

New research sheds light on the genetic heritage of the Nicobarese people

Hyderabad, 6th Dec, 2024: Nicobar Islands are situated in the eastern Indian Ocean and south of the Andaman Islands. The archipelago consists of seven large islands, including Car Nicobar and Great Nicobar, and numerous smaller ones, characterised by flat topography, coral reefs and sandy beaches. Nicobarese people are estimated to be approximately 25,000.

A recent genetic study has revealed new insights into the genetic origin of the Nicobarese. A group of researchers from nine institutions co-led by Dr Kumarasamy Thangaraj, CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad and Prof. Gyaneshwer Chaubey, Banaras Hindu University (BHU), Varanasi, conducted a detailed genetic analysis, using DNA markers that are inherited exclusively from mothers and fathers respectively, and those from both the parents. This helped them to explore the ancestry and genetic affinities of the Nicobarese with South and Southeast Asian populations. Findings of this pioneering study has been recently published in the *European Journal of Human Genetics*.

"Previous theories suggested that the linguistic ancestors of the Nicobarese settled in the Nicobar archipelago during the early Holocene, about 11,700 years ago. However, our new genetic research on Nicobarese, involving 1,559 individuals from South and Southeast Asia, indicate a significant ancestral connection of Nicobarese shared with Austroasiatic populations across South and Southeast Asia. But, our studies also suggest that the Nicobar islanders settled there approximately only 5000 years ago," said Dr Thangaraj.



The study notably highlighted the common genetic affinity of the Htin Mal with Nicobarese. Htin Mal is a population in the the mainland of Southeast Asian, who speak an Austroasiatic language. The Htin Mal community has maintained remarkable ethnic distinctness over time, exhibiting a pronounced genetic drift from the Nicobarese.

"Genomic regions sharred across linguistic groups suggests an ancient distribution of Austroasiatic populations in Southeast Asia," said Prof. Gyaneshwer Chaubey, the lead author of the study. He further said that, "Our findings compellingly argue that the Nicobarese and the Htin Mal represent valuable genetic proxies for understanding ancient Austroasiatic heritage."

Dr Vinay K. Nandicoori, Director of CSIR-CCMB, said, "This research opens up new avenues for understanding the rich tapestry of genetic diversity in Southeast Asia and highlights the importance of preserving the cultural and genetic heritage of Indigenous populations".