Water Management Sidelined in Copenhagen

Claudia Ciobanu Copenhagen

Over a million people have been affected by cyclones hitting the coastal areas of Bangladesh over the past year. Hundreds of people died and tens of thousands of homes were destroyed.

According to Ainun Nishat, Senior Advisor on Climate Change at IUCN (International Union for the Conservation of Nature) Asia, the biggest problem is the unpredictability of weather patterns, which makes it very difficult for governments to make long-term plans on how to assist people.

"As the planet warms up, this will be one of the certain impacts – the speeding up of the hydrological cycle," writes a November report of the Stockholm International Water Institute. "Even so, we don't know much about how that vapour will behave, where it will condense and form rain, and how much will evaporate back into the atmosphere."

The impacts of climate change can be best observed in the water cycle, said Mike Muller from the Global Water Partnership, speaking during the third day of the Copenhagen COP15 conference.

However, while most decision-makers acknowledge this and the opening ceremony of the Copenhagen Conference was replete with statements on the importance of water management, experts such as Muller criticize the fact that water is only marginal in the draft agreements being discussed these days in Copenhagen.

In the words of Karin Lexen from the Stockholm International Water Institute, "this is cognitive dissonance on the part of policy-makers".

Ainun Nishat said that the government of Bangladesh has already invested 100 millions of its own money for adaptation to the effects of climate change as reflected in violent weather phenomena.

But the country certainly needs international help. According to Nishat, it has been estimated that Bangladesh would need between 5 and 10 billion dollars for investments in infrastructure that would handle the effects of climate change.

As clear from Nishat's presentation, Bangladesh would surely benefit from more focus being placed on water management measures in the agreement on adaptation to be reached at Copenhagen.

But Karin Lexen, analyzing the latest draft of the adaptation agreement being discussed in Copenhagen, said water management continues to be a side issue even though water has finally been mentioned in the negotiated texts.

Lexen explained that satisfying water management would need a regional approach to adaptation rather than a state-centered one, as promoted by the national delegations. Rivers, floods and droughts know no borders.

The expert also insisted that "integration of water with land and forest management is key to effective adaptation". Instead, the proposed draft looks at water from a sectoral perspective, ignoring the interconnections between water and land, livelihood, energy, transboundary relations and gender.

Adaptation funds can be allocated more effectively if the integrative approach is pursued, argue water experts like Lexen and Muller. "We do not have enough resources to work on different tracks," believes Muller.

Good water management can improve the livelihoods of the most vulnerable in the world: poor farmers could get better information about climate appropriate crops and more efficient irrigation systems, the urban poor could have access to more resilient water and sanitation systems, families in coastal areas might have better safeguards for their homes

But it seems likely that the Copenhagen Conference will end without any answer on how these ideals can be translated into concrete measures and pledges that the 192 countries attending COP15 can assume.

CLIMATE CHANGE: Scaling Down Transport Is Tabu

Claudia Ciobanu Copenhagen

"If we do not tackle transport, we will not tackle climate change," said Ivo de Boer, General Secretary of UNFCCC. But experts think that the Kyoto Protocol did not bring any progress on reducing emissions from transport and that Copenhagen might bring too little, too late.

Transportation is responsible for 13 percent of total greenhouse gas emissions (GhG) globally and for 23 percent of carbon dioxide (CO2) emissions. 73 percent of the carbon emissions are from road transport only.

But in the Copenhagen COP15 conference, there is too little discussion on how to reduce the impact of transportation on the environment, said Holger Dalkmann from the Center for Sustainability of the UK Transport Research Laboratory (TRL), speaking during the third day of the Copenhagen negotiations at the Danish Technical University (DTU).

Dalkmann said that negotiations on aviation and international shipping are taking place under the framework of COP15. But road

transport, responsible for over three times as many emissions as aviation and shipping together, is largely left untouched.

Road transport is, in a sense, tabu for negotiators. "We live in a world that has a fetishism for large-scale transport infrastructure," commented, in a similar vein, John Whitelegg from the Stockholm Environment Institute also speaking at DTU.

Annual subsidies for transport given in the European Union (EU) amount to over 240 billion euros annually, said Whitelegg. And the amount excludes funds given for parking development. In the UK only, Whitelegg calculated, the total area of parkings around the country equals the surface of the three largest citites, London, Manchester and Birmingham.

Over the past 17 years, emissions from transport in the EU rose by 28 percent. And large developing countries, like China, are rapidly following in the footsteps of the US and the EU in favoring large infrastructure for transport.

With such a track record, how can we expect countries signing the Copenhagen agreement -- no matter how unambitious it may evolve to be - to stick to their commitments to reduce emissions?

"We need a new type of mobility, a paradigm shift away from our love affair with big transport infrastructure and fast traffic," said John Whitelegg.

And, added Dalkmann, "developing countries must not follow the Western model of development, but leapfrog their way to low-carbon development."

These experts believe that, without a massive rethinking of city planning and a radical turn towards means of transport that do not rely on fossil fuels, climate change cannot be addressed properly.

The oil peak will not in itself lead to the reduction of emissions from transport, thinks Dalkmann, because the world is already turning to other fossil sources, for example sand oil, "which is even dirtier".

Whitelegg and a team of researchers at the Stockholm Environment Institute have devised "the Zero Carbon Project" to illustrate how transportation in UK cities can become carbon-neutral by 2050 (the calculations show a zero-carbon result if aviation and shipping are left out).

The specific feature of this research is that it proposes a strategy towards zero-carbon transport by starting from addressing demand - "distance is now a consumer product", says Whitelegg - and city planning, rather than taking technology as the starting point. Technology is certainly involved but the founding premise is that the current paradigm of organizing city life must change.

Among the core elements of this strategy towards zero-carbon are: giving up subsidies for transport infrastructure, strong fiscal signals of the polluter-pays type, electrifying railways 100 percent, creating strong resilience models and returning to short-distance city models. Increases in prices of fuel by 5 percent and a significant rise in the cost of air fares must be accepted.

This may seem like a radical vision, but the authors of the study make the point that such ideas only seem utopian because of the shortsightedness of politicians.

"Most policy-makers share the behavioral pattern of a rabbit caught in the front lights of a car," commented Whitelegg. He added that research shows that 85 percent of the public would prefer environmentally-friendly means of transportation, while politicians perceive this preference to be much weaker.

Encouraging signs exist, added the expert. The promotion of bicycle use in many European countries, the use of congestion charges in cities like London and Stockholm, or the introduction of a tax on companies proportional to the number of parking spaces they have (used in Nottingham, UK).

Can the Copenhagen talks bring a push in the right direction? Holger Dalkmann pointed out that Kyoto has not been of much use for greening transport. Out of 1,699 projects registered under the Kyoto Clean Development Mechanism, only 2 were for transport.

"But the negotiations in Copenhagen can be a new opportunity," Dalkmann said. A framework for creating National Appropriate Mitigation Action plans by countries will be created. And adaptation, mitigation and climate technology funds will be made available.

However, the expert explained that this money will be largely for capacity and institution building. He further warned that funds available through the Kyoto mechanism were difficult to access, not in the least because of methodological complications. Even if the Kyoto patterns are not repeated with the funds under Copenhagen, effects are likely to appear only after 2012, concluded Dalkmann.

CLIMATE CHANGE: Careful with Carbon Trading, Warn Activists

Claudia Ciobanu Copenhagen

Many environmental activists think that, even if the best possible deal is achieved after the 2-week talks on climate change in Copenhagen, the outcome will not bring climate justice.

Under the best possible scenario, the Copenhagen talks would result in two protocols: an amended Kyoto Treaty setting up more drastic emission reduction targets for developing

countries and an additional agreement which would announce targets for countries not having signed Kyoto, most notably the US, and add action plans for major developing nations as well as concrete measures to help developing countries adapt to climate change.

But activists worry that, no matter how ambitious the final deal is, some of the mechanisms promoted during the Copenhagen talks are faulty.

One of the problematic areas is represented by the financing mechanisms envisaged to assist developing countries green their economies and deal with the negative impacts of climate change.

According to the United Nations' Department of Economic and Social Affairs, developing countries would need 500-600 billion US dollars annually for measures of mitigation and adaptation.

And the money should come from developed countries, which have a historical responsibility to the rest of the world for being the major contributors to climate change.

However, Friends of the Earth (FoE) argue that, rather than face up to this responsibility, "developed countries are attempting to count private financial flows – through offsetting – as meeting their own emissions reduction commitments, despite emissions cuts and additional public funding (for aid to the developing countries) being distinct obligations."

According to the Clean Development Mechanism established in the Kyoto Treaty, industrialized countries which have committed to reduce their greenhouse gas emissions can invest in projects that reduce emissions in developing countries as a means compensate for cuts not made at home.

The environmental group emphasizes that most of the money for developing countries will not come in the form of public funds given by developed states but from the monetization of carbon credits accumulated through offsetting.

Offsets are achieved by a government or corporation when investing in renewable energy or other type of projects which will reduce carbon emissions.

These can be then sold on the carbon market, a practice encouraged by the Kyoto Protocol as one of the principal means to stimulate emission cuts.

At present, 100 million dollars in carbon credits exist in a global fund for adaptation in the developing countries, a small fraction of the total amount needed.

The fear of environmental groups is that, by making use of carbon offsetting and trade, governments of developed countries can eschew their double responsibility of significantly reducing domestic emissions and of providing aid to developing states.

According to Kevin Smith from Climate Justice Action, in some cases the offsets actually help companies perpetuate their polluting practices. "In the UK, new polluting infrastructure has been built with money obtained through the European Union Emission Trading Scheme," the activist told IPS.

How it works, as Smith explains, is that a petrochemical company in India, for instance, can reduce emissions in one of its plants by simply responding to normal business imperatives. Then, it sells the offsets to a Western company and, with the income, goes on to build another polluting chemical plant. "This scheme can in some cases lead to more pollution", thinks Smith, "and it is a way to ensure the flows of money go to corporate entities".

"There is really no proof that those cuts would not have happened anyway and the offsets are not a reward for business as usual," Francesca Gater from FoE Europe told IPS. The Kyoto Protocol envisages the verification of whether the cuts are indeed stimulated by the carbon credits system, but activists argue this is nearly impossible to check.

"The carbon markets cannot really be trusted to reduce emissions," Smith says. "They will lead to financial corruption of the type that has caused the recent global economic crisis and they are just a means to create new markets for capital."

A need to regulate carbon markets has already been acknowledged by most countries. However, according to FoE, "most developed countries are positioning the World Bank to assume a controlling role for climate finance. This is despite the World Bank's poor environmental and social track." A more transparent and accountable body should be given this task, argues the group.

Francesca Gater says FoE wants to see all developed states (including the US) committing to emissions cuts of 40 percent by 2020 on 1990 levels and a new financial mechanism under the authority of the UNFCCC (the United Nations Framework Convention on Climate Change) to adequately finance adaptation and mitigation in developing countries from public funds of developed states.

"If all the political energy dedicated to the creation of complicated carbon trade mechanisms were used to address real issues, such as ending the reliance on fossil fuels and achieving equity between the global North and South, we would have hope," said Kevin Smith

CLIMATE CHANGE: Brazil Defends Biofuels

Claudia Ciobanu Copenhagen

The Brazilian government and its business and NGO partners tried to persuade participants in the Copenhagen Climate Change Conference that biofuels are the only real alternative if the world wants to reduce emissions fast.

Brazilian authorities have much to boast about. Over the past 30 years, since the country started its ethanol programme, over 800 million tons of carbon dioxide emissions have been avoided through replacing the use of fossil fuels with biofuels.

Brazil is the world's largest producer and exporter of ethanol fuel. Sweden, for instance, which has as a target to become fossil fuel independent by 2030, is currently importing most of its biofuels from Brazil.

Speaking in Copenhagen, representatives of the Brazilian government tried to show that not only is biofuels production the best way to reduce greenhouse gas emissions but ethanol production can be used as a means to combat poverty.

The Brazilian government is currently promoting a scheme of social micro-distilleries to be developed in rural areas in order to provide additional income to families.

And the country constantly shows its readiness to share its rich experience with biofuels with countries from the developing world.

But biofuels have come under serious attack over the past years. As a result, the European Union has backed away last year from a commitment to introduce a 10 percent mandatory quote of biofuels in all transportation by 2020. The target now refers to a 10 percent renewable energy quota in all fuels.

Biofuels are being blamed for negatively affecting food security in developing countries, as lands that used to be cultivated with food crops are increasingly being turned into plantations of crops such as sugar cane or soybeans used for biofuels.

Additionally, in the particular context of Brazil, environmentalists have pointed to biofuels production as one of the key reasons for deforestation in the Amazon.

The Brazilian delegation tried to address these criticisms in Copenhagen. "We were told that biofuels lead to deforestation in the Amazon, but the ethanol production areas are 3,000 km away from the Amazon!" commented Jose Migues, representing the Brazilian Ministry of Science and Technology. "Then we were told that biofuels displace something which then displaces something else which then displaces forests," Migues added.

Migues was referring to the Indirect Land Use Change (ILUC), a phrase describing the indirect effects of biofuels production, which through its expansion pushes other human activities towards the Amazonian forests. In the Sao Paolo area in Brazil, for instance, where most of the ethanol production is concentrated, the development of the ethanol industry has coincided with a significant decrease in cattle rising and agricultural production.

"But is it fair to say that all of these activities are now moving to the Amazon?" asked Thelma Krug, another representative of the Brazilian Ministry of Science and Technology. "There is much room for making agriculture and cattle rising more efficient in Brazil."

The question of where the agricultural and cattle rising producers from the Sao Paolo area moved to remained unanswered in Copenhagen.

And the planned expansion of the ethanol business in Brazil rings alarm bells as regards the potential for displacement. At present, over 6 million hectares of sugar cane are planted in the country. But, speaking in Copenhagen, Thelma Krug said "in Brazil there are 64 million hectares available for expanding sugar cane production."

But Krug also said that the government is currently working on setting up a National Deforestation Monitoring Programme which will make possible the satellite monitoring of forests and keep deforestation under check.

And a representative of environmental NGO Nature Conservancy from Brazil spoke highly of the thoroughness of the legislation in place to protect forests.

Referring to how much of a threat biofuels production is to food security, Andre Correa do Lago, Director General of the Energy Department in the Ministry of Foreign Affairs, stopped short of a clear denial that biofuels are to blame for the 2008 rise in food prices.

"Food security is one of the main concerns of our government," he said. "Biofuels, like anything other human endeavor, can be done in a better way. So we should not use the worst case as a general reference point."

Efforts are certainly made in the country to remedy some of the negative aspects of biofuels production. Legislation is being discussed at the moment to prevent biomass burning, which is responsible for high greenhouse gas emissions. And much of the waste, especially in the case of biofuels produced from bagrass (used increasingly more), is being used as fertilizers instead of the polluting nitrogenous fertilizers. The production process is made increasingly efficient, with nine units of energy from bagrass being now produced with the spending of one unit of fossil energy.

In the end, even the optimistic Brazilian delegation had to admit

that "biofuels are no silver bullet". Still, they insisted biofuels are the best solution for developing countries, as long as thorough studies of the local conditions are completed to understand the effects of this type of production