

EDITOR'S MESSAGE



Managing land and water typically means the calculated design, utilization, and preservation of these resources for enduring benefit. Almost 80% of terrestrial regions experience the effects of water erosion, while assorted deterioration methods have compromised about 52% of the world's total arable land. When land and water are managed and applied correctly, they not only improve agricultural yields but also assist in restoring ecosystems. Cutting-edge digital technologies, including remote sensing, GIS, IoT, sensors, artificial intelligence, drones, and blockchain, present revolutionary approaches to achieving sustainable land and water resource management. The crucial and current issue of managing land and water is key for restoring ecosystems and ensuring long-term farming, especially with climate change, soil deterioration, and rising pressure on agriculture. Both lasting farming and keeping natural ecosystems intact rely on managing soil and water resources comprehensively.

This special issue of the magazine seeks to highlight contemporary research, field innovations and policy perspectives in land and water management engineering. By fostering dialogue among scientists, engineers and decision makers, it aims to reinforce the centrality of this discipline in ensuring resources security for present and future generation. Sustainable management of land and water is not merely a technical necessity but a prerequisite for ecological stability, agricultural prosperity and societal resilience.

I wish you have a pleasant reading experience.

A handwritten signature in blue ink, reading "Prachi Jena".

Dr. Prachi Pratyasha Jena

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