

PEOPLES WORLD CONFERENCE ON CLIMATE CHANGE

Establish international climate justice tribunal

The agreements that emerged from this First World Conference of the Peoples on Climate Change will not be left in oblivion, according to the sponsors of the conference. They will be raised robustly at the Mexico UN Conference on Climate Change this December.

HARUN UR RASHID

It seems media has not given importance to the the People's World Conference on Climate Change on 19-22 April in Bolivia as it deserved.

Bolivia's small town, Cochabamba, is a far cry from Copenhagen. But it has been the latest gathering place in the ongoing effort to shape an effective global response to climate change.

The organisers of the conference argued the poor nations were left out of dealings at Copenhagen conference last December. "The only way to get negotiations back on track not just for Bolivia or other countries, but for all of life, biodiversity, our Mother Earth, is to put

civil society back into the process," said Pablo Solón, Bolivia's Ambassador to the U.N.

NGOs, scientists, activists, indigenous leaders, and representatives of 60 to 70 national governments have participated in the event -- in all, about reportedly 20,000 attendees from 110 countries.

It is not known whether any NGO or any representative from Bangladesh attended the conference.

Speakers included NASA climate scientist James Hansen; actor, director, and activist Danny Glover; journalist and activist Naomi Klein; Indian environmentalist Vandana Shiva; Egidio Brunetto, a leader of Brazil's Movement of Landless Rural Workers; Lumumba Di-Aping, who

served as chief negotiator for the G-77 group of developing nations at Copenhagen.

Speakers from all walks of life talked about "climate justice" and "ecocide"-- new words suggested at the conference.

The conference was divided into 17 working sessions to discuss a number of issues. These included

- structural causes of climate change,
- rights of Mother Earth,
- a world referendum on climate change,
- climate refugees,
- environmental debt,
- the Kyoto Protocol, and
- transfer of technologies and action strategies.

On 22nd April, the conference agreed to call for the halving of greenhouse gas emissions by 2020 at the next UN climate meeting in Mexico in December.

The hope is that the Final Declaration and the conclusions of each and every one of those issues can influence the next UN Climate Conference in Mexico in December.

To address climate change on a global level, four suggestions were considered and they were as follows:

- An international court to prosecute transgressions against the environment. The goal is to establish an International Climate Justice Tribunal or International Environmental Court within the UN framework, modeled on the International Court of Justice, that will seek to enforce nations' commitments to reduce greenhouse-gas emissions.
- International environmental lawyer Polly Higgins put forward a related proposal to include "ecocide" in the list of crimes against peace, so that cases could be tried at the International Criminal Court.
- Climate reparations or compensations from developed nations for developing nations. While industrialised nations are historically responsible for causing climate change through their greenhouse-gas emissions, poorer nations are more likely to feel the effects and are less able to fund and undertake changes to adapt to climate change.
- The idea of reparations (some call it 'historic debt') was widely discussed in Copenhagen and endorsed by well-known figures like Naomi Klein as well

as organizations like Jubilee South and Focus on the Global South.

- Development and transfer of clean technology by industrialised nations to developing countries -- the technology necessary to adapt to climate change and produce and use energy sustainably and efficiently.
- A Universal Declaration for the Rights of Mother Earth, comparable to the 1948 Universal Declaration of Human Rights.

It is noted that this year, the UN General Assembly approved April 22 to be observed as the "International Mother Earth Day" every year.

"One of the most important implications is that it would enable legal systems to maintain vital ecological balances by balancing human rights against the rights of other members of the Earth community," write Solón and environmental lawyer Cormac Cullinan.

The proposal of Brazilian theologian, Frei Betto, who stated this kind of meeting should be held every two years, was supported widely at the conference. Venezuelan President Chávez report-

edly said "We will travel there (Cancun in Mexico) to raise our voice, because we know that our voices are the voices of our peoples"

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Bangladesh is one of the top vulnerable countries to climate change and the adverse impact on the country will be catastrophic because of convergence of climate change, poverty and large population.

Given the huge challenge ahead of Bangladesh, the suggestions of the People's conference are very relevant for the country and Bangladesh government and NGOs may take note of the outcomes of this conference in presenting the country's case at the UN Conference in Mexico in December.

Barrister Harun ur Rashid is a former Bangladesh Ambassador to the UN, Geneva.

KUAKATA BIODIVERSITY

How will it respond to predicted climate change?

Forty percent of algae population may die due to climate change by the end of this century. Sea-level rise will cause erosion of turtle nesting beaches. The plant parts of Fatra and Gangamati mangrove vegetations provide nourishment for young fish, shrimps, and crabs. In the changed environment, only a handful would survive.

DR. MD. MIZANUR RAHMAN

KUAKATA, locally known as Sagar Kanya (daughter of the sea) is located in the southwest of Bangladesh. Next to Cox's Bazar it is the second most famous sea beach of this country. And Kuakata is one of the rarest sea beaches of the world, which has a rare scenic beauty offering the full view of the rising and setting of crimson sun in the water of the Bay of Bengal. This 30 km long and 03 km wide beach has a typical natural setting and sandy as gently sloping into the Bay of Bengal.

It is 70 km away from Patuakhali district headquarters and 320 km from the capital Dhaka. The sight is characterised by an excellent combination of eye-catching natural beauty, sandy beach, blue sky, huge expanse of water of the Bay and evergreen forest. The unique customs of the 'Rakhyne' tribal families and Buddhist temple of about hundred years old indicate the ancient tradition and cultural heritage in the area.

Kuakata is a unique example of co-occurrence of different ecosystems. There are remnants of mangroves in this beach. The line of coconut trees has increased the scenic beauty of this seashore. The nearby Fatra and Gangamati mangrove forests (part of Sundarbans) have enriched the biodiversity of this territory. The tamarisk (Jhau) forests have added more attraction to this beach.

There are uneven and mixed patches of trees dominated by Keora and Gewa. The pioneer species Shundari trees are occasionally distributed in these forests. Gola (firewood) and Hantol are the indicator plant species of these ecosystems. Kakra and Pashur have become rare species

though they were abundant few decades back. Sporadic patches of Hogla (a robust herb) and Golpata exist throughout the area. The plant species composition differs greatly within the forests and the canopy closure is a mosaic.

The forests are characterized by several small patches of mature trees, shrublands, isolated old trees and denuded sands. These forests are habitats of rhesus monkey, wild boar, spotted deer, snakes, forest owl, fox, wild fowl and lizards. Mangroves as well as the beach are the home to turtles, molluscs, crabs, sea weeds and sea birds, and provide excellent nurseries for marine fishes like Hilsha, Hamilton (Baila), Asian Sea Bass (Koral), Black Sea Bass (Bhol Koral), Silver Pomfret (Rupchanda), dolphins and shrimps.

Kuakata is a virgin abode of migratory winter birds. It is the home of Cotton Pygmy-goose, White-winged duck, Sarus crane, Eurasian Thick-knee, Indian Cormorant, White-bellied heron, Pacific Reef Egret, Malayan Night heron, Glossy Ibis, Woolly-necked stork, Asian Openbill, Indian Pond heron, Black-bellied Tern, Gull-billed Tern, Spot-billed duck, Lesser Whistling-duck, Watercock, etc. Migratory birds like Common Shelduck, Ruddy Turnstone, Sanderling, Great Knot, Long-billed Ringed Plover, Crab Plover, Caspian Tern, Spot-billed Pelican, White Stork, etc. come in winter from the temperate regions.

The climate change has already affected the coastal ecosystems of the northern hemisphere. This is also a region of transition between the freshwater of the rivers (Payra, Bishkhal and Agunmukha) and the saline water of the Bay of Bengal.

The luxuriant biodiversity of Kuakata region has strong interactions with marine environment. The environmental param-

eters with the direct influences on mangroves (Fatra and Gangamati forests), Coconut orchards, Jhau Bans and the beach in terms of global climate change are sea-level rise, cyclones, rise in temperature and salinity.

The species composition of Fatra and Gangamati forests may undergo major change, depending on the severity of predicted climate change impact.

Sea level rise, increased salinity and inundation will change the forest's nature. One-metre rise of sea level will destroy the whole ecosystem. Shrub-land and dune vegetation will be submerged. The occasionally distributed pioneer species Sundari will be totally replaced by Keora and Gewa. The mixed stands will be converted into pure stands and old grown forests will be changed into new successional forests. Sundari, Kakra and Pashur will be highly vulnerable even in low level sea rise (8-9cm/100 years) while, they will be extinct from these ecosystems in medium level sea rise (9-12cm/100 years).

Keora and Gewa will be able to keep pace with low level sea rise. In high level sea rise (>9-12cm/100 years) all existing plant species will be lost except aquatic plants. The repetition of cyclones like Sidr and Aila will degrade the habitats and the affected forests will be unsuitable for natural regeneration. Sediments carried by storm surges will cause plants mortality by interfering with root and soil gas exchange. Alien exotic plant species will be rapidly suppressing native flora.

Coconut palm will be highly affected by high temperature. Pollen viability will be reduced with the increase of temperature affecting reproductive development. Deformation of fruits will occur resulting in small number of nuts, empty nuts or elongated nuts.

Predicted climate change will be congenial for Jhau but the introduction of invasive species may cause local decline, and even extinction of tamarisk. Invasive species will change community composition and ecosystem functioning.

The monkey, spotted deer, wild boar, fox and lizards will face shortage of foods. They, often in groups will move to the locality by swimming rivers and canals for foraging foods and sweet water. Many of them will die of drowning or caught by

crocodiles and the people.

Most of the fish species and shrimps utilize fresh water for spawning and juvenile feeding. The Hilsa needs sweet water to lay their eggs and the hatchlings move towards marine water where they attain adulthood. The breeding habitat of most of the fish species and other crustaceans will be destroyed with the intrusion of salinity. The migration of certain fish species out of their natural habitats will cause food shortages for thousands of people.

Forty percent of algae population may die due to climate change by the end of this century (Muller 2009). Sea-level rise will cause erosion of turtle nesting beaches. Higher sand temperature will lead to changes in sex ratios or prevent eggs from hatching. Huge rainfall may raise ground water tables, thereby flooding nests of turtles. Sea acidification will decline the abundance of mollusc. The breeding place of crabs and shrimps will be destroyed due to sea level rise.

The plant parts of Fatra and Gangamati mangrove vegetations provide nourishment for young fish, shrimps, and crabs. In the changed environment, only a handful would survive. Mangrove trees also provide habitats to young fish, shrimps, crabs and molluscs. The mangrove trees provide not only support to countless food webs; they are also indirectly responsible for the survival of the most primary planktonic and epiphytic algal food chains. High salt concentration will make the ecosystem unfavourable for most of the species.

Ground birds will be severely affected by losing their habitats, nesting and breeding sites. High sea temperature will affect seabirds' foraging success, growth patterns and reproductive potentiality. Over all global warming will affect the abundance and spatial distribution of birds. Cyclones will cause large-scale mortality of adults, exposure of eggs and young, starvation or structural failure of nests. Climate change will affect the abundance and availability of food (i.e., arthropods) which influence nesting survival and the frequency of double-brooding and hence seasonal fecundity.

How to mitigate

- Monitoring of biological resources and impact of climate change to adopt



- appropriate biodiversity management
- Emphasising on adaptive or community based conservation programme
- Combining adaptation and mitigation measures
- Planned adaptation options to climate change will consider three approaches namely planned retreat, accommodation, and protection
- Developing alternative livelihoods for the fishermen
- Initiating conservation programme for the migratory birds
- Declaring the Fatra and Gangamati mangroves as natural forest reserves
- Protecting natural regeneration to promote natural succession in the denuded lands Fatra and Gangamati mangroves
- Creating of public awareness
- Strengthening research work on the impact of climate change
- Emphasising on ex-situ conservation of occasional and rare species like Sundari, Pashur and Kakra
- Establishing an information system of biodiversity
- Raising funds for conservation programme
- Restoring and maintaining mangroves

- to minimise erosion
- Designing and establishing sea-level / climate modelling network
- Establishing database systems for biological resources
- Integrated coastal and marine management
- Assessing coastal vulnerability and risk to climate change
- Increasing waterfront setbacks in beach front areas
- Education on climate change and emergency preparedness at all levels
- Developing coastal infrastructure
- Protecting existing mangroves against encroachment and cutting
- Afforestation and reforestation by salt tolerant species like Gewa and Keora
- Establishing mechanisms to promote carbon uptake
- Digging out thickets of invasive plant species from the Jhau forests
- Gap filling by native species in the Jhau forests and mangroves to protect invasion by exotic species

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For liveable and sustainable cities

World Cities Summit is a premier gathering of practitioners, policy makers and leading experts in their field to identify innovative solutions to the most pressing challenges faced by cities worldwide. The inaugural summit held in June 2008 was immensely successful with over 800 senior delegates including leaders, mayors, policy makers and the civil society. The second Summit is going to be held this year also in the month of June with an offer of a strategic platform for finding new perspectives and innovative ideas for sustainable future of the cities.

MD. MAHFUJUR RAHMAN

"LIVEABLE and Vibrant Cities" was theme of the inaugural world cities summit. The discussion topics emphasized the challenges of growing cities. Various discussions and speeches were presented on issues like sustainable urban infrastructure development, maintaining clean environment, good quality of life and economic competitiveness.

The first ever World Cities Summit was held in Singapore on 23-25 June, 2008. Significance of conference was that prominent and internationally-renowned speakers met and shared their experiences. It fostered promotion of insights into effective policy formulation and implementation -- what can bring about a long term wave of change in the urban environment of the world.

Objectives of conference were:

- Clear insights into good governance strategies and effective urban development solutions through discussions, exchange of ideas and analysis of successful case studies.
- An excellent opportunity for networking amongst top officials and high-level

policy makers. The event provided a platform to showcase achievements and identify global opportunities.

Who arranged?

World Cities Summit 2008 was organized by Singapore's Ministry of National Development, the Singapore Civil Service College and the Lee Kuan Yew School of Public Policy of the National University of Singapore at the Suntec Singapore International Convention and Exhibition Centre.

On the occasion Tan Tee How, Permanent Secretary of Singapore's Ministry of National Development, said "Today, half of the world's population is already living in cities and the trend for further population growth, urbanization and industrialization will continue. Cities, and the way we plan, build and manage them, will determine how far the world can achieve sustainable development and tackle environmental problems like climate change. Mindful of its limited resources, Singapore has embraced long-term urban planning from the onset to ensure that both economic growth and quality living environment are sustained. Through World Cities Summit, we hope to bring together like-minded cities and stakeholders to share

their insights and expertise as well as discuss the challenges faced in achieving sustainable development."

"World Cities Summit will be an excellent platform for public policy practitioners to discuss and to share experiences on how to tackle the challenges of creating cities that are economically vibrant and livable. The Summit will be a good platform to share learning experiences and perhaps, even spark off some new ideas," said Chan Heng Kee, Dean and Chief Executive Officer of the Singapore Civil Service College.

Professor Kishore Mahbubani, Dean of the Lee Kuan Yew School of Public Policy, noted that, "Asian cities are becoming the new centers of growth in a dynamic and exciting region. The challenge for national and city leaders is to ensure that these growing cities carry on humming -- to keep the water clean, the air clear and the traffic flowing; and more than that, to provide a high quality of life and a good livelihood for the people living in them. World Cities Summit creates enormous opportunities for new ideas to emerge on how Asian cities can be better managed and developed."

Asian cities at stake

With Asian cities growing by over 100,000 people a day (ADB), 1.1 billion people who will move to cities in Asia over the next 20 years is a task of "magnitude never before attempted by humanity." A new report published by ADB, *Managing Asian Cities*, outlines how the region's cities can meet the enormous challenges they face. The challenge is underlined by the unprecedented speed of urbanization in Asia. While London, for example, took 130 years to grow from 1 million to 8 million residents, Asian cities are fast attracting a "tidal wave of humanity."

With population expanding rapidly over the last 50 years, many Asian cities face deteriorating sanitation and environmental conditions, inadequate housing and

infrastructure, and other problems. ADB recognises that urban issues require integrated approaches that specifically target the poor, promote economic development, treat cities as a living ecosystem, and foster the involvement of private sector and civil society.

Managing Asian Cities aims to provide a useful management resource, canvassing key issues and pointing managers to appropriate responses to problems; and, second, provide the initial step in a new phase of ADB's continuing support to Asian cities under its Strategy 2020. The study reviews the existing situation and presents options for improved urban management practice. Throughout the report, when options for solving problems are suggested, "we distinguish between cities of differing wealth, size, and capacity. We also focus on a city's self-reliance, suggesting ways in which different types of cities can take on more responsibility for their own development. Last, we focus on how to establish enabling frameworks for urban development. Rather than suggesting prescriptive interventions, we concentrate on government as less of a doer and more of a facilitator for the community and private sector."

The report says a "wholesale rethink" is needed on how cities are laid out to reduce the use of private vehicles. "How can new cities be planned in an energy-efficient way and how can existing ones be structured to minimize the need for movement." New approaches are also needed on energy use, the management of household rubbish and other solid waste, sewage, water supply and other urban infrastructure issues. *Financing urban environmental improvement is vital for sustainable urban development. According to ADB statistics "each year, there is a \$30 billion shortfall in urban infrastructure investments, leading to greater deterioration of existing infrastructure and worsening urban environments."* What is next?



Now the theme for the second summit is Liveable and Sustainable Cities for the Future. World Cities Summit 2010 will be a four-day event focusing on leadership and governance eco-friendly and liveable cities, and harmonious and sustainable communities. Through the exchange of ideas and knowledge, cities can learn from each other to create a good environment that is sustainable and forward-looking. The coming summit expected to be held from 28 June to 1 July will comprise a high-level summit, plenary sessions, networking forums and technical workshops. Through the exchange of ideas and knowledge, cities can learn from each other to identify practical, scalable and replicable solutions to the challenge they face.

To conclude I want to quote from the speech by Mr. Lee Hsien Loong, Prime

Minister of Singapore delivered at the first world city summit, "The sustainable development of cities is one of the key challenges of our time. Good governance is vital in tackling this challenge, and achieving the right balance between economic growth, environmental protection, and high quality of life for urban dwellers."

The stakes are high and we have to get it right early. The welfare of our peoples depends on how well we harness our collective ideas, knowledge and capabilities. Countries and cities should work together, so that we make progress towards cleaner, more resource-efficient and more sustainable cities for the future.

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