APCTT
Asian and Pacific Centre
for Transfer of Technology
ESCAP

वैज्ञानिक और औद्योगिक अनुसंधान विभाग
Department of Scientific and Industrial Research

Fostering Regional Cooperation:
Building partnerships between scientific and research councils in the Asia Pacific region

26 February 2025 at 11:15 – 12:30 hrs (Thailand Time)
[09:45 – 11:00 hrs IST]
Online

Organizers:

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

Meeting Report

Event Overview

The side event, organized as part of the 12th Asia-Pacific Forum on Sustainable Development (APFSD), focused on fostering regional cooperation in science and technology to accelerate progress toward the 2030 Agenda for Sustainable Development. The event brought together 40 representatives and experts from China, India, Philippines, Russian Federation and Thailand to discuss the role of scientific and research councils in promoting sustainable, inclusive, and evidence-based solutions for the SDGs.

The discussions emphasized the importance of technology transfer, innovation, and regional partnerships in addressing global challenges such as climate change, resource management, and digital transformation. The event also highlighted the need for a unified approach to collaboration, particularly through digital platforms, to bridge regional disparities and catalyze innovation across the Asia-Pacific region.

A. Key Points Discussed

1. In her opening remarks**, Dr. Preeti Soni**, Head of APCTT, emphasized the importance of regional cooperation in science and technology. She highlighted APCTT's mandate as a platform for knowledge exchange and technology transfer across the Asia-Pacific region.
2. **Dr. Vipin Kumar Shukla**, representing the Department of Scientific and Industrial Research (DSIR), Government of India, stressed the critical role of science and

technology in achieving India's vision of becoming a developed nation by 2047 under the *Viksit Bharat* initiative. He highlighted India's strong commitment to sustainable development through key initiatives such as large-scale solar energy adoption, waste-to-wealth technologies, and international collaborations. Notable among these are the International Solar Alliance (ISA), launched by India, and now comprising over 100 member countries; India's alignment with the Paris Agreement and the Indian Space Research Organization's partnerships with the US, the Russian Federation, and France in advancing space technology.

3. **Dr. Rama Swami Bansal,** representing the International Science and Technology Affairs Directorate (ISTAD) of the Council of Scientific and Industrial Research (CSIR) presented an overview of the CSIR, India's premier research organization. She highlighted CSIR's multi-disciplinary contributions at both national and international levels across sectors such as research and development, governance, aerospace, water management, civil infrastructure, and sustainable agriculture. She also noted CSIR's bilateral collaboration with countries including Bangladesh, Nepal and the Russian Federation in areas such as the reconstruction of disaster resilient schools, and strengthening science and technology

Key innovations discussed included:

- Runway Visibility Measuring System (VISHTI): Developed to enhance aviation safety by accurately measuring runway visibility in low visibility conditions.
- Atmospheric Water Generator: A sustainable system designed to extract potable water directly from atmospheric humidity, addressing water scarcity.
- Waste-to-Wealth Technologies: innovations such as converting plastic waste into fuel and durable materials for road construction, promoting circular economy practices.
- Dr. Bansal also emphasized CSIR's pivotal role in fostering international collaborations and supporting technology-driven entrepreneurship through its network of incubation centers.

4. Ms. Anastasia **Ryabukhina**, representing the Russian House of International Scientific and Technical Cooperation (RHISTC) Russia spoke about the transformative potential of digital platforms in fostering scientific and technological collaboration across the Asia-Pacific region. She highlighted key challenges such as fragmented infrastructure, lack of unified communication platforms, and information silos that hinder cross-border innovation. Ms. Ryabukhina introduced the upcoming Asian Pacific Technology Transfer Platform (APTTP), a regional initiative designed to establish a unified digital environment for sharing scientific and technological developments. The platform aims to consolidate information flows, create a database of innovations, and facilitate regional knowledge exchange.

5. **Dr. Chalee Vorakulpiphat**, representing the National Electronics and Computer Technology Centre (NECTEC), Thailand focused on Thailand's national efforts to

integrate artificial intelligence (AI) across key sectors, including public services, education, and industry. He highlighted Thailand's AI Ethical Guidelines and AI Governance Framework, which are designed to promote the responsible, transparent and accountable use of AI technologies.

Key initiatives included:

- AI-driven public services, such as chatbots and electronic document management systems, aimed at improving efficiency and citizen engagement.
- Capacity-building programs focused on upskilling the workforce in AI technologies.
- Regional collaboration opportunities with other Asia-Pacific countries to advance AI research, development and applications.

6. **Professor Zhou Yuguang f**rom China Agricultural University highlighted China's initiatives in renewable energy technology transfer, particularly within the framework of South-South cooperation. He shared examples of biogas and solar energy projects in countries such as Ethiopia, Sri Lanka, and Zambia, which have provided affordable and sustainable energy solutions to local communities, supporting energy access and rural development.

Key achievements included:

- Establishment of joint research centers and demonstration sites to promote the deployment and localization of renewable energy technologies.
- Development of a centralized database of over 100 renewable energy technologies to facilitate regional knowledge sharing and capacity building
- Contribution to SDG 7 (Affordable and Clean Energy) through the adoption of biogas and solar energy systems in partner countries.

7. **Ms. Maria Irene Amatorio** , representing the Department of Science and Technology (DOST), Philippines presented the country's initiatives in promoting smart and sustainable cities through the application of science, technology and innovation. She also discussed efforts to strengthen and modernize the national science and technology infrastructure. Ms. Amatorio highlighted three flagship projects:
    1. **GreenTech:** A digital platform for environmental monitoring and disaster preparedness.
    2. **BlueTech:** A citizen science platform for environmental data gathering.
    3. **AgriTech:** An initiative aimed at promoting agricultural innovation among the youth to address the aging farmer population in the Philippines.

    These projects align with the Philippines' commitment to achieving the SDGs, particularly in the areas of sustainable cities, climate action, and food security.

B. Open Discussion and Recommendations

- The open discussion focused on the need to enhance regional collaboration to address common challenges such as Climate Change, resource scarcity, and digital transformation.
- Key recommendations included:
    - Establishing a unified digital platform for technology transfer and cross-border collaboration in the Asia-Pacific region.
    - Strengthening triangular cooperation among governments, research institutions, and industries to drive innovation and inclusive growth.
    - Promoting sustainable technologies in priority sectors such as renewable energy, waste management, and digital innovation.
    - Enhancing capacity-building programs to upskill the regional workforce in emerging technologies like Artificial Intelligence (AI) and renewable energy systems.

C. Key Takeaways

I. **Regional Cooperation is Essential:** The Asia-Pacific region holds tremendous potential for scientific and technological collaboration, which can serve as a powerful driver for sustainable development and regional innovation.

II. **Digital Platforms as Catalysts:** Digital platforms such as the proposed Asia and Pacific Technology Transfer Platform (APTTP) can help bridge communication gaps, enable streamlined knowledge exchange, and facilitate cross-border innovation.

III. **Focus on Sustainable Technologies:** Areas like renewable energy, waste management, and digital transformation emerged as priority sectors where regional cooperation can yield significant benefits.

IV. **Capacity Building:** Upskilling the regional workforce in emerging technologies , particularly Artificial Intelligence (AI) and renewable energy systems, is essential to ensure long-term sustainability and inclusive growth.

V. **Triangular Cooperation:** Effective technology transfer and implementation relied on strong partnerships between governments, research institutions, and industry, building a collaborative innovation ecosystem.