EDUCATIONAL AND INSTITUTIONAL EXPOSURE VISIT

Visit to Karnataka State Remote Sensing Applications Centre (KSRSAC), Regional Centre, Mysuru

Date of Visit: 24 November 2026
Venue: KSRSAC Regional Centre, STEP Building, JSS Technical Institution Campus, Mysuru
Organised by: Division of Geoinformatics, School of Life Sciences,Mysuru, JSS Academy of Higher Education & Research, Mysuru.

1. Introduction

The Division of Geoinformatics, School of Life Sciences, JSS Academy of Higher Education & Research, Mysuru, organised an educational visit to the Karnataka State Remote Sensing Applications Centre (KSRSAC), Regional Centre, Mysuru, on 24 November 2026. The visit was undertaken by 38 students of I Semester M.Sc. Geoinformatics, accompanied by Dr. Mahesha D B, Assistant Professor, Division of Geoinformatics.

The visit aimed to provide students with practical exposure to the applications of Remote Sensing, Geographic Information Systems (GIS), spatial analytics, and geospatial technologies in various developmental and administrative sectors.

2. Proceedings of the Visit

The students and faculty member reached the KSRSAC Regional Centre at approximately 11:00 AM. The session commenced with a detailed technical presentation by **Dr. Muralidhar, Senior Scientific Officer, KSRSAC**, who introduced the organisation, its establishment, history, objectives, institutional responsibilities, and significant contributions to geospatial technology applications across Karnataka.

The presentation covered the fundamental concepts of geospatial data, beginning with vector and raster data models, raster band combinations and composites, and vector overlay operations. These concepts helped students understand how fundamental GIS operations are translated into practical applications and decision-support systems.

3. Technical Presentation and Key Highlights

Dr. Muralidhar provided insights into the diverse activities and projects undertaken by KSRSAC across various sectors. The major areas covered included:

- **Geospatial Data and Analysis:** Fundamental concepts of vector and raster datasets, raster composites, spatial overlays, and thematic map generation.
- **Geospatial Applications:** Development of approximately 350 geospatial products and applications addressing the requirements of different government departments and sectors.
- **Natural Resource Management:** Applications of remote sensing and GIS in land resources, agriculture, forestry, water resources, and environmental monitoring.

- **Infrastructure and Urban Development:** GIS-based applications supporting infrastructure planning, asset management, and developmental activities.
- **Karnataka Geographic Information System (K-GIS):** Introduction to the K-GIS portal, its functionalities, availability of geospatial datasets, and access to spatial information for various applications.
- **Decision Support Systems:** The role of geospatial databases, spatial analytics, and GIS-based platforms in supporting government planning, administration, and decision-making.

Particular emphasis was given to the K-GIS portal, through which students were introduced to the availability and accessibility of standardised geospatial datasets and various GIS-based applications developed for Karnataka.

Photograph 1: Technical Presentation by Dr. Muralidhar, Senior Scientific Officer, KSRSAC



4. Industry Exposure and Career Opportunities

An important component of the presentation focused on the professional opportunities available to Geoinformatics graduates. Students were introduced to potential career pathways in GIS development, geospatial database management, spatial analytics, application development, and geospatial project implementation.

The possibilities of undertaking internships and gaining professional experience at organisations working in the geospatial domain were also discussed. The session helped students understand the skills and technical competencies expected in the geospatial industry and the relevance of academic learning to professional requirements.

5. Visit to the Geoinformatics Laboratory

Following the presentation, students visited the Geoinformatics Laboratory at the Regional Centre. During the laboratory visit, students interacted with the technical staff and other professionals working at KSRSAC.

Dr. Muralidhar explained some of the ongoing projects and demonstrated how geospatial technologies are implemented in operational project environments. The interaction provided students with an opportunity to understand practical workflows, project requirements, data processing approaches, and the application of GIS and remote sensing in addressing real-world challenges.

During the visit, **Dr. Ballegowda,** Head of the KSRSAC Regional Centre, Mysuru, also interacted with the students and encouraged them to actively explore and utilise the geospatial datasets, products, and services made available through KSRSAC and its K-GIS portal for their academic activities and research. He further emphasised the importance of sharing this information and creating awareness among fellow students about the availability and potential applications of these valuable geospatial resources.

The laboratory interaction also encouraged students to clarify their technical queries and gain insights into the professional working environment of a geospatial organisation.

Photograph 2: Visit to the Geoinformatics Laboratory and Interaction with Technical Staff





6. Learning Outcomes

The educational visit provided several important learning outcomes:

1. Gained an understanding of KSRSAC's organisational structure, objectives, and role in Karnataka's geospatial development.
2. Strengthened fundamental knowledge of vector and raster data, raster composites, and spatial overlay operations.
3. Understood the practical applications of GIS and remote sensing across various government departments and developmental sectors.
4. Gained exposure to the K-GIS portal and the availability of geospatial datasets and applications.
5. Acquired insights into ongoing geospatial projects, professional workflows, and industry requirements.

6. Explored internship opportunities and potential career pathways in GIS development and the geospatial industry.

7. Conclusion

The educational visit to KSRSAC Regional Centre, Mysuru, was informative and academically enriching for the I Semester M.Sc. Geoinformatics students. The technical presentation, demonstration of ongoing projects, and interaction with professionals provided valuable exposure to the operational and professional dimensions of Geoinformatics.

The visit successfully connected classroom-based theoretical knowledge with real-world geospatial applications and helped students appreciate the expanding role of GIS, remote sensing, and spatial technologies in governance, resource management, and sustainable development.

The Division of Geoinformatics sincerely acknowledges the support and valuable insights provided by Dr. Muralidhar, Senior Scientific Officer, and the KSRSAC team for facilitating this educational visit.

Photograph 3: Group Photograph of M.Sc. Geoinformatics Students and Faculty with KSRSAC Officials

