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### 1. India's Position at WTO on Fish Subsidies for Developing Nations



#### **India's Stance on Fisheries Subsidies Negotiation**

India, during the 13th WTO Ministerial Conference in Abu Dhabi, has emphasized the necessity for a comprehensive agreement on fisheries subsidies.

India asserts that such an agreement must adhere to the principles of 'common but differentiated responsibilities and respective capabilities' (CBDR-RC) and incorporate special and differential treatment (S&DT).

#### **Rationale Behind Subsidies**

India argues that while subsidies to the fisheries sector have historically led to overexploitation, they are crucial for the development and diversification of fisheries sectors in developing countries and small economies.

India highlights the importance of protecting the livelihood and growth of the fishing community in developing countries through appropriate provisions in the agreement.

### **Joint Call for Support**

Fisherfolk from developing nations like India, Indonesia, and Bangladesh have jointly emphasized the need to protect livelihoods in the fisheries subsidies pact.

India voices concerns regarding the impact of negotiations on small-scale, artisanal, and indigenous fishers, especially regarding proposed limits on fishing distances.

India advocates for extending exemptions to small-scale fishers up to 200 nm, which contrasts with the proposed distance of 12 nm or 200 nm in the latest draft of the agreement.

### **Capturing Non-Specific Fuel Subsidies**

India argues for including non-specific fuel subsidies and transfer of fishing rights to corporate fishing under government-to-government payments within the agreement's disciplines.

### **Discipline of Subsidies by Distant Water Fishing Nations**

India also stresses the importance of disciplining subsidies given by Distant Water Fishing Nations for an effective and sustainable fisheries agreement.

Relevance: GS Prelims & Mains Paper III; Economics

Source: The Hindu

## **2. Creating India's genetic map: Genome India project**

### **Why in news?**

The government's Genome India initiative recently announced successful sequencing of 10,000 whole genomes of healthy persons from across the country, creating a genetic map of the population. Researchers from 20 science institutes across the country helped in collecting the blood samples, sequencing the genome, developing a methodology, and storing the data.

With each sequence requiring 80 Gb storage space, the huge dataset of 8 petabytes will be stored at the Indian Biological Data Centre in Faridabad. This dataset will be made available to researchers as "digital public good." The data can be utilised to develop new diagnostics, targeted therapies, identify new rare diseases, and cure existing ones.

### **What is the project?**

The Genome India project was approved by the government in 2020 with the aim of creating a comprehensive catalogue of genetic variations found in the Indian population. A map of genetic diversity is essential for understanding the history of our evolution, discovering the genetic basis for various diseases, and creating therapies of the future. This cannot be done using data available in existing international databases, as Indian genomes are likely to be different from that of other populations.

Our population of 1.4 billion consists of more than 4,600 distinct groups. With endogamy — marrying within the same community — common in India, the various groups have maintained their distinct genetic makeup. This can help compare and contrast the impact of genetic variations on physical health.

# Road to Future

## Aim of Genome Mapping Project

Developing therapies for diseases such as cancer and other rare ones



Predictive diagnosis and precision medicine



**22**  
Partner organisations to be roped in

Dept of Bio-technology has initiated the project

**10,000**  
Number of Indians whose genomic data will be catalogued in phase 1

### What is a genome, how is it sequenced?

The human genome is essentially a biological instruction manual that we inherit from our parents. It is a tome written with just four letters, A,C,G, and T — the four bases that come together to create everyone's unique genetic makeup. There are around 3 billion pairs of bases in the complete human genome. This contains all the information needed to create your physical form and maintain it throughout life. From your height, colour of the eyes, the genetic diseases you get or those you are at a higher risk for, everything is determined by the genetic makeup.

### How does studying the genetic makeup of the country help?

1. One, it can help identify the genetic basis or genetic risk factors for various diseases. For example, a mutation, MYBPC3, which leads to cardiac arrest at a young age. It is found in 4.5% of the Indian population but is rare globally. Another mutation called LAMB3 causes a lethal skin condition. It is found in nearly 4% of the population, but it is not seen in global databases.
2. Two, it can help in targeted treatments, especially for rare diseases that usually arise from genetic anomalies.

Take for example the under-development mRNA vaccine to prevent relapse of pancreatic cancer, which is based on a genetic mutation that allowed a small group of pancreatic cancer patients beat the odds. The mutation allowed their immune system to identify the cancer cells and attack them.

3. It can also help in identifying resistance-indicating variants — for example, genes that might make certain medicines or anaesthetics ineffective in certain populations. An example from India is a set of a Vaishya community from South India, who lack the gene for properly processing common anaesthetics. For this group, use of such anaesthetics can result in death.

### **How long did the project take?**

The first whole human genome was sequenced with the collaboration of an international team. It took 13 years and \$3 billion, and was completed in 2003. India announced its first complete human genome in 2009. The technology has come a long way. Now, it takes only about five days to sequence an entire human genome and perform all the quality checks. In fact, we were able to sequence the entire 10,000 genomes in a matter of three to four months.

Relevance: GS Prelims & Mains Paper III; Science & Technology

Source: The Indian Express

## **3. Protecting Indian Emigrants from Conflict Zones**

### **Indian Nationals Recruited by Russian Army in Ukraine**

The Indian government acknowledges that some Indians have been recruited by the Russian Army and placed within Ukrainian borders now under Russian control.

### **Government Response and Efforts**

The Ministry of External Affairs (MEA) confirms the recruitment of Indian nationals for support roles and asserts efforts for their early discharge, dismissing accusations of non-responsiveness.

### **Addressing Recruitment Challenges**

The government faces criticism for delayed acknowledgment and urges awareness campaigns to deter Indians from joining conflict zones, highlighting the need to investigate unethical recruiters.

India must update emigration protocols for conflict-afflicted countries, enhancing vetting processes for job contracts and providing better advisory and protection measures.

### **Regional Cooperation and Conflict Zones**

Collaboration with neighboring countries like Nepal, Pakistan, and Bangladesh can strengthen efforts against exploitative employment networks, particularly in conflict zones.

### **Reviewing Recruitment Drives**

The government faces scrutiny for approving recruitment drives to conflict zones like Israel, raising concerns about the safety and welfare of Indian workers.

**Addressing Economic Distress**

Instances of Indians seeking risky employment abroad reflect underlying economic challenges. The government must show empathy and implement comprehensive support structures for emigrants facing peril.

Relevance: GS Prelims & Mains Paper II; Indian Diaspora

Source: The Hindu

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