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Family home floating on the Navotas river, Manila, Philippines

Leadership in urban areas

Celine d’Cruz describes how leadership from the Philippines Homeless People’s Federation is helping the urban poor cope with climatic disasters

The lack of affordable land and housing options for the poor in most cities in the Philippines means that between one third and one half of the urban population live in informal illegal settlements. These lack access to toilets, water supplies and electricity, and the danger of eviction is constant. Without secure access to land and safe housing, communities place more and more of their scant resources into just surviving. They are caught in a hopeless cycle of squatting and eviction, which leads to further impoverishment. Such communities are particularly vulnerable to disasters such as Typhoon Dorian, which struck at the end of 2006.

The Philippines Homeless People’s Federation brings together poor community organizations in cities across the Philippines, all engaged with finding solutions to problems they face with secure land, housing, income, infrastructure, health, welfare and

access to affordable credit. The Federation has a number of new leaders who are focused, confident and support the communities with elegance and sensitivity. This article describes how these leaders, and the activities they are involved with, are helping the urban poor recover from Typhoon Dorian in the Bicol Region and reduce their vulnerability to other similar disasters in the future.

MAIN POINTS

- **The author describes** how federations of the urban poor in the Philippines are helping families affected by floods rebuild their lives after Typhoon Dorian.
- **Helping poor people** save, acquire land and build homes are

key components of this work.

- **Committed local leadership** has secured community trust, established good working relations with local government and explored long-term sustainable solutions.

Mayon Volcano and Typhoon Dorian

Bicol is one of 17 regions in the Philippines. It occupies the Bicol Peninsula at the southeastern end of Luzon Island and some other islands. Mayon Volcano, in Albay Province, is a major landmark, rising 2462 metres above the gulf. It is the Philippines’ most active volcano. Its sides are layers of lava and other volcanic material. It has had 47 eruptions in recorded history; the first in 1616 and the latest in November 2006.

Typhoon Dorian followed shortly after the November 2006 eruption, leading to floods that created mayhem in surrounding settlements and took many lives. Mudslides of volcanic ash and boulders from Mayon Volcano killed hundreds and covered a large portion of the village of Padang (an outer suburb of Legazpi City) in mud up to roof level. The death toll was estimated at 1000, which is either equal to or surpasses the death toll from the major 1814 Mayon Volcano eruption.



Meeting with the Mayor of Iloilo

Photo: © Celine d'Cruz

After November 2006, the federation of the urban poor in Bicol (henceforward, “the federation”) needed to redefine its strategy. Two leaders from the Philippines Homeless People’s Federation, Jossie and Rollie, went to provide support.

Following the disaster, all foreign aid was routed through local government. At such times corruption is commonplace and there is no one to demand accountability from government. Despite this, people were not ready to trust the federation until it organized exposure visits to Manila where people met with other urban poor federation communities.

Helping people save money

Some of the communities had been saving as part of the federation before the disaster struck, but in March 2007, the federation started helping people save in all the evacuation centers. As the men slowly started returning to work on construction sites, in the handicrafts industry and elsewhere they had money to put aside. The federation helped them manage their own money by explaining that savings are like drops of water that slowly fill a bucket.

The federation had to first get permission from the Municipal Social Service Depart-

ment to enter the evacuation centers. It had to explain its objectives to the municipality and only started working with those municipalities which were interested.

The government said it did not have enough land to relocate all the families. It worked out a set of criteria for selecting affected families but many were left out. Families who could not prove they had land title were of lower priority. This also encouraged people to save as most families who were seriously affected understood that they had to work hard to secure their own safety.

In the year that followed, 1036 people saved a total of 600,000 pesos (US\$14,634). Some saved daily while others saved weekly.

Relocating families to new land

As soon as the savings groups were created, conversations began about land. This was the main preoccupation of affected families who had lost their land. The local community chose some suitable and affordable land and the federation helped them purchase this land with a loan. In government relocation packages, flood victims only get a certificate of occupancy from the municipality. Borrowing money from the federation, however, allowed people to get land in their name. With title to the land and a safe house, families felt more secure about their children’s future.

The federation has since purchased three pieces of land in three different municipalities after checking with disaster experts that the land was acceptable for relocation. The

aim was to move beyond the ‘doling out’ mentality to finding a long-term solution and a ‘self-help’ approach to coping with disasters. This is in line with a key federation principle of working with communities affected by disasters: moving them from being victims to victors. The federation understands that living free of cost comes with no security. People can be evicted or houses demolished at any time, whereas buying their own land gives people security. Under the federation there are no free houses, so people borrow

money, then pay it back into the fund allowing others to borrow. In the long-term, many more people benefit.

Floods due to typhoons regularly affect some families, but the government’s immediate response is to keep them in evacuation camps with very poor living conditions. Local schools are used and, when school starts, families have to wait until the end of the school day to occupy the buildings. This creates conditions of stress and anxiety for families who want to return home. The infrastructure



Construction site

Photo: © Philippines Homeless People’s Federation

RELOCATION PROCESS

This is the relocation process followed by families in Camalig and Ginubatan.

- Identify affordable and suitable land.
- Secure a loan to purchase the land.
- Sub-divide the land between families, including roads and infrastructure, and mark the location of each plot.
- Collect and store water from the local springs for construction.
- Provide land allocation certificates for each family.
- Start constructing housing, beginning with temporary houses and moving on to constructing permanent houses when resources are available.
- Secure loans from the Urban Poor Development Fund for those who cannot afford construction.

is also appalling and toilets overflow because they cannot cope with such high levels of use. Headmasters also complain that families vandalize the school premises. The solution is far from perfect for all concerned, but it is the only one the government has found to date.

The three pieces of land are in the municipalities of Daraga, Camalig and Ginubatan (see table on next page). In Daraga, the federation needs government permission to use this agricultural land as a relocation site. The Mayors have to collectively declare and reclassify the agricultural land and permission is needed from the Daraga Agrarian Reforms Department, the Mines and Geo-science Bu-

LAND FOR RELOCATING FAMILIES AFFECTED BY FLOODS

Municipality in which land has been purchased	Number of families to be relocated there	Land area (hectares)	Cost of land (US\$)	Repayment time	Amount of repayment per family per month (US\$)	Funding source
Daraga	72 families, each getting 100 square metres of land to grow fruit and vegetables	1.2	16,725	2 years	7	The Latin American, African and Asian Social Housing Service (SELAVIP)
Camalig	95	1.4	12,500	1 year and 6 months	7	SELAVIP
Ginubatan	191	2.5	45,127	3 years	7	SELAVIP funds are insufficient so the Urban Poor Development Fund is being explored

reau and the Philippines Volcanology Center, which needs to confirm that the land is safe for relocation. There are three landowners in Ginubatan but most of the land formalities are completed. The plot is also agricultural land, and special permission from the Ministry of Agriculture is needed to begin construction. It may be that every single tree removed during construction will need replacing.

Building leadership

Rollie and Jossie work as a team in Bicol. Jossie is one of the victims of the Payatas landslides in 2000. She lives in Quezon City in Manila, in the relocation site for the affected families of the Payatas landslides. She was born in the Bicol Region and currently spends at least ten to 15 days there a month, working with Rollie

to support the federation building process.

Rollie was a trade union leader in the transport sector in Manila from between 1975 and 1990. He lives in Montelupa - the settlement along the rail tracks in Manila where he met the Homeless People's Federation survey team in 2003. He tried to find out more about the Federation and realized it ran very differently to the trade union where leadership was authoritarian and power-hungry and misused funds. He detached himself from the trade union leaders because of this.

Rollie and Jossie have earned the trust of the local communities. It took time for the local communities to see that the federation was not a non-government organization or a funding agency but a people's organization. It was only when the community was walked through all the following steps that they

understood that the federation was different and began to trust it: 1) registration of their local organization, 2) surveys, 3) meetings, 4) savings, and 5) exposure to other city federations.

Rollie and Jossie learnt that there were three categories of affected people: those completely washed out who lost their land, left, moved to Manila City or moved in with relatives, those who half lost out, and those who were not washed out but continued to live in the danger zone. The municipality prioritized the first category even though the latter two categories of people also needed help. The government identified land for those they prioritized, but built homes without people's participation using international funding. Foolishly, they built in places that were still in the danger zone.

In the very beginning, after meeting with the communities, Rollie and Josie also met the mayor and the elected municipal councilors who make up the policy-making body of the city. Most disaster management is done by the Social Services Center under the Mayor, although some government officials understand what the federation is trying to do and have been supportive. The Mayor and the city have their resources but the community also now has its own savings. So they decided to work together to find a more lasting solution.

Leadership has not been without its challenges. Rollie and Josie described how

sometimes those with bad experiences had dissuaded others from trusting the federation. Likewise, traditional leaders sometimes forced communities to raise money for their own interests.

Learning from exposure trips

Rollie and Jossie invited the Mayor of Camalig and his team on an exposure trip to Iloilo to meet with the Mayor and the federation there, and to better understand the work of the federation at the city level. The City of Iloilo has one of the more mature federations. It has been involved with various city slum upgrading projects and has developed

a very good working relationship with the city council. The federation and the city work together with other federations and citizen groups to create a city-level strategy.

This process began following a small project providing loans for families to construct houses in a flood relocation area. Resources were only available, however, for a fraction of the families who needed loans. Selecting which families would benefit was difficult. The federation, therefore, created a multi-task team of different federations, professionals and businesses at the city level. This team will help the federations find long-term, sustainable city-level solutions, supporting all families affected by floods. Ultimately, the federation hopes that the team will help make Iloilo a city where every poor family has a secure home.

This process is forcing the federation to refine its own skills and to work with different citizen groups and articulate their interests to find city-level solutions. In doing so, the federation hopes to find answers to a problem that is too complex for it to tackle alone.

Organizing relocation

The federation has created a number of different committees to manage relocation:

- construction;
- peace and order;
- health;
- livelihoods;
- culture;
- audit and inventory;



At a group meeting

Photo: © Celine d'Cruz

- land and housing; and,
- sanitation.

Crucially, files need moving, permissions need to be obtained and large amounts of paperwork and documentation needs to be in place. Cito, a local leader, is in charge of the land and housing committee and conducts this role. He works with Jossie and Rollie who have given him the space to work without much interference. Although untrained in this area, he has learnt on the job and is now ready to mentor others.

Through this work, Cito says he has learnt patience, self control, how to negotiate with people and officials to secure permissions and how to get the work done without paying bribes. He is motivated and values the principles of the federation. He stresses that members must attend all meetings regularly because if not they will not have accurate information and may misunderstand what is going on. All families who are part of the federation relocation project therefore meet every month. Besides this, leaders like Cito who have taken on responsibility for different tasks also meet once a month to review progress.

Funds to help the poor

Discussions about a City Urban Poor Fund are underway amongst the federation leadership. The Urban Poor Development Fund already exists but an additional fund could facilitate further change. A national fund would also provide different options for ac-

cessing and dispersing funds. This national fund could be led by senior government officials, chaired by a local pastor and have federation members on the board. Consultative meetings are underway to determine what kind of institutional mechanism is needed for this to work.

Climate-related disasters occur on a regular basis and the federation is also talking about establishing a Disaster Fund. The Latin American, African and Asian Social Housing Service (SELAVIP) and more recently Misereor money has been used for this purpose but funding needs scaling up. Such a fund would be used for:

- immediate crisis intervention;
- providing businesses with small loans to help communities get back on their feet;
- providing long-term loans for buying land and for housing;
- long-term investment in collecting information such as family and settlement surveys and family photo identification in all danger zones; and,
- a satellite survey along the 'Pacific Ring of Fire' to locate all cities in the danger zone, identify communities under threat and begin thinking about long-term city solutions rather than waiting until disaster strikes. ■

ABOUT THE AUTHOR



● **Celine d'Cruz** was one of the founding members of the Indian Society for the Promotion of Area Resources (SPARC) in 1984. She is currently one of the global coordinators of Slum/Shack Dwellers International, an umbrella organization formed by 15 national slum/shack/homeless people's federations to support each other and new emerging federations.

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FURTHER INFORMATION

● **On the Web:** visit www.achr.net/philippines1.htm for more information on the Philippines Homeless People's Federation.

Adaptation in Bangladesh

Jessica Ayers, Mozaharul Alam and Saleemul Huq describe Bangladesh's new Multi-Donor Trust Fund and national Climate Change Strategy and Action Plan

Within both international climate change and development arenas, there is currently a great deal of attention being paid to estimating the costs of adaptation in developing countries, raising the funds to meet those costs, and designing international finance mechanisms to channel these funds to developing countries. The preoccupation with raising funds for adaptation at the international level assumes, however, that once funding is available, developing countries have enough 'absorptive capacity' to receive and spend this money in a cost efficient and effective manner to build the adaptive capacity of vulnerable communities on the ground. Yet many of the most vulnerable developing countries – taken here to be the Least Developed Countries (LDCs), Small Island Developing States, and African nations – do not have comprehensive climate change adaptation

strategies, policies or mechanisms in place to deal with the receipt and disbursement of adaptation funds and the implementation of adaptation actions.

One country which is currently 'ahead of the game' in this regard is Bangladesh, which has recently taken steps to develop a new climate change strategy and action plan, and is the site of an innovative 'Multi-Donor

MAIN POINTS

- **The authors explain** how the new Multi-Donor Trust Fund in Bangladesh can receive and disperse adaptation funds from multiple donors.
- **They describe** the national Climate Change Strategy and Action Plan.
- **They conclude that** lessons from developing the Fund and Action Plan are useful for other vulnerable developing countries looking to use international adaptation funding effectively at national and local levels.

Trust Fund' (MDTF) for receiving and dispersing adaptation funds. These developments have not been uncontroversial, however, and there are many ways in which existing actions could be improved.

This article reviews the evolution of climate change policy and action on adaptation in Bangladesh, and considers what can be learnt both for strengthening the existing adaptation proposals in Bangladesh and informing development of similar strategies in other vulnerable developing countries.

Engagement with the international climate change agenda

One reason for Bangladesh's leadership amongst the other LDCs is its history of environmental research and non-government organization (NGO) action, largely as a result of its extreme environmental vulnerability to climatic hazards in general, regardless of climate change. In the 1980s, the science be-



Survivors of Cyclone Sidr, Golachipa, Bangladesh

Photo: © Claire Barrault/EC/ECHO

gan to reveal the potential impacts of climate change. Potential impacts included sea-level rise, more frequent and intense storm surges and variability in drought and rainfall. These impacts overlapped with the environmental hazards already facing Bangladesh. Climate change thus provided a new focus for researchers and NGOs, but the institutional framework for dealing with environmental hazards was already there to be mobilized. There is now widespread agreement amongst the politicians, media and general public, both in Bang-

ladesh and globally, about Bangladesh's position as one of the most vulnerable LDC nations to adverse climate change impacts.

Bangladesh was also fortunate to have well-informed academics and activists in the international climate change arena who could bring and disseminate information back home. Indeed, Bangladesh has four Intergovernmental Panel on Climate Change lead authors, who along with other well-informed civil society groups, have helped coordinate NGO and government climate change efforts.

Effective communication between informed research organizations, civil society groups and government, coupled with the clear relevance of climate change for Bangladesh, has resulted in strong and effective engagement in the international climate change negotiations from an early stage. In 1992, the Government of Bangladesh signed the United Nations Framework Convention on Climate Change (UNFCCC), and then ratified it in 1994. Bangladesh has participated in all UNFCCC negotiations, often playing a significant role. For example, it was elected chair of the LDC Group from 2004 to 2006. In addition to engaged and capable political leaders, Bangladesh also has knowledgeable experts outside the government and a very active NGO community, which plays an advocacy role to influence negotiations. Some NGO members have been inducted into the official government delegations at international meetings, and the government uses expertise from outside the government in the international negotiations and in developing its climate change strategy.

National institutions for climate change

Capacity on adaptation at the international level also translates down to action at the national level. A National Climate Change Committee, comprised of members from all relevant government and non-government organizations, was constituted in 1994 for policy guidance and to oversee the imple-

mentation of obligations under the UNFCCC process.

In 2003, Bangladesh established a Comprehensive Disaster Management Programme with donor assistance, which has within its remit the goal of establishing an integrated approach to climate change and disaster management. This involved the creation of a 'climate change cell' within the Department of Environment to build government capacity for coordination and leadership on climate change issues. The cell coordinates awareness raising, advocacy and mechanisms to promote climate change adaptation and risk reduction in development activities, as well as strengthening existing knowledge and information accessibility on climate change impacts and adaptation.



Women queuing for food, Golachipa, Bangladesh

Photo: © Claire Barrault/EC/ECHO

Other government institutions that are relevant for climate change include an inter-ministerial committee on climate change, headed by the Minister for Environment and Forests and with representation from relevant government ministries as well as NGOs and research institutions, and a National Environment Committee to determine environmental policies chaired by the Prime Minister with representation from Members of Parliament as well as government and civil society.

National adaptation policies and strategies

Bangladesh was one of the first LDCs to complete a National Adaptation Programme of Action in 2005, and the Bangladesh govern-

ment is integrating climate change into national policies and sectoral plans. The 2005 Coastal Zone Policy incorporates climate change into its integrated coastal zone management strategies, the Bangladesh National Water Policy recognizes climate change, and climate change is considered in the preparation of disaster-preparedness plans drawn up under the comprehensive disaster management strategy. In 2007, the Government announced an initiative to incorporate the impacts of climate change into development plans under its Poverty Reduction Strategy Paper and this has happened in the recently revised policy and action plan.

The Multi-Donor Trust Fund

Recently, and with assistance from the United Kingdom's Department for International Development, Bangladesh has taken innovative steps to address the problem of accessing the proliferation of international funds for adaptation, as well as building national 'absorptive capacity' to receive these funds. All adaptation funding from different national and multilateral climate change funds could be channelled and pooled through the new Multi-Donor Trust Fund (MDTF), which would be managed by a board of trustees. The Fund was launched at the United Kingdom/Bangladesh Climate Change Conference which took place in London in September 2008, where delegations from both governments and civil societies, and representatives from other countries and agencies, met and agreed

to work in partnership to combat climate change.

In Bangladesh's National Budget for 2008 to 2009, the Finance Minister recently allocated approximately US\$45 million from the national exchequer towards implementing the climate change strategy and invited international donors to put matching funds into the MDTF. To date, the United Kingdom's Department for International Development has pledged £75 million. Denmark has also pledged to contribute and other countries are expected to follow suit. It is hoped that the MDTF could significantly reduce transaction costs for global and bilateral funds and pave the way for large flows of future funding while ensuring proper institutional, governance and management structures are in place and funds are targeted at the national level.

The scale and scope of the MDTF are still under discussion, but it is hoped that the fund would be accessible to government agencies, NGOs and private sector actors who work with vulnerable communities at the local level. A

from NGOs. There are concerns that this may result in bureaucratic and functional problems similar to those already faced with international adaptation funds, particular those managed by the Global Environment Facility. Discussions concerning MDTF governance are ongoing.

The national Climate Change Strategy and Action Plan

In preparation for the launch of the MDTF and in recognition of the need for a more strategic and coordinated approach to implementing adaptation, the Government of Bangladesh has published its Climate Change Strategy and Action Plan 2008, which outlines priority national needs over the next ten years to reduce climate change impacts over the next 25 years. The Action Plan outlines 37 programmes under the six thematic areas of food security, social protection and health, comprehensive disaster management, infrastructure, research and knowledge management, mitigation and low carbon development, and capacity build-

by the Ministry of Environment and Forests. Programmes funded under the Plan are intended to be implemented by ministries or their agencies, with involvement, as appropriate, of civil society and the private sector.

Since the publication of the Plan, concerns have been raised over the use of international consultants in developing the Plan, the lack of local or even national stakeholder consultation, and the emphasis on infrastructure development at the expense of more development-orientated approaches to adaptation. In response, the Government has stated that the Action Plan will be reviewed and revised, if necessary.

Next steps and sharing lessons learnt

Bangladesh has made considerable progress in action on adaptation at both national and international levels, proving itself to be innovative and forward thinking at a time when there is little international guidance to help steer the way. In relation to national level processes, however, the Government of Bangladesh has at times been criticized by civil society for insufficient local participation and for allowing processes to be donor led. It is important that the Government responds to these criticisms and ensures adequate participation of civil society and local stakeholders as it takes forward the Climate Change Strategy and Action Plan and the MDTF.

In addition, while the Action Plan may prove a useful strategic document, it must

“a recent announcement that the World Bank is likely to take at least interim responsibility for the governance of the fund has raised alarm bells”

recent announcement that the World Bank is likely to take at least interim (two years) responsibility for the governance of the fund, however, has raised alarm bells, particularly

ing and institutional strengthening. The Plan will be implemented under the overall guidance of the National Environment Committee, chaired by the Chief Adviser, and coordinated

be followed up by concrete policy. The lack of any comprehensive climate change policy in Bangladesh will prove problematic for enforcing implementation of the strategy and effective integration and coordination of climate change concerns across sectors. Nevertheless, there is a great deal that can be drawn from the experience of Bangladesh.

The positive engagement of Bangladesh in international negotiations and government efforts to respond to and work with NGOs on both international and national climate change issues have helped enable Bangladesh to gain enough experience to inspire donor commitment to assist action on adaptation. Importantly, Bangladesh has taken steps to increase its capacity to receive and disseminate funds and has been proactive about sourcing funding from its own national budget to highlight its commitment to adaptation.

While the MDTF and Action Plan are certainly at early stages, other vulnerable developing countries and donors should closely follow their progress and consider whether such structures could be used as models elsewhere to help use international funds for adaptation effectively at national and local levels. There are also useful lessons on how to structure collaboration amongst key stakeholder groups including the finance ministry, environment ministry, other line ministries, research institutions, civil society and donors. ■

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FURTHER INFORMATION

● **On the Web:** You can download the National Adaptation Programme of Action for Bangladesh at tinyurl.com/qp3666. The Climate Change Strategy and Action Plan 2008 is available at tinyurl.com/ma3otm (8.8Mb download).

CONFERENCES

World Climate Conference-3 2009 Geneva, Switzerland: 31-08-2009 to 04-09-2009

Working theme of the conference is "Climate prediction for decision making: focusing on seasonal to interannual time-scales, taking into account multi-decadal prediction".

Details: WMO, Conference Organizer, Case Postale 2300, CH-1211 Geneva, Switzerland.

Fax: +41-22-7308181

Email: info@wmo.ch

Web: www.wmo.ch/pages/world_climate_conference/index_en.html

Water Utilities & Law: Current Trends & Development

Dundee, UK: 03-09-2009 to 04-09-2009

Conference is organized by, and will be held at, the UNESCO Centre at the University of Dundee. Intends to provide a forum in which to address the role of law in promoting appropriate policies, structural design and regulatory solutions in order to meet the Millennium Development Goals target of reducing the proportion of people without access to sustainable, safe drinking water by half.

Details: Michael Hantke-Domas, Centre for Water Law, Policy and Science, Peters Building, University of Dundee, DD1 4HN, UK.

Fax: +44-1382-388671

Email: water@dundee.ac.uk

Web: www.dundee.ac.uk/water/news/waterutilities.php

International Conference on Eco- hydrology & Climate Change

Tomar, Portugal: 10-09-2009 to 12-09-2009

Aim is to bring together researchers in the areas of climate, ecohydrology, soils and geo-statistics to share experiences and promote the integration of these areas as a multidisciplinary framework. Topics include: climate change; extreme events; water resources and management; soil degradation and soil quality; ecohydrology; and geo-statistics amongst others.

Details: Cristina Andrade, Depart. Matematica, Instituto Politecnico de Tomar, Estrada da Serra - Quinta do Contador, 2300-313 Tomar, Portugal.

Fax: +351-249-328136.

Email: ecohcc09@ipt.pt

Web: www.ecohcc09.ipt.pt

11th Annual BIOECON Conference Venice, Italy:

21-09-2009 to 22-09-2009

Working theme of this year's Biodiversity and Economics for Conservation (BIOECON) conference is "Economic instruments to enhance the conservation and sustainable use of biodiversity". Papers will cover such issues as assessment of the efficiency of biodiversity conservation instruments, the development of new, incentive-compatible instruments, applications of economic instruments and assessing socio-economic benefits.

Details: Conference Organizer, Fondazione Eni Enrico Mattei (FEEM), Palazzo Querini Stampalia, Castello 5252,

I-30122, Italy.

Fax: 39-41-2711461

Email: infofeem@feem.it

Web: www.bioecon.ucl.ac.uk

2009 International Conference on Chemical, Biological & Environ- mental Engineering

Singapore: 09-10-2009 to 11-10-2009

Conference hopes to provide opportunities for participants to exchange ideas and experiences and to establish business and research relations for future collaboration. Aimed at researchers, engineers, academics and industrial professionals to present research results and development activities in the three areas of chemical, biological and environmental engineering.

Details: Secretary of CBEE 2009, 9 Jurong Town Hall, iHub, Jurong East, Singapore.

Email: cbee@vip.163.com

Web: www.iacsit.org/cbee/index.htm

8th International Workshop on Large-Scale Integration of Wind Power into Power Systems

Bremen, Germany: 14-10-2009 to 15-10-2009

Conference will include a workshop on Transmission Networks for Off-shore Wind Farms. A field trip to be taken the day after the workshops is also planned. Intended to provide a platform for exchanging knowledge, ideas and experiences regarding wind energy and in-depth discussions and

brainstorming. Representatives from companies and research institutes will give presentations.

Details: Workshop Organizer, Energnautics GmbH, Muhlstrasse 51, 632225 Langen, Germany.

Email: info@energynautics.com

Web: www.windintegrationworkshop.org

XIII World Forestry Congress 2009 Buenos Aires, Argentina: 18-10-2009 to 25-10-2009

Co-organized by the Food and Agriculture Organization and held every six years. Congress intent is to provide a forum whereby collective knowledge and experience can give guidance to the formulation and implementation of environmentally friendly forest policies.

Details: 2009 World Forestry Congress Organizer, Paseo Colon 982, Anexo Jardin, C1063ACV Buenos Aires, Argentina.

Email: info@cfm2009.org

Web: www.wfc2009.org

18th World Congress of Environ- mental Journalists

Colombo, Sri Lanka: 19-10-2009 to 22-10-2009

Working theme of the congress is "Educate to End Climate Poverty". Organized by the Asia-Pacific Forum of Environmental Journalists and supported by the Sri Lankan government and the United Nations Environment Programme (UNEP). Aims to bring together journalists, writers, environmental communicators, other media

and educational professionals as well as NGO activists and government officials to discuss the role journalists and educators have in informing the public on climate change.

Details: Dharman Wickremaratne, Asia-Pacific Forum of Environmental Journalists, PO Box 26, Colombo, Sri Lanka.

Fax: +94-1-883187.

Email: ejournalists@slnet.lk

Web: www.environmentaljournalists.org

International Symposium on Hydrological Models

Beijing, China:

24-10-2009 to 26-10-2009

Organized by the College of Water Sciences together with the Chinese National Committee for the International Hydrological Programme (IHP) of UNESCO. Will assess the rapid progress made in computer sciences, remote sensing and geographic information systems in relation to hydrological modeling. Aims to contribute to the study and applications of latest models and to facilitate communication and networking amongst the associated research communities.

Details: D Peng, College of Water Sciences, Beijing Normal University, Xin Jie Kou Wai Street 19, Beijing 100875, China.

Fax: +010-58802739.

Email: hydrologicalmodel@gmail.com

Web: www.bnu.edu.cn/shuixx/CWS.htm

European Sustainable Energy Seminar

Glucksburg, Germany:

10-11-2009 to 14-11-2009

Co-organized by the International Network for Sustainable Energy (IN-FORSE) and Artefact. Seminar will be held at the Artefact Centre, which promotes and supports educational programmes in environmental technologies, environmental management and provides a meeting place for workshops and congresses. Programme topics include low carbon scenarios, sustainable energy policies and practice, and the general meeting of INFORSE-Europe.

Details: Judit Szoleczky, INFORSE, Gl. Kirkevej 82, DK-8530 Hjortshoj, Denmark.

Fax: +45-86-227096.

Email: ove@inforse.org

Web: www.inforse.org/europe/seminar09_Artefact.htm

Social & Political Dimensions of the Global Crisis: Implications for Developing Countries

Geneva, Switzerland:

12-11-2009 to 13-11-2009

UN Research Institute for Social Development to host the conference aimed at a better understanding of the social and political dimensions of the current crisis and further discussions on the subsequent necessity of policy and institutional reforms and their implications for developing countries. Also intends to facilitate identifying key issues for future research.

Details: Rebecca Buchholz, UNRISD, Palais des Nations, Geneva CH-1211, Switzerland.

Email: buchholz@unrisd.org

Web: www.tinyurl.com/jm9hr2v

East Asian Seas Congress 2009 Manila, Philippines:

23-11-2009 to 27-11-2009

Working theme of the Congress is "Partnerships at Work: Local Implementation and Good Practices". Aims to provide a venue to debate issues and highlight good practices and lessons learned in coastal and ocean seas management, which will include the impacts of climate change amongst other issues.

Details: EAS Congress 2009 Secretariat, PEMSEA Resource Facility, DENR Compound, Visayas Ave, Diliman, Quezon City, Philippines.

Fax: +63-2-9269712

Email: congress@pemsea.org

Web: www.pemsea.org/eascongress

15th Conference of the Parties to the UNFCCC & the 5th Meeting of the Parties to the Kyoto Protocol

Copenhagen, Denmark:

07-12-2009 to 18-12-2009

Overarching goal is to agree post-Kyoto climate treaty framework. Meetings will coincide with the 31st meetings of the treaty's subsidiary bodies - the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technical Advice.

Details: UNFCCC Secretariat COP15/ MOP5, PO Box 260124, D-53153 Bonn,

Germany.

Fax: +49-228-8151999.

Email: secretariat@unfccc.int

Web: www.unfccc.int/meetings/unfccc_calendar/items/2655.php?year=2009

ASLO-NABS 2010 Joint Meeting

Santa Fe, USA:

06-06-2010 to 11-06-2010

Working theme of the meeting is "Global Changes from the Center to the Edge". Incorporates the American Society of Limnology and Oceanography and the American Benthological Society. Aims to draw attention to the entirety of aquatic systems on which humans depend encompassing the entire hydrological cycle. Session topics include watersheds, water resources, science education and public policy.

Details: 2010 Meeting Organizer, ASLO Business Office, 5400 Bosque Blvd, Suite 680, Waco, Texas 76710, USA.

Fax: +1-254-7763767.

Email: business@aslo.org

Web: www.aslo.org

Climate and Nepalese youth

Abhishek Shrestha reports on the role of Nepalese youth in climate change activities

Nepal is likely to be one of the countries hardest-hit by climate change, despite being one of the smallest contributors to the problem. Scientific and anecdotal evidence confirms that climate change is already impacting communities in Nepal through the melting Himalayas, changing monsoon patterns that have a direct affect on water resources and reduced crop yields, which leads to food insecurity. A large percentage of the Nepali population needs significant assistance to adapt to the changing climate and to protect their centuries-old traditions and livelihoods from climate impacts.

Nepal is at high risk from the impacts of climate change, but sadly this issue has not been prioritized at the national level. Taking into account the susceptibility of Nepal's Himalayas and the Nepalese economy, which is heavily dependent on agricultural and nat-

ural resources, it is essential to make people aware of climate issues.

Youth have a major stake in climate change in general and in the outcome of the climate change treaty in particular. Young people are a very important part of our society as they are future decision makers and can play a vital role in popularizing the issue among friends, family members, peers and the wider

MAIN POINTS

- **The author describes** the work of Nepalese Youth for Climate Action (NYCA), a coalition of youth and youth groups.
- **Nepal is likely to be** one of the countries hardest-hit by climate change, despite being one of

the smallest contributors.

- **NYCA works** with universities, schools, organizations, elected officials and communities in Nepal and abroad in a variety of ways to combat the climate threat.

community. Youth are the backbone of the nation who can influence others to bring about change.

There is already significant mobilization of youth at the international level, articulating



Drama performance

Photo: © NYCA



Run for Climate

Photo: © NYCA

national and international efforts to reduce emissions. In particular, some nations have a strong youth network fostering youth leadership and dialogue on climate change. With a mission to protect Nepal from the effects of climate change through a diverse, nationwide, youth-led movement, a youth group on climate change, Nepalese Youth for Climate Action (NYCA), has been established.

NYCA is a coalition of Nepalese youth and youth groups tackling climate change, the biggest challenge of our generation. NYCA works with universities, schools, organizations, elected officials and communities in Nepal and abroad to protect our future from

the threats posed by climate change. We inspire, educate, empower and mobilize young Nepalese to create a future that is economically prosperous, environmentally sustainable and socially just.

NYCA is involved in a number of projects. To make young people aware of the issue of climate change, an awareness programme on climate change is being carried out in the schools and colleges of Kathmandu Valley through presentations and documentaries. NYCA is planning to take these campaigns all over Nepal. NYCA is also developing a college network through the College Climate Wing programme.

With the objective to form a unified youth voice on climate change and create a youth charter/declaration on climate change, the first-ever Nepalese Youth Summit on Climate Change was organized in November 2008 in coordination with the Ministry of Environment, Science and Technology and the Ministry of Youth and Sports. Young people from different parts of the country participated in the summit. The Summit Declaration was handed to science and technology minister Ganesh Shah.

Aiming to make people aware of the issues of climate change and the environment through culture, the Deushi-Bhailo programme, blending informative drama with songs and demonstration, was carried out on the auspicious occasion of Dipawali, the Festival of Lights.

The Run for Climate was organized in Kathmandu in coordination with 29 other organizations. The campaign synchronized Nepal's climate activities with international climate activities coordinated by the Global Climate Campaign. The basic aim of the programme was to make people aware of climate change and to demand that world leaders take the urgent action required to prevent the catastrophic destabilization of the global climate.

An interaction programme called Climate Talk takes place every alternate Friday. The objective is to inform young people on recent climate change issues. The programme provides an opportunity for youth to dis-



'Plant a Tree and Grow in Love'

Photo: © NYCA

conduct research carried out by them on climate change.

The aim of the Ghar Dailo awareness programme is to make Constitution Assembly members aware of climate change and to com-

mit them to effective climate action, including the formulation of policies on climate change and addressing the climate issue in the new constitution. NYCA has the target of reaching the 601 Constitution Assembly members.

A message on climate change was published in the English-language Nepali daily *The Himalayan Times* on December 6th 2008. The main objective of this was to make people aware of climate change, to gather the views of concerned people on the issue, to share ideas regarding how to save Mother Earth from global warming and to support the global demonstration on climate change.

NYCA is on the way to publishing a magazine on the climate issue for youth and is planning to run a radio programme on climate change targeting the young people of the country.

On the occasion of Valentine's Day, February 14th 2009, NYCA, Leadership for Environment and Development-Nepal, Organic Village, and the Department of Forests jointly organized a programme in which tree seedlings were distributed as a Valentine gift to couples who visited Sidhapokhari, Bhaktapur, a romantic spot for young people. The theme was "Plant a Tree and Grow in Love". The couples were briefed about the importance of trees in saving the earth's degraded environment. They were told that the tree would symbolize their love so they would need to protect it well. Two hundred plants were distributed to 100 couples.

NYCA believes that climate change is a global challenge. There is still an opportunity for us to address this challenge. NYCA works with allies at the international level to en-



Young people involved in the 'Plant a Tree' programme

Photo: © NYCA

sure that global greenhouse gas emissions are reduced at the rates necessary for our survival. In coordination with other youth networks in South Asia, NYCA is planning to organize a South Asian Youth Summit on Climate Change.

Through collective actions and initiatives, NYCA hopes to ensure that a future is indeed possible for us. NYCA is determined

to contribute to the global effort, in line with the principle of common but differentiated responsibilities. We also believe that developed countries must assume greater commitments in line with their responsibilities. ■

ABOUT THE AUTHOR



● **Abhishek Shrestha** is coordinator, responsible for programme design and management, with Nepalese Youth for Climate Action.

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FURTHER INFORMATION

● **In the Cyberlibrary:** The Tiempo Climate Cyberlibrary lists websites covering youth activities on climate change at www.tiempocyberclimate.org/portal/web71.htm.

BRAZIL TREES

The Brazilian government has announced that companies operating fossil fuel-based power plants will have to plant trees to compensate for their carbon emissions.

The new requirements will contribute to the goals of the National Climate Change Plan. "It must be remembered that the Environment Ministry is not creating a new cost for the plants," said environment minister Carlos Minc. "This cost has always existed, but it now must be paid by all society."

Read more:
tinyurl.com/pb9qqqt

CLEAN COAL IN UK

Following lengthy controversy, the British government has pledged that it will not allow any new coal-fired power stations to be built without a proportion of carbon emissions buried underground.

"The era of new unabated coal has come to an end," claimed British Secretary of State for Energy and Climate Change Ed Miliband. The United Kingdom recently became the first nation to commit to a mid-term goal for greenhouse gas emissions reductions, a 34 per cent cut by the year 2020 relative to 1990 levels.

Read more:
tinyurl.com/rc4ggj

ADAPTABLE CORAL

Some coral reefs are adapting to higher temperatures, rendering the global coral ecosystem less vulnerable to climate change, according to a new study.

"Corals are certainly threatened by environmental change, but this research has really sparked the notion that corals may be tougher than we thought," commented Stephen Palumbi, director of the Hopkins Marine Station at Stanford University in the United States.

Read more:
tinyurl.com/ocr8ad

CLIMATE DEATHS

Climate change is already causing 300,000 deaths a year, according to a new report from the Global Humanitarian Forum.

By the year 2030, the economic cost of global warming could reach US\$600 billion a year. "The world is at a crossroads. We can no longer afford to ignore the human impact of climate change. This is a call to the negotiators to come to the most ambitious agreement ever negotiated or to continue to accept mass starvation, mass sickness and mass migration on an ever growing scale," said Kofi Annan, the Forum's president.

Read more:
tinyurl.com/p3nw56

AFRICA - SEASONS

By 2050 growing seasons throughout Africa will be "hotter than any year in historical experience," according to a study by American researchers.

"When we looked at where temperatures are headed, we found that for the majority of Africa's farmers, global warming will rapidly change conditions beyond the range of what occurs anywhere in their country," said Marshall Burke from Stanford University. Senegal, Chad, Mali, Burkina Faso, Niger and Sierra Leone were found to be particularly at risk.

Read more:
tinyurl.com/q92x8h

Voluntary carbon markets

Muyeye Chambwera scrutinizes the voluntary carbon market and suggests improvements to benefit those most vulnerable to climate change

People's consciousness of the reality of climate change is increasing, and many individuals and companies want to participate in tackling the problem. Trading of emission reduction units of greenhouse gases, or carbon credits, has been a significant response to addressing climate change in recent years. This has seen

the emergence and rapid growth of carbon markets. Carbon trading, commonly referred to as offsetting, held the promise of addressing climate change and delivering development benefits. Over time, however, questions have been raised about its effectiveness.

There are two forms of carbon markets: the compliant or regulatory market, and

the voluntary market. Both of them enable individuals and organizations with high emissions to pay others to reduce their emissions elsewhere. People pay other parties to reduce emissions on their behalf because it is less expensive than doing it on their own. The potential of both markets to deliver real benefits, especially to the poor who are most vulnerable to climate change, has come under scrutiny recently.



Photo: © Richard Clay

MAIN POINTS

- **The author describes** the problems associated with the regulatory carbon market.
- **He explains how** the voluntary carbon market has more development potential in terms of providing community benefits or biodiversity conservation.
- **He suggests that** in order to help poor people cope with climate change impacts, however, the credit unit could focus less on carbon and more on these development benefits.

Clean Development Mechanism limits

The compliant market operates primarily under the Clean Development Mechanism (CDM) of the Kyoto Protocol. It enables countries with obligations to reduce their emissions to meet part of their emissions reduction targets by funding projects in developing countries to reduce emissions at a lower cost than would have been the case at home.



Air conditioning - should its use be offset?

Photo: © Lars Plougmann

The CDM also has a specific aim of ensuring that emission reduction projects in developing countries contribute to sustainable development in these countries. However, the delivery of this benefit is constrained by the inability of host countries to set conditions or standards for sustainable development and still compete for CDM in-

vestments with other developing countries with less stringent development standards. High development standards increase the costs of carbon credits as investors need to do more in the host country to meet sustainable development conditions. This effectively increases the price of credits with development benefits.

Compliant buyers often simply want to meet their emission reduction targets at low cost. They, therefore, tend to go for high volume, low cost projects. So host countries must either set stringent standards and lose investment, or set loose standards and attract investments with limited sustainable development benefits. In this respect, CDM markets often fail to deliver development benefits in poor countries.

The CDM has also failed to effectively reach the poorest countries. For example, the number of CDM projects in Africa, where poverty levels are highest and development is needed most, is less than three per cent of the total. Some 70 per cent of African CDM projects are in South Africa, Egypt and Nigeria.

The potential, and limits, of voluntary offsetting

The emergence of voluntary offsetting provided hope regarding overcoming some of the shortcomings of the CDM and providing more benefits to developing countries. Rather than being driven by mandatory obligations to reduce their emissions, voluntary buyers are motivated primarily by corporate social responsibility and public relations. They would like to contribute to a worthy cause such as climate change. They prefer offsets with additional attributes, such as community benefits or biodiversity conservation, which can potentially cover the sustainable development gap that CDM

projects struggle to cover. The connection that offset buyers want to make with poor people in poor countries is a particularly positive attribute of voluntary action. Thus, from a development perspective, voluntary carbon markets hold more promise.

The growth of voluntary markets over the past few years, in terms of volume of carbon and number of buyers, indicates that it could play a significant role in the future. The volume doubled from 65 million tons of carbon in 2007 to 123 million tons in

ity. They may serve to soften or tone down people's guilt, yet do little to encourage carbon-neutral lifestyles. Tackling climate change should be about real reductions in emissions rather than transferring them to other countries.

There are also development-related concerns. Projects are driven by the need for people in developed countries to mitigate, or reduce, their emissions. They do not reflect the needs of developing country communities who are most affected by

“offsets, far from being a means of taking responsibility for one's actions, may actually be a means of evading responsibility”

2008. This is likely to increase still further as more companies and individuals become aware of climate change and the need to take action to address the problem.

Concerns have been raised, however, about the integrity of the voluntary market and about offsetting as an approach to addressing climate change more generally. There are questions about the lack of regulation and the existence of a wide array of standards on the voluntary offset market, which have called the credibility of its operation into question. Some also feel that all offsets, far from being a means of taking responsibility for one's actions, may actually be a means of evading responsibil-

ity. They may serve to soften or tone down people's guilt, yet do little to encourage carbon-neutral lifestyles. Tackling climate change should be about real reductions in emissions rather than transferring them to other countries.

There are also development-related concerns. Projects are driven by the need for people in developed countries to mitigate, or reduce, their emissions. They do not reflect the needs of developing country communities who are most affected by

climate change. Most of these communities produce negligible emissions yet are geographically and socio-economically vulnerable to the impacts of climate change driven by developed country emissions. Adaptation, or coping with those impacts, is their biggest priority.

It is quite reasonable to argue that some voluntary offsets and associated standards promote projects with additional benefits around host projects. Offset transactions are, however, centred around emission reductions. The higher the level of emission reductions, the more attractive a project is. Other benefits are only additional. Thus, even with great standards in terms of other



Photo: © Richard Clay

benefits, a project can only be funded if it has an emission reduction component first. The unit of the credit is carbon, and not the additional benefits.

Doing even better

Does this mean the voluntary market has to stop? The spirit behind voluntary action, which largely accounts for the current momentum of voluntary offsetting, need not be killed by the weaknesses of the voluntary offset market. Those seeking to offset their emissions are only using the available means to help address climate change.

Addressing the weaknesses of the voluntary market provides an opportunity to revisit the concept of offsetting in a way that encourages people in developed countries to address their emissions more effectively. The first step is to recognize that two key and equally important responses to climate change are emissions reduction, or mitigation, and adaptation. The second is to recognize that those who are most vulnerable to climate change have very low levels of emissions, and therefore offer few opportunities to reduce emissions.

The primary responsibility of reducing global emissions lies with people in developed countries. But these people can also take voluntary steps to help the most vulnerable people adapt to climate change. In so doing, they are still addressing a required and very urgent response to climate change while at the same time fulfilling

the social responsibility that lies behind voluntary offsetting. Voluntary efforts that promote real emission reductions by polluters and help the victims of past and current unavoidable emissions to adapt have the potential to make voluntary action on climate change really effective.

There are a few emerging options for addressing climate change voluntarily that address both mitigation and adaptation. The 'AdMit' initiative led by the New Economics Foundation and the International Institute for Environment and Development helps voluntary actors in developed countries to take care of the impacts of their unavoidable emissions by supporting adaptation activities in poor communities that are vulnerable to climate change. AdMit also encourages these actors to take steps to reduce their emissions. The AdMit initiative is still in a pilot stage but is likely to offer real solutions to voluntary climate change action. Mercy Corps' Cool Carbon initiative also notes that it is possible for voluntary actors to support development projects in poor communities that help to reduce carbon emissions without having to strictly link the payment to the level of emission reductions. ■

ABOUT THE AUTHOR



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FURTHER INFORMATION

● **On the Web:** See www.iied.org/search/node/AdMit for more information on the AdMit initiative. For more information on Mercy Corps' Cool Carbon initiative, see www.mercycorps.org/15475.

Bonn voyage

NEGOTIATIONS

The latest round in the negotiations leading up to the critical meeting on the future of the climate treaty in Copenhagen in December this year took place in Bonn in early June. Tiempo editors Mick Kelly and Sarah Granich report.

Delegates from 182 countries assembled at the Bonn Climate Change Talks to discuss, amongst other things, the draft negotiating texts that will form the basis of any agreement reached in Copenhagen later this year when the future of the United Nations Framework Convention on Climate Change and its Kyoto Protocol should be decided. “The political moment is right to reach an agreement,” said Yvo de Boer, who heads the climate treaty secretariat. “There is no doubt in my mind that the Copenhagen climate conference in December is going to lead to a result. If the world has learned anything from the financial crisis, it is that global issues require a global response,” he continued.

According to Connie Hedegaard, Danish climate and energy minister, agreement on a treaty rests on the richer countries paying for emission control measures in the developing world. “If we do not provide financing then we will not have a deal in Copenhagen,” she said. Hedegaard, like others, is concerned about the slow progress of the negotiations.

At the Bonn meeting, the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) considered issues related to the goal of a shared vision for long-term cooperative action, enhanced ac-

draft text had been “enriched” from a 53-page starting point to a daunting 200 pages.

The Ad Hoc Working Group on Further Commitments for Annex I Countries under the Kyoto Protocol (AWG-KP) focused on a proposal for amendments to the Kyoto Protocol, including emissions reduction commitments of 37 industrialized countries for the Protocol post-2012. “It is important that we complete some of the more solvable issues here in Bonn so that we can then focus on the more difficult ones later on in the negotiations,” said AWG-KP chair

“if the world has learned anything from the financial crisis, it is that global issues require a global response”

tion on adaptation, mitigation and finance, technology and capacity-building. Michael Zammit Cutajar, AWG-LCA chair, noted that the AWG-LCA negotiating text did not pre-judge or preclude any particular outcome. “The text is a starting point and now is the time for parties to take position and enrich it,” he said. By the end of the meeting, the

John Ashe. Unfortunately, there was no clear consensus with regard to the future of the Kyoto Protocol. Whether or not the rules should be amended or simply the national targets was a key issue. Developing countries, for the most part, favoured the simple approach of altering the targets alone, while industrialized nations wanted the rules (re)

MAJOR ECONOMIES FORUM MEETS

Proposals for a long-term emissions goal that were on the table at the Bonn meeting included stabilization of greenhouse gas concentrations in the atmosphere at specific levels, a 50 per cent cut by the year 2050, limiting temperature rises to two degrees Celsius above pre-industrial levels, or aiming for global annual *per capita* emissions of two metric tons of carbon. Later in the month, the latest session of the Major Economies Forum on Energy and Climate took place in Mexico. The Major Economies Forum consists of nations responsible for 80 per cent of global greenhouse gas emissions. Its aim is to help generate the political

leadership necessary to achieve a successful outcome at the December climate change conference in Copenhagen. The draft document tabled at the meeting by the United States and Mexico proposed an “aspirational” global emissions reduction goal of 50 per cent for the year 2050, with developed nations assigned an 80 per cent target. While Forum delegates supported the notion of a long-term goal, there was no agreement on any specific target.

There have been signs of increasing support for Mexico’s proposal of a “green fund”. The fund would receive contributions from all nations, with the scale of each

national contribution determined by population, gross domestic product and emissions. It may also receive income from the auction of permits in developed countries and a levy on the disbursement of mitigation funds for adaptation. “It’s not a question of what we like, but of what may work, and the Mexican proposal gives flexibility that may be appreciated by the United States, Japan and by other donors,” commented Jos Delbeke from the environment directorate of the European Commission. The putative inclusion of carbon credits was favourably received at the Major Economies Forum.

defined before targets were given serious consideration.

In a significant move, the United States announced that it would not demand that China commits to binding cuts in greenhouse gas emissions. Instead, said Jonathan Pershing, head of the United States delegation, “we’re saying that the actions of developing countries should be binding, not the outcomes of those actions.” Developing countries seeking

to grow their economies and alleviate poverty would be asked to commit to measures such as increasing energy efficiency standards and promoting renewable energy rather than specific emissions targets. Both the United States and the European Union stressed that private finance, through, for example, carbon offsetting, rather than government funding would assist developing nations follow a low-emissions development path.

“The only thing that they have agreed on in Bonn, is that they fundamentally disagree on all issues,” concluded Regine Günther of WWF. Though there was general disappointment at the slow progress made at the 12-day meeting, Yvo de Boer, who heads the climate treaty secretariat, remained optimistic. “I think that this session has made clear what governments want to see in a Copenhagen agreement. It shows that they are committed to reaching an agreement and this is a big achievement,” he said. Even de Boer accepts, though, that it will be “physically impossible” to have a detailed agreement in Copenhagen in December this year. Cutajar warned that big breakthroughs were likely to happen only in Copenhagen. “This is like the evolutionary process in reverse. The Big Bang comes at the end,” he said.

The next port of call on the voyage to Copenhagen will be Bonn, once again, in August, followed by a stopover in Bangkok in September and an opportunity for final discussions in November as the subsidiary bodies meet prior to the Copenhagen deadline.

● **Further information:** TheTiempo Climate Cyberlibrary provides hourly coverage of climate news at www.tiempocyberclimate.org/newswatch. For further discussion of recent climate negotiating meetings, visit Earth Negotiations Bulletin at www.iisd.ca/process/climate_atm.htm.

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Affluent diets and climate change

Globally, food production accounts for at least a quarter of greenhouse gas (GHG) emissions. A recent Food and Agriculture Organization report estimates that the biggest share of this – 18 per cent of total global emissions – comes from livestock.

The tendency for populations to consume more animal products as they become richer has been strong. Predictions based on 'business as usual' assumptions are for a doubling of global livestock production by mid century, mainly in response to rising incomes in low- and middle-income countries.

But it will not be possible for this business to continue 'as usual'. The only geopolitically feasible path to dietary sustainability is 'contraction' of ecologically disruptive production for high-income countries to make room for some upward 'convergence' in low- and middle-income countries.

Global average meat consumption is now about 100 grams per person per day. This is

consumption in the economic sense of 'using up' and includes waste. The corresponding level of intake is probably about 70 to 80 grams per day. If, by 2050, the population increases by 40 per cent and mitigation (reduction in GHG emissions per unit product) improves by 20 per cent, then mean global meat consumption

would need to fall slightly to around 90 grams per day. This means more than halving average consumption levels in high-income countries.

Achieving these modest but necessary objectives will require radical changes. Reducing consumption of red meat, which makes the heaviest environmental

demands, will help. Within high-income countries, an appreciable minority already have a pattern of low red meat consumption. This could be generalized to the whole population.

Reducing consumption of red meat is also likely to bring health benefits, yielding a double dividend for those who make the change. A large United States National Institutes of Health-sponsored study has compared high and low red

meat consumers (who turned out to have similar white meat intakes). The low consumers enjoyed a mortality advantage of about one quarter.

If our planet can only sustain a limited number of livestock, making room for higher consumption of milk, eggs and meat in low-income countries should be an important goal of global climate change policy. Undernutrition remains the leading cause of lost healthy life globally. Increasing the supply of animal foods in the diets of growing children in poor countries will be central to the achievement of further health gains. Increasing animal protein intake in adults (in countries where it has been very low) should also lower the risk of stroke - a major cause of premature death and disability.

Diet, of both rich and poor, should be central to climate change policy.

THE FINAL WORD

John Powles explains why the diets of the rich and the poor are central to climate change policy



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