Technical sessions on climate change initiatives by DST @ CoP-27, 2022

The Conference of the Parties (CoP) is organized every year by the United Nations (UN) Framework Convention on Climate Change (UNFCCC) to discuss and negotiate global climate change policies involving all the parties (countries) that are part of the UN. This year the 27th Conference of the Parties (CoP-27) was held in Sharm el-Sheikh, Egypt, from 6 to 18 November 2022.

Climate change is a global concern and countries are taking concerted actions to mitigate its impacts. The Inter-Governmental Panel on Climate Change (IPCC), in its Sixth Assessment Report (9 August 2021), observed that climate change is widespread, rapid and intensifying and it may cross the 1.5°C temperature threshold by as early as 2040 unless serious efforts are taken by all countries. This calls for a synergistic effort by all nations to control demands on resources so that the imbalanced demand–supply scenario is addressed appropriately towards sustainability.

India believes climate action starts from the grassroots, at an individual level. Therefore, the India Pavilion at CoP-27 was designed with the theme of Lifestyle For the Environment (LiFE). This concept was introduced by Prime Minister Narendra Modi at COP-26 in Glasgow, Scotland, calling upon the global community of individuals and institutions to drive LiFE as an international mass movement towards 'mindful and deliberate utilisation, instead of mindless and destructive consumption' to protect and preserve the environment.

The concept of sustainable living qualifies for meeting the present ecological, societal and economical needs without compromising on the needs of future generations. A decent life demands 24 × 7 electricity, potable water, adequate food and nutrition, and a sustainable habitat. The biggest challenge is to deliver these basic needs sustainably. Here, technology has the potential to play a critical role in maintaining sustainability in this ecosystem.

The present authors, in association with Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi, hosted a technical session and panel discussion on 'Technology needs assessment for sustainable life' and 'Decarbonization technology for Indian industries'. The Department of Science and Technology (DST), Government of India (GoI), in collaboration with the Government of Himachal Pradesh had organized a technical session on 'Climate research action for sustaining Indian Himalayan Region (IHR) - towards resilient mountain communities' at the India Pavilion at CoP-27 on 10 November 2022, under LiFE, involving experts from academia, and the industry to identify the technology needs which must be adopted by the relevant stakeholders.

The Indian Pavilion at CoP-27 showcased visionary citizen-centric energy access, transition, security and justice-related initiatives. Discussions were held on ways to accelerate the deployment of energy-efficient and low-carbon technologies as well as

market investment to facilitate and strengthen the global energy transition. Many senior government officials, special representatives from all over India and international developers participated in this event organized by DST.

India has submitted its long-term low-carbon development strategy to UNFCCC, which was released by the Union Minister for Environment, Forest and Climate Change on 14 November 2022 at the India Pavilion at COP-27.

During the entire duration of CoP-27, 49 sessions were conducted at the India Pavilion by Central Government ministries, state governments, public sector undertakings, autonomous bodies/subordinate organizations, think-tanks and UN organizations. Sixteen of these events were organized by GoI. The India Pavilion witnessed a footfall of 25,000 participants.

CoP-27 provided a critical opportunity for business and Government leaders to double down on their climate goals, forge new collaborations and achieve innovative solutions.

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