

**Seventy-ninth session of the Commission  
Bangkok, 15-19 May 2023**

**SUMMARY REPORT**

**Scaling up climate change adaptation technology applications for a resilient  
future in Asia and the Pacific**

**[Side event of the 79th session of the Economic and Social Commission for Asia and the  
Pacific (ESCAP)]**

**Jointly organized by:**

Department of Scientific and Industrial Research (DSIR), Ministry of Science and  
Technology, Government of India, and Asian and Pacific Centre for Transfer of Technology  
(APCTT) of the United Nations ESCAP

**19 May 2023 (Bangkok and online), Time: 12:45-13:45 (Thailand time: GMT +7.0)  
Venue: CR-4, Level 1, United Nations Conference Centre, Bangkok, Thailand**

**A. Introduction**

1. The side event was an effort to identify actions to enhance regional cooperation for scaling up climate adaptation technologies and their applications, with a focus on early warning systems and hazard monitoring.
2. Key discussions were based on impact of climate change, innovative technologies and their application for climate adaptation, the opportunities to enhance regional cooperation to upscale them in Asia and the Pacific, implemented government schemes, expectations from collaborative efforts.
3. The side event was attended by about 48 participants. Out of this number, approximately 28 were government participants (officials from the Ministry of Science and Technology in Bangladesh, India, Malaysia, Pakistan, Philippines and a few participants from ministries of disaster management and forest agencies). The event was also attended by representatives from NGOs, UNESCAP and APCTT's members.
4. The event opened with Welcome Remarks by Dr. Preeti Soni, Head, APCTT-UNESCAP which was followed by Opening remarks Sri Surinder Pal Singh, Joint Secretary, Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India (online). Ms. Armida Salsiah Alisjahbana, Executive Secretary of United Nations Economic and Social Commission for Asia and the Pacific delivered the Special address. The

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Keynote presentations was delivered by Mr. Rajendra Ratnoo, Executive Director, National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of India (online). Thematic Discussions on Opportunities and role of regional cooperation for upscaling climate adaptation technologies in Asia-Pacific brought out the perspective of experts from the region namely: Mr. Sefanaia Nawadra, Director General, Secretariat of the Pacific Regional Environment Programme (SPREP), H.E. Amenatave V. Yauvoli, Ambassador Extraordinary and Plenipotentiary of Fiji and Dr. Ramanuj Banerjee, Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India. (online). The session was moderated by Dr. Preeti Soni, Head, APCTT and hosted by Mr Soumya Bhattacharya, Economic Affairs Officer, APCTT ESCAP.

## **B. Summary of discussions**

5. The role of regional cooperation and its impact on the development and operation of effective early warning systems were acknowledged. Events and discussions that alter the fast-approaching grave threat of climate change are important. Strategic cooperation, the development of an internationalized institutional framework, and a strong implementation-level framework are required in Asia and the Pacific.
6. The Government of India has undertaken significant efforts, scaling from G20 2023 to the National Policy on Disaster Management. The are designed to address critical challenges due to climate change, such as intense cyclones and droughts, heat waves, etc. Such severe weather-related disasters have a negative impact on health, food and water security. New practices to combat such situations were explained, such as robots and drones in flood-prone regions, bringing together adapted solutions in the hope of building new ones.
7. The Indian Prime Minister's 10-point agenda on disaster risk reduction, the National Disaster Management Plan for Disaster Risk Reduction, Climate Policy, National Action Plan for Climate Change, the International Solar Alliance, and Startup India were some of the frameworks of India that were highlighted. India is working globally to create a resilient future, and recent efforts have been recognized around the world. The country is an active member of global and regional climate change forums and has been leading by example.
8. The importance of climate change and DRR integration was discussed in detail. A holistic systems-based approach enhances resilience and understanding of the risks. Founded on climate change principles, a risk resilience framework minimizes climate-related disasters and economic and social burdens in the long term.
9. With new innovative technologies, including the Fourth Industrial Revolution (4IR), advancements have been made in the field of climate adaptation. Affordability, accessibility, and reliability depend on the involvement of a global community, thus coming back to the idea of climate technologies as a global effort. Improving the understanding of knowledge and experiences about mainstreaming innovative and emerging technologies is needed. Collaborative research and public-private partnerships can also strengthen collaboration across borders.
10. Along with technological development and innovations, lifestyle changes in India were also analyzed. India is promoting a circular economy that aims to eliminate waste and pollution. This is in line with India's commitment to a sustainable future.

11. The event also underscored that the alleviation of poverty is one of the most important sustainable development goals, but it cannot be achieved until everyone comes together. The developed world needs to provide financial support and affordable, accessible technologies to the developing world to help them mitigate climate change. This is because the developing world is often the most vulnerable to the effects of climate change. Identifying technological needs and gaps across sectors in countries also accounts for shaping policies against this.
12. Before scaling up, existing technologies need to be seen and assessed. The wheel need not be reinvented. There is traditional knowledge that is available that could help boost adaptation messages, which could cope with climate impacts. Building climate-resilient infrastructure or houses or using unique farming methods are some of the solutions at the community level.
13. In context to the Pacific nations, it was highlighted that the technologies or new technologies need to be cost effective, environmentally sustainable and culturally compatible. Points were also made on the impact of climate change on vulnerable communities, and to enable adaptation, Fiji's policy called Climate Vulnerability Assessment was briefly discussed.
14. Conversations were held about the Pacific region facing a triple global crisis in the environment, including climate change, pollution, and the loss of biodiversity. Its leaders have chosen to address this through the 2050 strategy for the Blue Pacific continent. SPREP addresses four key themes under the Pacific Climate Change Center. The first is research, the second is knowledge brokerage, capacity building and innovation. The work here looks at the four streams- strategy and governance, forecasts and warnings, and infrastructure. The Blue Pacific strategy has two thematic areas: climate and disasters, and ocean and environment, led by SPREP. It, along with the contributing countries, comes up with solutions that can help develop the Pacific's pool of researchers and translate knowledge into policies and actions. Such practices encouraged the event attendees.
15. Multilateral organizations like ESCAP and APCTT may capitalize and catalyze technological resources, intellectual resources and financial resources. There is a need of understanding technology suitability, and it should be custom based so that it will be adopted and accepted by individual Nations easily. Such organizations can take a comprehensive role in planning or developing a strategic framework so that all these three points can be addressed very easily through institutes like APCTT. After the development of the strategic level or policy level advocacy, there is the urgent need for the development of internationalized institutional framework. It will reform multilateralism and create a more accountable, inclusive and representative International System, which is fit for addressing 21st century climate challenges. The climate sustainability working group has emphasized climate, finance, and sustainable technologies, which include resource efficiency, circular economy, ocean health, marine litter, coral reefs, land degradation, and more. All these priorities, directly related to climate change adaptation, can be addressed effectively through advances in climate change adoption or adaptation technology applications.

### **C. Recommendations for the Asian and Pacific Centre for Transfer of Technology:**

16. The centre should effectively foster linkages between the sub-regions in Asia Pacific and take a comprehensive role in planning or developing a strategic framework on scaling climate adaptation technologies for resilience to disasters.

17. The centre may capitalize and catalyse technological resources, especially 4IR and digital technologies to scale up early warnings that also help strengthen international cooperation for knowledge, information and technology sharing.
18. The centre should foster deeper regional collaboration with relevant organisations and encourage its members to take necessary actions that support a regional plan for collective action towards technology focused interventions.

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