## Water@2047: A lifeline for Sustainable Futures

Discussion under this theme circled around the major components of water industry, technologies used by experts, engineers, scientists, technologists towards riverine ecosystem. Geospatial technologies and emerging technologies are being used for watershed conservation, its delineation, efficient planning and management of water distribution system, identifying sources of water like lakes, rivers, ponds, and potential groundwater zones.

In the name of development, some drastic changes have happened that have affected some natural processes. However, development, conservation and management of water resources are crucial. In this session we got the understanding of human intervention and ways to optimize resource recovery and energy efficiency to save water bodies. Additionally, rejuvenation and conservation of water bodies and open areas emphasizes implementation of an interconnected system of urban environment comprising green spaces, recreational places, biodiversity and natural conservation areas. This conversation has helped us understand how cities are adapting integrated policies and plans for resource efficiency, mitigation and adaptation to climate change as well as disaster resilience.

Water Resource & Management program in GeoSmart India 2023 had very insightful discussion in two sessions including Recommendations and Way Forward with the experts from Government, Private sector, academia, Start-ups, and Knowledge Hub. The program covered the discussion on:

Development and changes in the riverine ecosystem

Data Analytics & Emerging Technologies Riverine

strategies

and Human

intervention

Distribution of River Water

Organic understanding of Nature and Management



## KEY TAKEAWAYS:

- → Utilization of Geospatial Technologies: the application of geospatial technologies in the water industry, with a focus on watershed conservation, delineation, and efficient planning and management of water distribution systems.
- → Balancing Development and Conservation: Acknowledging the impact of development on natural processes, the conversation emphasized the importance of water resource conservation and management.
- → Interconnected Urban Environment: Rejuvenation and conservation of water bodies as integral components of an interconnected urban environment underscored the need for green spaces, recreational areas, biodiversity, and natural conservation zones in urban planning to enhance resource efficiency, climate change adaptation, and disaster resilience.
- → Water Quality Improvement: Emphasis on strategies to enhance water quality, highlighting the importance of preserving water resources, and exploring methods for treating water trails.
- → GIS Monitoring: Understanding how GIS aids in monitoring water quality above and below ground, measuring factors like oxygen, pH, bacterial content, flow rate, and turbidity.
- → Critical Juncture for Water Bodies: The program underscored the critical state of India's water bodies, emphasizing the urgent need for intervention and steps to improve conditions. The discussion served as a call to action to prevent the depletion of essential water resources.

## ALL PANELISTS AND SPEAKERS

- **G. Krishnamurthy** Regional Director Southern Region, Central Ground Water Board
- Dr Pandith Madhnure Scientist, CGWB, Ministry of water resources
- Dr S. Mohan Institute Chair Professor, IIT Madras
- Dr Lingaraju Yale Director River Rejuvenation, Art of Living
- **Dr R. N. Sankhua** Chief Engineer (South), National Water Development Agency
- Abdul Hakeem Head of Department - Water Resources, Water Resources-National Remote Sensing Centre

- **Dr Ajit V. Salvi** Dy. Chief Engineer, Municipal Corporation Of Greater Mumbai
- Anil Pillai CTO, Bioxgreen Technology
- Sharan Singanamala Senior Director Sourcing, Veolia
- Pranit Mehta Founding Member, VP- Business Development, Galax Eye Space
- Kamaleshwar Pratap Singh Chief Geologist, WAPCOS Limited
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