties and come up with a single document and demand for South.

In World Trade Organization's negotiation, South was divided into groups and sub-groups which weaken the cause of South. Every country and group started to emphasize for the fulfillment of its demands or submission. From their negotiations de-tracked and resulted in failure of Cancun and emergence of Regional and Bilateral Trade Agreements. Doha Development Agenda is still under discussion and parties to WTO are waiting for conclusion of Doha Framework Agenda.

Now same bad blood is creeping into UNFCCC negotiations. There is clear division in G77 +China group. There is emergence of new groups and sub-groups. Regional integration and specific needs of countries and region should be built in common and consented document and demand. South should avoid this grouping and remain stick to G77+China group. This will help South to have a fair, equitable and acceptable deal at Copenhagen.

Positive thing about negotiation is that still South and North are hoping for a concrete and fairer outcome from COP15 with legally binding agreement supported by political will of the North and the key players of the South. ❀

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## Books & Resources

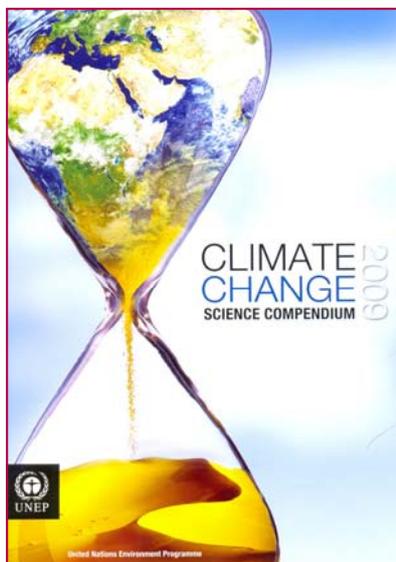
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### Climate Change Science Compendium 2009

**Edited by:** Catherine P. McMullen

**Associate Editor:** Jason Jabbour

**Published by:** United Nations Environment Programme, 2009.



This Climate Change Science Compendium presents some of the issues and ideas that have emerged since the close of research for consideration by the IPCC Fourth Assessment Report over three

years ago. Focusing on work that brings new insights to aspects of Earth System Science at various scales, it discusses findings from the International Polar Year and from new technologies that enhance our abilities to see the Earth's Systems in new ways. Evidence of unexpected rates of change in Arctic sea-ice extent, ocean acidification, and species loss emphasizes the urgency needed to develop management strategies for addressing climate change.

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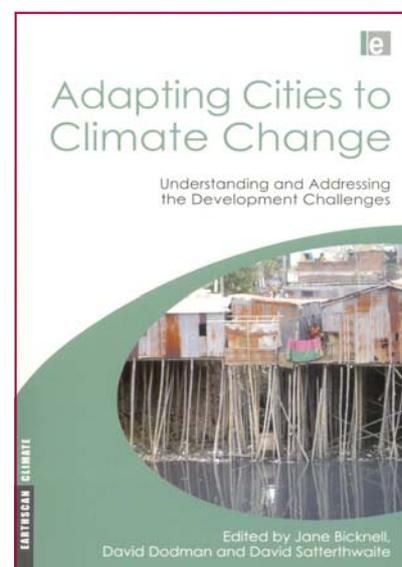
### Adapting Cities to Climate Change—Understanding and Addressing the Development Challenges

**Edited by:** Jane Bicknell, David Dodman and David Satterthwaite, IIED, London

**Published by:** Earthscan in the UK and USA in 2009

This volume bring together, for the first time, a wide-ranging and detailed body of information identifying and assessing risk, vulnerability and adaptation to climate change in urban centres in low- and middle-income countries.

Framed by an overview of the main possibilities and constraints for adaptation, the contributors examine the implications of climate change for cities in Africa, Asia and Latin America, and propose innovative agendas for adaptation. The book should be of interest to policy makers, practitioners and academic who face the challenge of addressing climate change vulnerability and adaptation in urban centres throughout the global South.



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**Editors:** Dwijen Mallick, Golam Rabbani, Sanjay Vashist, Md. Jahedul Huq and Sarder Shafiqul Alam

**Editorial Advisers:** Atiq Rahman (BCAS), Saleemul Huq (IIED, UK), Ashok Khosla (Development Alternatives, India), R. K. Pachauri (TERI, India), Jyoti K. Parikh (IGIDR, India), Shaheen Rafi Khan (SDPI, Pakistan), Mohan Munasinghe (MIND, Sri Lanka), Bhushan Tuladhar (CEN, Nepal), Anwara Begum (CNASA Board Member), Ziaul Hoque Mukta (CSRL, Bangladesh) and Lam Dorji (RSPN, Bhutan)

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