Preface

Since its establishment in 1979, the Indian National Cartographic Association (INCA) has been dedicated to advancing cartographic research across India. To this end, INCA has been organizing annual conferences at various locations, addressing contemporary topics of national importance. These conferences serve as a vital forum for collaborative discussions, paving the way for a more informed, innovative, and sustainable future.

The 43rd INCA International Congress, held during 06-08 November 2023, at the Regional Remote Sensing Centre - West, National Remote Sensing Centre, ISRO, Jodhpur, was a remarkable success. This congress focussed on the theme "Emerging Trends in Digital Cartography for Sustainable Ecosystems and Geospatial Economy," offering a platform for insightful exchanges and collaborative efforts crucial to many ongoing development initiatives in the country.

Around 400 participants attended the event including researchers, academicians, students, professionals, representatives from government agencies and non-profit organizations, as well as technology companies, start-ups, and entrepreneurs engaged in digital cartography and geospatial technologies.

A highlight of the congress was the Todar Mal Memorial Lecture, delivered by Lt. Gen. Girish Kumar, VSM (Retd.), Advisor (PP & R), Ministry of External Affairs, and former Surveyor General of India. He spoke on *"Digital Cartography for Land Records Modernization in India."* The S. P. Chatterjee Memorial Lecture was delivered by Shri Shantanu Bhatawdekar, Scientific Secretary at the Indian Space Research Organisation, on the subject *"Space for Sustainable Ecosystems and Geospatial Economy."*

The conference featured 20 technical sessions covering various sub-themes with 190 oral presentations and 46 poster presentations. Selected top 10 papers from the conference are being published in *'Indian Cartographer'*, a Journal of the Indian National Cartographic Association (INCA). Remaining 56 full papers from the conference as received along with the 2 memorial lectures are published in this Proceedings of the 43rd INCA International Congress.

We express our heartfelt appreciation to the authors whose outstanding contributions are featured in this proceedings. Their work exemplifies excellence in advancing geospatial science and contributes significantly to the pursuit of sustainable ecosystems and a thriving geospatial economy. We hope that this proceedings will serve as a valuable resource for the scientific community engaged in digital cartography, geospatial technologies and allied domains.

Editors