

**Report on the Special Lecture by
Dr. M. K. Stalin, Addl. Surveyor General, Survey of India, East Zone
12.05.2026
Department of Geography, Vidya-Bhavana, Visva-Bharati, Santiniketan**

Title: Role of Survey of India – A Geospatial Perspective

Speaker: Dr. M.K. Stalin

Organized by: Department of Geography, Visva-Bharati

Date: 12 May 2026

Venue: Seminar Room, Department of Geography, Padma Bhavana, Santiniketan

The lecture titled “Role of Survey of India – A Geospatial Perspective” was held on 12 May 2026 at the Seminar Room of the Department of Geography, Padma Bhavana, Visva-Bharati. The programme commenced with a formal welcome address followed by the ceremonial lighting of the lamp. The speaker, Dr. M.K. Stalin, was introduced to the audience with special emphasis on his contributions to the field of geospatial science and surveying.

Dr. Stalin began his lecture with an overview of Survey of India and elaborated on its present mandate under the National Geospatial Policy (NGP) 2022. He explained the organization’s responsibilities in maintaining the National Geodetic Reference Frame, producing orthorectified imagery, and managing digital elevation models and functional boundaries across the country.

The speaker highlighted two important initiatives of the Survey of India, namely the SVAMITVA Project and the NAKSHA Project, which focus respectively on high-resolution mapping of villages and urban habitats. These initiatives were discussed in the context of their importance for land management, planning, and governance.

A significant portion of the lecture addressed the concept of the Indian Vertical Datum, wherein the mean sea level (m.s.l.) is considered as the reference base or zero level. Dr. Stalin pointed out the variation in mean sea level between the eastern and western coasts of India, noting that the difference is approximately 0.5 metres and that the elevation of m.s.l. itself is variable in nature.

In this context, he explained the mathematical relationship among Ellipsoidal Height, Orthometric Height, and Geoidal Undulation, emphasizing that Geoidal Undulation represents the difference between the former two heights. He further elaborated on the preparation of Strip Maps and the importance of Dot Accuracy in scientific map-making processes.

Moving beyond conventional mapping practices, Dr. Stalin discussed the role of CORS (Continuously Operating Reference Stations) in monitoring tectonic activity and the movement of the Indian Plate through seasonal observations conducted at selected stations. He also introduced emerging initiatives such as the development of 3D Digital Twin systems, reiterating the role of the Survey of India as the principal authority for national geodetic assets and geospatial infrastructure.

The session concluded with an engaging interactive session, during which the future prospects for students were discussed, particularly in relation to internships, workshops, training programmes, and seminars. The programme ended with an official vote of thanks extended to the speaker and all participants.

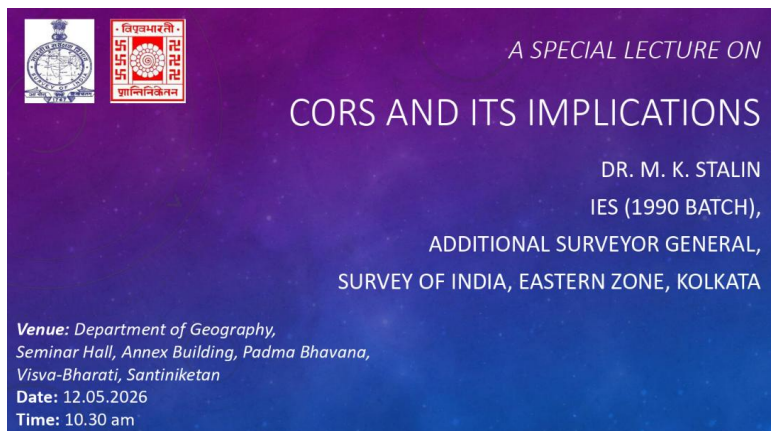


Plate: Glimpses of the event - (top left corner) flyer of the event; (top right corner) Dr. M.K. Stalin delivering the talk; (left center) inauguration; (bottom left) amalgamation of traditional and modern digital form of lecture delivery by Dr. Stalin; (bottom right) group photo of students and faculty members of the department with Dr. Stalin.
