

TECHNICAL ACTIVITY CARRIED OUT BY CENTRES / OVERSEAS CHAPTERS

Name of Centre / Overseas Chapter:		Meerut Local Centre	
Title of Activity:		World Water Day	
Activity under Divisional Board (delete which are not applicable):		Statutory Day	
Date:	22-03-2025	Venue:	IEI Office A-12 Surya Nagar, Saket, Meerut

(Insert photo)	(Insert photo)
	
Title of photo: Some of the attendees in the webinar	Title of photo: Presentation of Memento to the speaker

Brief Report

World Water Day was celebrated on 22-03-2025 at the Meerut Local Centre on the theme "Glacier Preservation" under the chairmanship of Er. R.P. Agrawal, Chairman of the Local Centre, Meerut. The event was convened by Er. Ramesh Chand, Joint Secretary, Meerut Local Centre. Er. R.P. Agrawal welcomed all the attendees in general and the speakers Er. P.S. Singhal and Er. B.D. Sharma in specific.

Er. P.S. Singhal, a civil engineering graduate from IIT Roorkee, served in P.W.D. and U.P. Irrigation. With vast experience in the construction of canals, buildings, roads, and hydro power houses, he delivered a presentation on Glacier Preservation, emphasizing the importance of glaciers with the statement in Hindi: ग्लेशियर हैं तो जल है, जल है तो जीवन है.

This means:

"Glaciers exist, so water exists; water exists, so life exists."

The presentation focused on discussing glacier preservation on the World Water Day. Key questions raised included how to preserve glaciers and what global actions are being taken by various countries.

The preservation of glaciers is only possible by reducing global warming and curbing greenhouse gas emissions. Global initiatives aim for a 45% reduction in greenhouse gas emissions and achieving zero emissions by 2050.

Greenhouse gases contribute to global warming by trapping heat in the Earth's atmosphere, a process known as the greenhouse effect. Human activities are the primary cause of this phenomenon. To mitigate global warming, the following ten strategies were highlighted:

Transitioning away from fossil fuels such as coal, oil, and gas.

Shifting towards renewable energy sources like solar, wind, and hydro power.

Improving energy efficiency.

Reducing meat consumption.

Promoting sustainable transportation, including public transport (trains, buses), cycling, and walking instead of personal cars.

Implementing strict laws to reduce deforestation.

Encouraging water conservation.

Controlling human population growth.

Raising public awareness on environmental issues.

Increasing research programme on glaciers.

Er. B.D. Sharma, M. Tech, MIE (India), currently serves as the Convener of the Indian Water Resources Society, Meerut Local Centre. Having worked on rainwater harvesting systems since 2008, he shared insights on the World Water Day 2025 theme, 'Glacier Preservation.'

He highlighted that the event was celebrated under the aegis of UNESCO and the World Meteorological Organization (WMO), emphasizing the importance of glaciers as an integral part of the natural water cycle. Their formation, lifespan, rate of melting, and weather impacts are crucial to sustaining life.

Glaciers serve as natural water reservoirs, ensuring a continuous supply of water for agriculture, industries, religious rituals, and domestic use. Glacier-fed rivers such as the Ganga, Yamuna, Sutlej, Sindhu, and Brahmaputra leave significant impacts on their respective catchment areas, often resulting in either devastating floods or severe water shortages.

The Himalayas, which control meteorology and water resources, require a dedicated Ministry at the Government of India level to conduct in-depth studies, implement control measures, and ensure disciplined monitoring of this crucial natural resource.

According to a Central Water Commission (CWC) Report, the area of lakes and ponds in mountainous regions has increased by 10.81% (from 533,401 hectares to 591,108 hectares) due to the accelerated melting of glaciers. This alarming trend is primarily due to human interference, deforestation, greenhouse gas emissions, and unregulated construction activities using heavy earth-moving machinery.

To mitigate the impact of these changes, several advanced weather forecasting techniques must be adopted. The Central Water Commission recommends using:

Sentinel-1 – Synthetic Aperture Radar (SAR) for high-resolution monitoring.

Sentinel-2 – Multi-Spectral Imagery Technique, which provides accurate data even in cloudy weather, with a precision of up to 10 meters.

Additionally, it was emphasized that the human-induced disturbances affecting glacier formation and melting patterns require comprehensive research and in-depth analysis.

Several esteemed members of the institution also shared their views on water conservation.

Finally, Er. S.C. Mittal, Honorary Secretary, Meerut Local Centre, The Institution of Engineers (India), delivered the vote of thanks, expressing gratitude to all participants for their valuable contributions.