

## Climate change and media\*

Are unseasonal rainfall and temperature, landslides, cloud bursts and frequent floods due to climate change or mismanagement of resources, or both? This is difficult to answer. More science is therefore needed and issues need to be written about more. Scientists, although open to talk, are sometimes worried about being misquoted by the media. Confidence on both sides is thus needed to build a dialogue between the two.

To brief the media for reporting on future climate talks, the Centre for Science and Environment (CSE), New Delhi, organized a workshop where negotiators, policy makers and scientists were invited to interact with the media. About 75 media representatives were selected to attend the workshop from across South Asia. Journalists and editors from India, Bangladesh, Nepal, Pakistan, Bhutan and Sri Lanka were briefed, ahead of the United Nations Climate Change Conference at Cancun, Mexico. Climate change has been a widely debated topic and the workshop seemed to fit the need for the media to be acquainted with the right information on the science and politics of climate change. Contested issues such as black carbon, carbon pricing and funding for developing countries were discussed. The workshop also brought to light environmental issues in the Indian subcontinent from a journalist's point of view.

Sunita Narain (CSE) talked about the politics of climate change: (i) An increasing understanding that South Asia will be the victim of climate change impacts. (ii) The North wants to shift the burden of adaptation/mitigation for reducing emissions to the South. (iii) India is already trying to cut emissions, but it is compromising its position in international negotiations. Narain urged the media to question that when the world cannot reduce its emissions, can India do so and to ask what low carbon growth means and what will it cost? She also held the view

that Western media is weak and reports that China is the biggest polluter without recognizing the fact that China has 20% of the world's population. It ignores the fact that the US, being the second largest emitter of carbon dioxide and historically the largest emitter, has only 5% of the world's population. There seems to be a 'climate injustice' because of the call for removing historical emissions, the distinction between Annex-I (past and current polluters) and non-Annex I (developing) countries, and efforts to destroy the Kyoto Protocol, mentioned Narain.

R. Rashmi (Ministry of Environment and Forests (MoEF), Government of India (GOI)) while picturing the post-Copenhagen scenario, said that one must give credit to the Copenhagen conference for creating public awareness about climate change. Shyam Saran emphasized the role of clean energy technology for developing countries, which he said, requires resources that could come in the form of funds from developed countries, not in the form of aid, but entitlement. The promise of the transfer of US\$ 30 billion to developing countries is not being fulfilled by the developed countries, lamented Saran.

Chandra Bhushan (CSE) emphasized on carbon budget, stating that developed countries have exhausted their budgets if equal rights of countries to emit are to be considered. He informed that CSE was among the first few organizations to come up with the formulation of per capita emissions in 1991. He suggested that if India wants to remain environmentally responsible, it should have a 'low carbon economy'. He then presented an overview of the report 'Challenge of the New Balance', where six sectors – power, steel, cement, paper, fertilizers and aluminium – have been analysed for their energy efficiency and emission intensity. Cost is the factor that governs how low carbon technologies are deployed in the power sector in India. This study concludes that India's industries are more efficient compared to those of some other countries in terms of emission and energy efficiency.

A climate model helps test a hypothesis about climate change. R. Krishnan

(Indian Institute of Tropical Meteorology, Pune) highlighted the use of a high-resolution coupled ocean-atmosphere model for regional climate change projections. J. Srinivasan (Indian Institute of Science, Bangalore) clarified that the impacts of black carbon need to be studied in-depth before any conclusions about its influence on climate or glacier melting are made. Major issues to be looked at are the role of black carbon in atmospheric stability and its effect on the monsoon, role of aerosols in climate change and the impact of black carbon on Himalayan glaciers.

Retreat of Himalayan glaciers is a widely reported topic in the press. D. P. Dobhal (Wadia Institute of Himalayan Geology, Dehra Dun) said that though retreat of glaciers is a natural phenomenon, it has been accelerated after 1980. Debris-free glaciers are sensitive to climate and retreat can be considered as an indicator of climate change. An important characteristic of Himalayan glaciers is that they are covered with debris and hence are less prone to solar radiations.

Tashi Morup (journalist, Ladakh) presented the history of floods in Ladakh. Floods have occurred in Ladakh due to glacial lake outbursts, but the frequency of floods has changed and floods are more destructive because settlements have increased. What is needed is the monitoring of glacier lakes for early warning against glacial lake outburst floods as a short-term measure. Satheesh Shenoi (Indian National Centre for Ocean Information Services, Hyderabad) mentioned that the rate of sea-level rise in the Indian Ocean is much larger than the global average. Global sea level was rising steadily till 2003, but is slower since 2004. According to a recent study (Han *et al.*, *Nature Geosci.*, July 2010), the sea level has decreased substantially in the south tropical Indian Ocean and increased elsewhere, because of changing surface winds.

Ramesh Sharma (Ekta Parishad, Raipur) presented a case study of Baigachak community in Chattisgarh, where 'baiga' (hill tribes who practised shifting agriculture called 'bewar') were prohibited to practise bewar after the Forest Act,

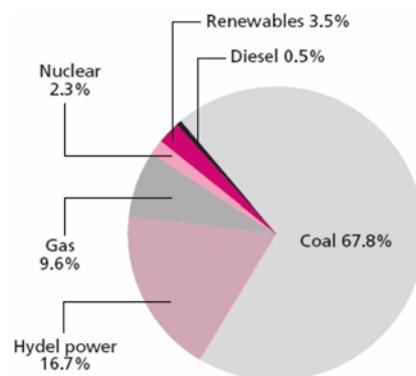
\*A report on the 'South Asian Media Briefing on Climate Change' organized by the Centre for Science and Environment, and held at the India Habitat Centre, New Delhi during 24–25 November 2010.

1864. In May 1890, the prohibition was lifted only from Baigachak. This ban on bevar by the British Government had led to the loss of biodiversity and food security. The tribe's perception of climate change due to the ban is increase of temperature, uneven rainfall, a high incidence of diseases and loss of ground-water table.

Emissions can be reduced by targeting the industry, agriculture, forests and waste. Forests can be targeted as a means to reduce emissions or for mitigation by efforts such as afforestation, reforestation, forest management, reduced deforestation, use of forest products for obtaining bioenergy and by improving wood burning cookstoves, suggested Jagdish Kishwan (MoEF, GOI). According to the UN-REDD programme (<http://www.un-redd.org/UNREDDProgramme/FAQs/tabid/586/language/en-US/Default.aspx>), Reducing Emissions from Deforestation and Forest Degradation (REDD) 'is a mechanism to create an incentive for developing countries to protect, better manage and wisely use their forest resources, contributing to the global fight against climate change' and 'REDD+ strategies go beyond deforestation and forest degradation, and include the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in reducing emissions'. There are speculations that REDD and REDD+ will take away the rights and privileges of local communities, to which Kishwan responded that adequate safeguards and regulations to prevent this from happening are in place. Shankar Gopalakrishnan (Sruti, New Delhi) presented a critique of REDD and REDD+, mentioning that the meaning and language of a policy are different, particularly in the case of forests in India. There is criticism that these two strategies will add value to some forests, particularly fast-growing trees, which absorb more carbon than they emit.

These strategies will get away with increasing pollution. He said that the data recorded on forest cover by Indian State Forest Departments differ from those by the Forest Survey of India. He added that the Greening India Mission aims to plant 10 mha of land, when this much land is not available!

Abhijit Mitra (University of Calcutta, Kolkata) suggested that 'green water' – water with triggered phytoplankton growth – may be considered under the Clean Development Mechanism Project, a 'flexible' mechanism under the Kyoto Protocol – as a cost-effective biological means to mitigate climate change. Gauri Singh (Ministry of New and Renewable Energy, GOI) talked about grid-connected and off-grid technologies in electricity generation. She praised the National Action Plan (2008) for its approach to climate change in promoting renewable energy. In the grid technology, presently wind plays the largest role, followed by biomass, hydro and solar energy. A recent initiative to increase the renewable energy in India, the National Solar Mission aims to generate 20,000 MW of grid power by 2020, and 2000 MW from off-



**Figure 1.** Only 3.5% of power generation (2007–2008) is from renewables (figure from Chandra Bhushan's presentation).

grid technology. The power generation from renewables is 3.5% (Figure 1) and the aim is to raise it to 5.6% in the coming years.

Burning of biomass has huge health effects besides the black carbon emissions. Ambuj Sagar (Indian Institute of Technology Delhi, New Delhi) threw light on the approach being followed at his institution, the idea behind which is to promote innovation rather than research and development directly. A global prize for clean and efficient cooking stoves has been announced. This approach would have benefits of cost, health and environment.

Ajay Mathur (Bureau of Energy Efficiency, New Delhi) while talking about problematic areas of energy consumption such as transportation technology and buildings, pointed out that buildings to be constructed in the next few decades have to be made energy-efficient with solar appliances. Fiscal incentive is required to bring down the cost of a technology such that it does not take a long time to reach the public at large, as it happened in the case of CFLs which became affordable in 20 years!

The presence of Jairam Ramesh (MoEF, GOI) towards the end of the workshop was most awaited by media participants, for obvious reasons, and he was loaded with questions ranging from heavy vehicles to REDD! Ramesh expressed sorrow over the fact that climate science has turned into climate politics. He elaborated upon the expectations from the Cancun meeting and mentioned about the Indian Network for Climate Change Assessment.

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