

Found trashed: 16 historical gems

 www.bangaloremirror.com/bangalore/others/Found-trashed-16-historical-gems/articleshow/54125802.cms

Bangalore Mirror Bureau | Sep 8, 2016, 04.00 AM IST

By: Mihika Basu

NIAS team uses GIS and remote sensing technologies to create a robust database

A team of researchers from the National Institute of Advanced Studies (NIAS), Bengaluru, have discovered 16 undocumented or unknown archaeological sites, monuments and structures in Karnataka. The results are significant because not only have they brought out undiscovered spots of historical importance, but also helped mark such structures and sites that lie in neglect.

This recently concluded study used the Geographic Information Systems (GIS) and remote sensing technologies to analyse four archaeological sites in Karnataka — Srirangapatana, Avati (Devanahalli taluk in Bengaluru rural district), Sirival (Yadgir district) and Halebidu. It created a GIS database of 109 archaeological features of known and so-far undocumented archaeological remains.

The research team — which included principal investigator MB Rajani along with Ekta Gupta, Sonia Das and Srikumar Menon — found 10 undocumented sites and features at Srirangapatana, on the Bengaluru-Mysuru road. This included "vegetation infested Tipu's batteries, documented but unknown sites, and buried features that are not visible on ground".

They also located monuments in Sirival (34) and Halebidu (2) that were documented but not protected by Centre or state.

THE TECHNOLOGY

"Scientific developments and emerging technologies have provided new tools to study ancient material and decipher the past. But for these tools, some aspects of history would have remained undiscovered. One such powerful tool is [remote sensing]. Images taken from aerial and space platforms display a perspective of landscapes that cannot be perceived from the ground. Being purely non-invasive, this technology is well-suited for archaeology because it leaves sites untouched for future scholars. This kind of data, together with spatial data from other sources ... can be integrated into a database for storage, retrieval and analysis, using GIS technology," said Rajani, assistant professor of Heritage Science and Society Programme, NIAS.

"In Srirangapatana, we documented 39 monuments/features, out of which 19 are well-protected, 10 are protected sites but in bad shape and 10 are undocumented or unknown sites or features," she said.

At Avati, the team geotagged documented temples and structures. While tracing the historical landscape, they identified traces of moats, old canal, and other old waterbodies. "We have found and geotagged megalithic and other remains. We have also found national highway and railway track cutting across archaeological landscape, makes the site vulnerable," said Rajani.

At Sirival, 45 structures were geotagged and the researchers found that all of them were in a bad shape. While five of them were temples in use, 34 documented structures were in a poor condition. Shockingly, they found that some of these sites were being used as public toilets, and some others were at risk from a stone quarry in the vicinity. "We found three wells and three small shrine-like structures, not documented before. We have also found that the site has faced river avulsion that might have caused siltation in some of the sites," she added.

At Halebidu, however, the team found that most of the 11 documented sites geotagged were well-preserved and in good condition. The study noted that about 1.5 km of fort wall on the south and west side each still remained and could be conserved.

SUBMITTED TO STATE

The findings of Rs 25-lakh project, funded by the Karnataka Knowledge Commission, have been submitted to the state authorities. The project identified the extent of archaeological remains in each site and produced accurate geospatial data, which could be used by state or central authorities for developing site-specific management plan.

The outcome includes printable maps of the sites with new findings and new archaeological outputs of this research work. These maps could especially benefit researchers and students. "Karnataka possesses a rich cultural heritage, whose history goes back more than two millennia. From the prehistoric megalithic structures and burial mound to the later sophisticated architectural marvels, Karnataka nurtures many souvenirs of tangible cultural heritage in the region. The outcomes of this project will serve as input to the major goal of heritage conservation and strategy development," said Rajani.