GOVERNMENT OF INDIA

MINISTRY OF SCIENCE & TECHNOLOGY

DEPARTMENT OF BIOTECHNOLOGY

LOK SABHA

UNSTARRED QUESTION No. 3013

ANSWERED ON 19.03.2025

Indian Biological Data Centre (IBDC)

3013. Smt. D K Aruna:
Shri Chamala Kiran Kumar Reddy:
Shri Suresh Kumar Shetkar:
Shri Eatala Rajender:

Will the Minister of Science and Technology be pleased to state:

(a) whether India has completed and made available a year-long compilation of 10,000 human genomes representing 83 population groups, making up about 2% of the country's 4,600 population groups as a data base and this collection will serve as a template of future investigations into disease and drug therapy and will now be available to researchers across the world for investigation and is housed at the Indian Biological Data Centre (IBDC) and this paved the way for India strengthening the biotechnology economy as well as biotechnology-based manufacturing, if so, the details thereof;
(b) whether the Government is aware that experts said that while only a small fraction of India's population groups were studied and the door was open to expanding the database to a million genomes and though costs are a limiting factor, a million would dramatically scale insight into India's genetic diversity; and
(c) if so, the details thereof in Andhra Pradesh and Telangana?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) Department of Biotechnology has created the national resource data of whole genome sequencing of 10,074 healthy individuals from 83 heterogeneous populations from 99 different sites, under the "GenomeIndia" project, to create a library of genetic variations. This data aims to serving both scientific and medical community, fostering genomic research. Hence, the data has been archived at the Indian Biological Data Center (IBDC), a National Repository set up by this Department. The data can be used for developing indigenous chips, diagnostics and therapeutics, benefiting healthcare system of the country and thus will contribute to the bioeconomy of the country. The Department has planned to fund translational research in which this dataset will serve as a template, thus maximizing the benefits of the data generated under 'GenomeIndia' project. This data will be disseminated to the researchers under the provisions of the Biotech-PRIDE (Promotion of Research and Innovation through Data Exchange) Guidelines and 'Framework for Exchange of Data (FeED) Protocols.

(b) **and (c)** Under the 'GenomeIndia' project, the study has been carried out throughout the length and breadth of the country and ensured equitable sampling across linguistic, social, and regional groups in India. Approximately, 36.7% of the samples were collected from rural, 32.2 % from urban and 31.1 % from the tribal populations. It is imperative that maximum benefit should be accrued from the large data base already created. Hence the Department initially focuses on translational research using the already available dataset, for which proposals are being sought throughout the country and the process is still on; hence state wise data in this regard is not available.

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