Mapping historical sites with remote-sensing technology

Vijesh Kamath, July 12, 2015, Bengaluru: DHNS

Cutting edge

The State government has given the green signal to the National Institute of Advanced Studies (NIAS) to use state-of-the-art remote-sensing technology to survey five archeological sites of cultural and historical significance.

The Bengaluru-based NIAS is all set to initiate this pilot project using cutting-edge satellite imagery and remote-sensing technology, fused with ground data such as terrain maps and excavation reports, to map, track and prepare site management plans for detailed and enhanced imaging of on-ground remains.

Four of the five locations selected for the project include Halebidu in Hassan district, Srirangapatna in Mandya district, Avathi, an unexplored site at Devanahalli in Bengaluru Rural district and Shirval, another unexcavated site in Yadgir district. The fifth location is yet to be finalised.

"We have selected locations with diverse characteristics. Avathi and Shirval are relatively unexplored and have not been well studied. The survey of Srirangapatna and Halebidu will also be a challenge", said Dr M B Rajani, assistant professor, Heritage Studies Programme, School of Humanities at NIAS. She is also the principal investigator of the project.

The basic idea behind using such technology is that images taken by satellites provide an imaging radar of landscapes, which cannot be perceived from the ground. This data combined with available terrestrial data such as maps, excavation reports can throw up a hitherto of undiscovered information.

Rajani, who is surveying Karnataka’s archaeological sites using state-of-the-art technologies, said that specific site management plans for the five locations would also be prepared as part of the project, she said.

‘Govt keen on project’

Meanwhile, Mukund K Rao, member secretary, Karnataka Knowledge Commission (KKC), said that the State department of archeology, heritage and museums has showed keen interest in the project.

The site management plans would have specific recommendations on conservation and protection of the historical sites and further excavations, if any. Tourism prospects will also be explored, he added.

A State-level or national-level workshop will be organised after the initial report for the locations are prepared. A time-frame of one year has been fixed for the project. The project has been routed through the KKC.