

**Round Table Discussion on
“ICT and Climate Change”**



TERI organized a round table discussion on *ICT and Climate Change* on 6 February 2008 in New Delhi to highlight the role of ICTs in adaptation to and mitigation of climate change.

The discussion focused on various activities in this domain, and examined their effective outreach. It also focused on a mechanism through which rural communities could be informed about the impending climatic variations and their effects. It was observed that though ICTs contribute to climate change, the purpose of the forum was to forge a better understanding of these tools in adapting to and mitigating climate change.

Moderator – Dr Basheerahmed Shadrach, Senior Program Officer - Asia, Telecenter.org, IDRC

Speakers

- Dr Leena Srivastava, Executive Director, TERI
- Dr Prodipto Ghosh, Senior Distinguished Fellow, TERI and former Secretary, MoEF
- Dr Veena Joshi, Team leader, Rural Energy & Housing, SDC (Swiss Agency for Development and Cooperation)
- Dr L S Rathore, Head AgroMet, Additional Director General, IMD (Indian Meteorological Department)
- Dr L H Prakash, NCMRWF (National Council for Medium Range Weather Forecasting)
- Dr R K Mall, Associate Professor, NIDM (National Institute for Disaster Management)
- Mr Raghu Saxena, Country Director, Earth Watch Institute



Summary of the discussions

Dr Leena Srivastava's presentation outlined the existing patterns of climatic change, and how they have been affecting both natural and human systems, making them vulnerable to climate change. She spoke about how climate change affects agriculture, water resources, and the health of poor and vulnerable communities. Her presentation highlighted how ICT has helped improve productivity of different sectors, especially in rural areas. The role of ICT in capacity-building through impact and vulnerability assessment, coping measures, and outreach was also dealt with. She emphasized on a proactive approach for the sector. Her presentation concluded on the note that there should be a platform for to-and-fro information flow, which assesses impacts and vulnerability and disseminates coping and adapting measures to the rural communities as well. She pointed out that as an adaptive measure, farmers need to be informed about the likely impact and trends of climate change. This would help them in adapting to new cropping patterns. She expressed deep concern for the rural and poor communities primarily because they are most dependant on climate, and are also the least informed about climate variability. There needs to be a concentrated effort from all stakeholders in this direction with ICT as the backbone. She emphasized that it is time for all stakeholders to get together and bring about a change in the manner we live our lives and in the manner we impact the climate system.

The round table discussion stressed on the need to include local voices in the system, there should be a medium or platform for information flow in both directions. This medium/platform has to be simple, easy to understand, localized, and should enable quick response. The learning of one community can be shared with another and so on. Timely solutions would help in improving rural livelihoods. The present forecast gives data for the next 5 days. Smart and



TERI DSDS Special Event- 6th February 2008

intelligent applications/models need to be developed which would provide data for a longer period. This forecast should be in the local language. Technical terms also need to be more colloquial for better understanding. Forestry, education, e-governance, agriculture, climate change impact assessment studies, and so on were identified as the potential areas of intervention since ICT has the advantage of cutting across most of the sectors. ICTs can go a long way in not only bridging the digital divide but also the lifestyle divide in populations. ICTs have a vital role in developing services and thus mitigating GHGs (greenhouse gases). ICT-enabled instruments also reduce the time and space gaps and be energy efficient. ICTs can play a major role in enabling the panchayats in real-time dissemination of information to local communities through automated weather stations. Use of ICTs can actually reduce GHG emissions by providing various services at the virtual space, like ticket booking, e-banking and distance learning.

The discussion stressed on the need for a more concerted action in sensitizing the government and policy-makers for appropriate policy decisions to enable the use of ICTs in adapting to climate change. There needs to be a convergence of ways and efforts within the government on policy decisions and play outlays for using the various mediums ICTs offer for assessment and coping measures to climate change. It was felt that that the potential use of community radio was still untapped with regard to quick information dissemination and disaster alertness due strict government policies. The discussants stressed on the need for a model for advocacy and adaptation. The government has a great role to play in setting the adaptation measures for climate change. As the service providers increase their geographic reach to the rural domain, the government must also act as a catalyst by creating conducive framework and policies.

The group felt a need for investments in localizing information and engaging communities in practices for assessment of vulnerability and adaptation



techniques. New funding mechanisms need to be worked out through PPP (public–private partnership) models for creating a platform that works directly in assessment and coping measures using a multi-stakeholder approach. The group called for a multi- stakeholder approach which needs to plan ahead of time and come out with solutions that go deeper into the village level, are area specific, technologies that are low cost and energy efficient. The group called for a wider use of ICTs in identifying and processes that connect the digital and the non-digital world.

The media can play an active role in outreach and dissemination activities. All media of communication – traditional radio, television, print media, community radio, GIS and remote sensing, new age mobile telephony, Internet, and video conferencing – have the potential of reaching every household. Thus, there can be wider dissemination of information and faster action. Community radio, local newspapers, Village Knowledge Centres, Common Service Centres, Krishi Vikas Kendras, all have a role in such information dissemination. Mobile phones have a huge potential in advancing the use of ICT for vulnerability assessment as well as adapting to climate change. SMS and voice mail services can be effectively used in advance warning systems and bulletins.

ICT infrastructure has to be built in the villages. In the long run, ICTs can even help in rural income generation. ICT infrastructure can also function as a repository of information on disaster risk mitigation. The Department of Information and Technology has taken an initiative of rolling out 100 000 common service centres across India as the network for establishing models of service delivery for assessment and coping with climate change. The round table stressed on this opportunity as a way forward.



Conclusion

The session ended with an agreement that active involvement of all stakeholders in a mission mode is needed for generating action. The poor have the least resources, knowledge, and ability to adapt to climate change. They are also the most vulnerable. Climate change needs to be demystified since the common man should be aware of the potential problems in order to address them. Their capacities should be built to adapt to the changes especially in the vernacular media. The group called for experiments of establishing a mechanism for creating communities of practice and influencing the policy-makers. They called on TERI to play an important role of bridging the various parties the policy providers and the practitioners.

Action Points

The round table recognized the need to address the various issues discussed. It also acknowledged that adaptation is not done overnight. There has to be a concerted effort over a period of time, meaning that a conducive policy is needed for the use of ICTs for climate change. They called upon TERI to lead a national-level multi-agency involvement and play an active role in moderating and cementing the mechanism. This national level platform would trigger the pipeline of to and fro information that is timely and easily understood. A major thrust would be on assimilating the information already available with the stakeholders. TERI should bridge the gap between the policy providers and the implementers, and should experiment with some states in processes that bridge the digital divide particularly related to climate change. The round table found a great opportunity in DIT's 100 000 CSCs initiative and felt that TERI should work towards integrating the knowledge platform with CSC models that builds capacity of grassroots bodies/NGOs and the village populations in variability assessment and adaptation to climate change. The group also called on TERI to be the knowledge provider especially to the vernacular media and also demonstrate the



TERI DSDS Special Event- 6th February 2008

use of emerging mediums like community radio, web, and mobile along with print and television towards mitigating climate change. The round table felt that TERI's experience in this domain at both the local and global levels would be of immense advantage in managing this multi-stakeholder approach as steps are taken towards fighting climate change.

Participating organizations

S. No	Organization	S. No	Organization
1	Times Group	17	Telecenter.org
2	Indian Express	18	IMD
3	DIT	19	NCMRWF
5	INFRAS	20	TERI
6	SEEDS	21	SDC
8	UN-Solution Exchange	22	Earth Watch Institute
9	CSDMS	23	NIDM
10	Ekgaon Technology	24	TERI
11	Airjaldi	25	Independent Consultant on ICT
12	Spatial Decisions	26	APCTT
13	Financial Technologies	27	One World South Asia
14	European Union	28	JNU
15	British High Commission	29	ISAP
16	IDRC		