UNFCCC TEC Bulletin

A Briefing Note of the UN Framework Convention on Climate Change (UNFCCC) Technology Executive Committee (TEC) Workshop on Technologies for Adaptation

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BRIEFING NOTE ON THE TECHNOLOGY EXECUTIVE COMMITTEE (TEC) WORKSHOP ON TECHNOLOGIES FOR ADAPTATION: 4 MARCH 2014

The UN Framework Convention on Climate Change (UNFCCC) Technology Executive Committee (TEC) Workshop on Technologies for Adaptation took place on 4 March 2014 in Bonn, Germany.

The workshop was organized by the TEC in collaboration with the UNFCCC Adaptation Committee (AC), to provide a platform to share experiences on the development and implementation of technologies for adaptation, and identify possible actions and recommendations by the TEC that could help promote and accelerate the development and transfer of technologies for adaptation.

The workshop brought together around 70 participants, including members of the TEC and the AC, observers from UNFCCC parties, representatives of UN bodies, intergovernmental and non-governmental organizations, and resources persons. The workshop immediately preceded the Eighth Meeting of the TEC (TEC 8), which took place from 5-7 March 2014 in Bonn, Germany.

During the workshop, several speakers presented case studies on developing and implementing technologies for adaptation in Asia, Africa and Latin America. Participants exchanged views and ideas on lessons learned and barriers to, and enabling environments for, the successful implementation of adaptation technologies. Participants also suggested potential areas of action for the TEC.

This briefing note summarizes the presentations and discussions during the workshop.

REPORT OF THE WORKSHOP

WELCOME AND OPENING REMARKS

The TEC Workshop on Technologies for Adaptation opened on Tuesday morning, 4 March, with remarks by Gabriel Blanco, Vice-Chair of the TEC, Christiana Figueres, UNFCCC Executive Secretary, and Margaret Mukahanana-Sangarwe, Chair of the AC, all emphasizing the importance of the workshop as a collaborative effort of the TEC and AC.

Figueres further stressed that financing is important to facilitate the transfer of technologies for adaptation on the ground and that, because climate change is a reality, adaptation should be mainstreamed into all human endeavors.

SESSION I: ROLES OF TECHNOLOGY IN ADAPTATION – SETTING CONTEXT AND EXPECTATIONS

Kunihiko Shimada, representing the TEC task force working in this area, introduced the workshop and its expected outcomes, noting that the results of the workshop will feed into the work of TEC 8, and encouraged all participants to contribute to the discussions.

Kunihiko Shimada, Japan

Mukahanana-Sangarwe presented the current and future work of the AC in the area of adaptation technologies. She pointed out that the AC will draw on the Technology Needs Assessment reports, and said she looked forward to the ideas and inputs from the experts and stakeholders present at the workshop.

Margaret Mukahanana-Sangarwe, Chair of the AC

Vladimir Hecl, UNFCCC Secretariat, presented the findings from the Third Synthesis Report on Technology Needs identified by Non-Annex I Parties, focusing on technologies for adaptation. He highlighted that agriculture, water, and infrastructure and settlements, including coastal zones, were the most commonly prioritized sectors for adaptation by reporting countries, while the most frequently cited adaptation barriers were economic, financial, and policy, legal and regulatory ones.

L-R: Dais during the TEC workshop opening session with **Ariesta Ningrum**, UNFCCC Secretariat; **Wanna Tanunchaiwatana**, UNFCCC Secretariat; **Margaret Mukahanana-Sangarwe**, Chair of the AC; **Gabriel Blanco**, Vice-Chair of the TEC; **Christiana Figueres**, UNFCCC Executive Secretary; and **Dechen Tsering**, UNFCCC Secretariat

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Saleemul Huq, International Institute for Environment and Development, and Helena Wright, Imperial College London, presented the background paper on technologies for adaptation commissioned by the TEC for the workshop.

Helena Wright, Imperial College London

Huq stated that a large body of knowledge on adaptation is now available from various countries and regions, and stressed the role of knowledge and know-how, of South-South cooperation, and of public-private partnerships for the development and transfer of adaptation technologies.

In the ensuing discussion, participants provided feedback on the background paper and raised issues such as: the need for definitions of adaptation; scaling up and replicating country-specific adaptation technologies; "maladaptation" as the use of technologies that increase vulnerability instead of reducing it; and the importance of engaging with stakeholders, including the private sector.

Saleemul Huq, International Institute for Environment and Development

Huq welcomed the comments made by participants on the background paper. On scaling up good pilot experiences, he said that both policy intervention and financing are required, and cited the example of Nepal where, by a government policy decision, 80% of funds for adaptation from all sources will go to supporting work with communities at the local level.

SESSION II: EXPERIENCES AND LESSONS LEARNED FROM DEVELOPMENT AND TRANSFER OF TECHNOLOGIES FOR ADAPTATION

Part I: Case studies, success/failure stories, barriers and enabling factors to the successful implementation of technologies for adaptation

Emile Frison, Bioversity International, moderated this session.

Yukoh Satake, Yukiguni Maitake Co., Ltd, presented on implementing adaptation technologies in agriculture in Asia. Satake showcased the example of a social entrepreneurship project in Bangladesh based on the cultivation of mung beans in saline areas, highlighting that this project has created rural jobs and supplied low-priced beans to local people.

Nick Moon, KickStart International, presented on the development and transfer of water technologies for agriculture in Africa, outlining the example of the introduction of pressure irrigation pumps in some African countries.

Moon explained that this project aimed to help smallholder farmers to move from subsistence to commercial agriculture, and highlighted cost-effectiveness and sustainability of the technology as factors for its successful adoption by the target beneficiaries.

Haseeb Irfanullah, Practical Action, presented lessons learned from the "floating gardens," a traditional agricultural practice in the southern wetlands of Bangladesh. He reported that the government of Bangladesh started a programme in 2013 for the promotion of floating gardens that will benefit 60,000 people in the country, but expressed concern about the lack of prior research on the sustainability of this technology.

Mark Kowal, Climate-Insight, presented experiences on adaptation technologies based on indigenous knowledge of water resources from South America. He showcased the Adaptation to Climate Change Project (PACC) in Ecuador that aims at reducing vulnerability to climate change through effective water governance.

In the ensuing discussion, participants discussed several issues, *inter alia*, the meaning of "appropriate technology," the concept of "technology justice" as the right of people to choose and use technologies, and microfinance.

Part II: Addressing gaps and challenges: how to sustainably upscale the development and transfer of technologies for adaptation

Batu Krishna Uprety, Chair of the Least Developed Countries Expert Group, moderated this panel discussion.

Roland Sundstrom, Global Environment Facility (GEF), presented the GEF perspective on scaling up the transfer of adaptation technologies. He highlighted new learning opportunities arising from the growing number of adaptation interventions and existing vehicles for development and diffusion of technologies in priority sectors, such as the Food and Agriculture Organization of the UN (FAO) network of farmer field schools.

Sundstrom identified ensuring predictability and availability of funding, scaling up pilot experiences, maintaining resilient infrastructure, validating the adaptation technologies, and governance, political and cultural barriers as challenges for scaling up transfer of technologies.

Michinori Kutami, Fujitsu Limited, highlighted the way in which information and communication technologies can contribute to adaptation, giving as examples, their use in

L-R: **Yukoh Satake**, Yukiguni Maitake Co. Ltd.; **Emile Frison**, Bioversity International; **Haseeb Irfanullah**, Practical Action; **Mark Kowal**, Climate-Insight; and **Nick Moon**, KickStart International

L-R: **Asher Lessels**, UNFCCC Secretariat; **Emile Frison**, Bioversity International; **Roland Sundstrom**, GEF; **Batu Krishna Uprety**, Chair of the Least Developed Countries Expert Group; **Michinori Kutami**, Fujitsu Limited; and **Bert De Bievre**, Consortium for Sustainable Development of the Andean Ecoregion

the monitoring, analysis and simulation of climate change, and in disaster prevention, agriculture, and natural resources management and conservation.

Emile Frison reported on experiences with the management of plant genetic diversity by farmers. He emphasized that genetic diversity, including crop wild relatives, is important for adaptation, and noted that this diversity is being threatened by climate change.

Bert De Bievre, Consortium for Sustainable Development of the Andean Ecoregion, presented the experience of a GEF-funded project aimed at the restoration of degraded mountain ecosystems. He emphasized that monitoring of adaptation technologies is important for optimizing the technologies, providing evidence of their impacts and offering insights into the possibilities for scaling up.

De Bievre further stressed the need to develop indicators and appropriate language to discuss adaptation benefits.

In the subsequent discussion, participants discussed: how to measure the benefits of adaptation; criteria for GEF funding for adaptation projects that also provide carbon and biodiversity benefits; the importance of learning and of participating in monitoring and evaluation of adaptation technologies; and the role of social capital in the implementation of technologies for adaptation.

SESSION III: POTENTIAL AREAS OF ACTION AND RECOMMENDATIONS BY THE TEC, AND IDENTIFICATION OF TOPICS FOR TEC BRIEFS

Participants convened in four parallel break-out groups to reflect on: areas of intervention by the TEC, in collaboration with the AC, to assist in the effective development and transfer of technologies for adaptation; recommendations by the TEC to policy makers to enhance the development and transfer of technologies for adaptation, as well as recommendations that could be submitted jointly by the TEC and AC; and possible topics for TEC briefs or other papers that could be prepared jointly by the TEC and AC.

In the reports made by the four groups in a plenary session moderated by Moses Omedi Jura, Kenya, topics identified included: the need to engage the research community in the validation of technologies for adaptation; multi-stakeholder knowledge management and learning; enabling legal frameworks; inventory and mapping of existing technologies to avoid duplication; South-South cooperation and transfer; development of standards to make technologies understandable and fundable; identification of champion technologies and incentives for sharing them; development of a framework approach as a basis for policy recommendations; monitoring and evaluation of technologies; and information sharing and marketing of good practices in technologies for adaptation.

L-R: **Gabriel Blanco**, Vice-Chair of the TEC with **Moses Omedi Jura**, Kenya, summarized the key issues.

CONCLUSION AND WRAP UP

In his concluding remarks, TEC Vice-Chair Blanco highlighted some of the key issues discussed at the workshop, such as: factors for successful implementation and replication of technologies, integrated approaches, South-South transfer of know-how, opportunities for scaling up technologies, technology assessment, and capacity building. He closed the workshop at 6:29pm.

Break-out group facilitated by **Kunihiko Shimada**, Japan (center)