

# Tools to test ties with the past

Tamil Nadu is using technology for authentication of the findings from the excavations at Keeladi and Sivakalai, besides tapping into literary evidence

Updated - January 15, 2022 05:15 pm IST Published - January 14, 2022 12:23 am IST



T.K. ROHIT



Archaeological excavations at Keeladi and other sites have reignited an interest in the ancientness of Tamil civilisation.

Archaeological excavations at Keeladi and last year's carbon dating analysis of rice with soil found in a burial urn at Sivakalai, which indicated the Thambirabarani civilisation dates back to 3,200 years, have reignited an interest in the ancientness of Tamil civilisation.

The State is now using scientific methodologies, along with literary evidence, to ensure the findings are irrefutable and stand intellectual scrutiny globally. "Normally, the process would be to excavate, exhibit, and corroborate with literary sources. Usage of

technology to prove the authenticity of findings is an important step undertaken in the past few years...We want to prove the findings so it would stand intellectual scrutiny,” said T. Udhayachandran, Principal Secretary to the Chief Minister and former Commissioner of Archaeology.

## **DNA lab being set up**

“An ancient DNA lab is being set up at Madurai Kamaraj University in collaboration with international agencies. Samples are being sent to Florida for carbon dating... We are looking at the best institutes to use their expertise and validate our results,” he added.

This year, three sites will be added to the excavation list —Tulukkapatti and Vembakottai to validate the cultural significance of Adichchanallur and Sivakalai; and Perumbalai that is on the erstwhile Kongu Nadu border.Efforts are on to undertake under-sea explorations through a reconnaissance survey at Korkai, an ancient port. This will be a multi-modal agency operation involving the National Institute of Ocean Technology and the Indian Maritime University. “Excavations have been happening in Tamil Nadu for the past 50 years... We are covering the period from prehistory to historical period. Geographically, we plan to cover the entire Tamil Nadu,” said Prof. Rajan, former professor of History, Pondicherry University, and academic and research adviser, Tamil Nadu Archaeology Department. In the Vaigai and Porunai river valleys, the focus has been on the delta region; in the future, the basin region — the catchments — would be covered, he said.

Efforts are on to incorporate the findings with much focus on ancient science and technology in the school syllabus. “We have given details of the Keeladi and Porunai river valley findings to be included in the Social Studies subject for Class IX. We have done the proofing and submitted it to the School Education Department,” said R. Sivanantham, Commissioner, Tamil Nadu Archaeology Department.

## **Long-term projects**

According to Shanti Pappu of Sharma Centre for Heritage Education, whose research team is working on the prehistory of Tamil Nadu for long, the government’s interest in and support for multidisciplinary long-term projects will help to address many aspects

of the State's heritage.

“To study the rich heritage, we require problem-oriented and interdisciplinary long-term strategies to address multiple questions. The answers do not lie only in one site or region, so research has to be spread across the State, at multiple sites, to address questions of interest,” she said.

Mr. Udhayachandran said that among the major potential was to explore the use of Artificial Intelligence and training people and [coding] the machines to decipher inscriptions and identify changes that occur over a period of time on the inscriptions. Experts can then be called to adjudicate on the findings.