India’s first Tribal Genome Project

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Why in News?

Gujarat has become the first Indian State to launch a genome sequencing initiative focused exclusively on tribal communities.

- **Aim -** To improve healthcare for tribal communities by creating a dedicated genomic database.
- **Title -** “Creation of Reference Genome Database for Tribal Population in Gujarat”.
- It is to sequence the genomes of 2,000 people belonging to tribal communities across 17 districts in the State.
- **Implementation agency -** Gujarat Biotechnology Research Centre (GBRC).
- **Funding -** Part of the 2025–26 State budget.
- **Detecting genetic disorders -** The initiative will focus on early detection and targeted treatment of genetic disorders such as sickle cell anaemia, thalassaemia, and certain hereditary cancers.
- **Facilitate personalized medicine -** By understanding the specific genetic variations within these communities, the project aims to enable early diagnosis and targeted treatment of diseases.
- **Bridge the gap between traditional knowledge and modern science** - The initiative seeks to integrate traditional knowledge with advancements in genomic research to improve tribal health.
- **Create a reference genome database -** The project will build a comprehensive repository of genetic markers and data specific to India's diverse tribal populations, which can be used for future research and public health planning.

Reference

The Hindu| India’s first Tribal Genome Project