

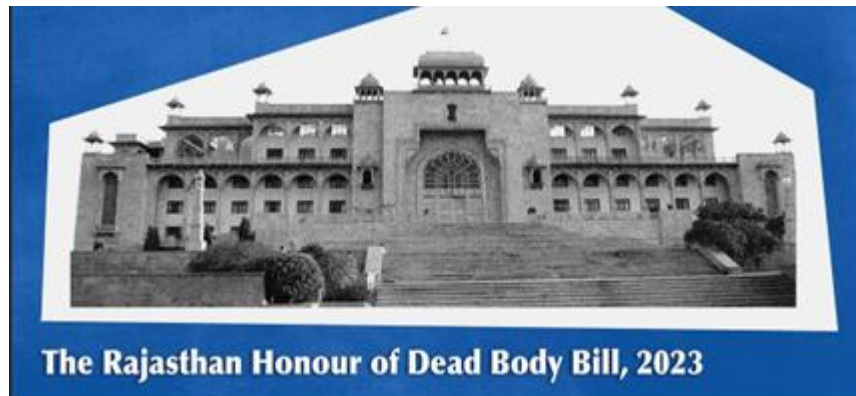
April - 02

## TNPSC BITS

- ❖ Over 21.7 lakh persons attended the Gram Sabha meetings conducted by 12,481 village panchayats on March 29, 2025 all over Tamil Nadu to mark World Water Day.
- ❖ The union government plans to launch a new app-based taxi service, 'Sahkar', on the lines of Ola and Uber.
- ❖ The Financial Action Task Force (FATF) Private Sector Collaborative Forum (PSCF) 2025 was held in Mumbai.
- ❖ The Union Govt has launched Biosarathi mentorship program to nurturing India's emerging biotech startups through expert guidance and capacity building.
- ❖ The WHO Released New Guidance on Mental Health Policy and Strategic Action Plans which replaces its 2004 mental health policy framework and service guidance package, offering a clear path for countries to improve mental health systems.

## TAMIL NADU NEWS

### Tamil Nadu Honor of Dead Body Act



- ❖ The Fifth Tamil Nadu Police Commission has recommended that a 'Tamil Nadu Honour of Dead Body Act' be enacted to prevent the protesters from using dead bodies to make unjustified demands.
- ❖ It would prohibit the protests by relatives or supporters of deceased persons with dead bodies on roads or public places demanding the compensation or immediate action by the police.
- ❖ Any such act would become a punishable offence, with an imprisonment of up to five years.

- ❖ Already Rajasthan enacted Honour of Dead Body Act in 2023.

## NATIONAL NEWS

### Dx-EDGE Initiative

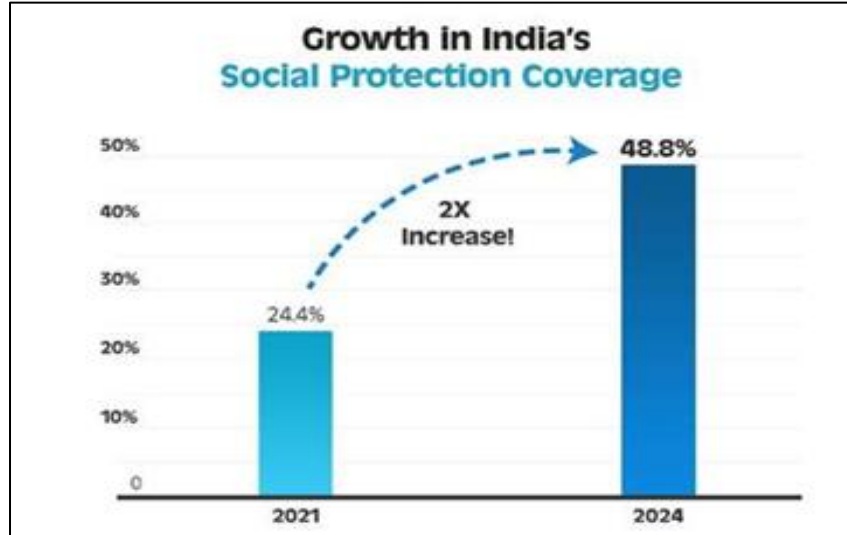


- ❖ The NITI Frontier Tech, in collaboration with AICTE and CII, launched Dx-EDGE initiative.
- ❖ It is a national initiative to embrace digital transformation across Micro, Small, and Medium Enterprises (MSMEs) in India.
- ❖ Dx-EDGE provides them with access to cutting-edge technology and digital skills.
- ❖ The initiative aims to democratise innovation and the skill development across the country.

### Social Security Coverage

- ❖ International Labour Organization (ILO) released its latest World Social Protection Report (WSPR) recently.
- ❖ India has made very significant strides in expanding its social security coverage, which has doubled from 24.4% in 2021 to 48.8% in 2024.
- ❖ Nearly 920 million people, or 65% of the population, are now covered by at least one form of social protection.

- ❖ The eShram portal, launched in 2021 to register the unorganized workers, has recorded 30.68 crore registrations, with women making up 53.68% of the total.
- ❖ The Atal Pension Yojana has enrolled 7.25 crore people and accumulated a total corpus of ₹43,369.98 crore by December 2024.



### 10,000 TB genome samples

#### DNA FINGERPRINT CAN IDENTIFY BACTERIA

**WHAT IS A GENOME?**  
Genome or genetic material of an organism—whether bacteria, virus, potato or human—is made up of DNA

Human cell

Genes

DNA

Genome

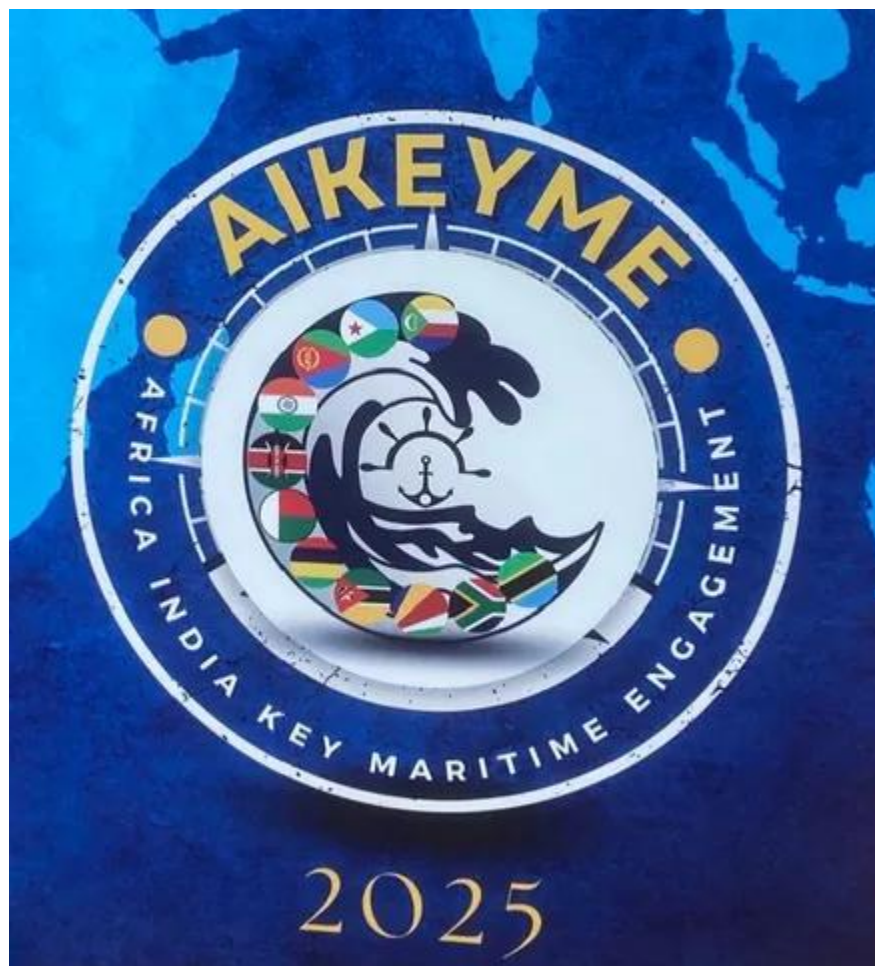
Tuberculosis bacteria

- Each DNA has a unique sequence composed of bases called A T C and G
- Once the sequence is known, it acts a DNA fingerprint; it would then be easy to identify the organism once the sequence is established
- Thus, whole genome sequencing (WGS) is a lab process to determine the order of the bases in an organism's genome
- In past few years, tech and digital database developed to diagnose multi-drug resistant TB strains using WGS
- The M tuberculosis genome is 4.4m base pairs long & encodes for 4,000 genes
- Advantage: Quick diagnosis
- As WGS involves testing many samples, health officials can easily locate TB clusters & treat large number of patients

- ❖ The Department of Biotechnology (DBT) has completed the genomic sequencing of a third, or 10,000 samples, of the target of 32,500 samples of mycobacterium tuberculosis.

- ❖ It aims to improve the understanding of drug-resistant TB and capture unique genomic features of the TB bacterium in India.
- ❖ Of the sequenced samples, 7% are said to be resistant to a single drug.
- ❖ The genome sequencing initiative, called part of “Dare2eraD TB”, is an umbrella programme 2022.
- ❖ India has 1,990 cases per million in 2022, down from 2,370 per million in 2015.
- ❖ India accounts for about 28% of new TB cases worldwide.

### **India-African exercise**



- ❖ The Indian Navy has announced some initiatives to bolder the cooperation with the continent and the Indian Ocean Region (IOR).
- ❖ This includes a large-scale multinational exercise is titled as ‘Africa India Key Maritime Engagement’, also known as ‘AIKEYME’.
- ❖ This will be held with 10 African countries.

- ❖ INS Sunayna is being deployed to the Southwest IOR with a combined crew of India and nine Friendly Foreign Countries (FFC).
- ❖ FFC includes - Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Sri Lanka, South Africa.

## Parliamentary Standing Committee on SSA



- ❖ The committee has taken serious note of the non-release of SSA funds to certain States which have not signed MoUs for implementation of PM Shri scheme.
- ❖ The total funds pending under this scheme to the States are over ₹1,000 crore to West Bengal, ₹. 859.63 crore to Kerala, and ₹2,152 crore to Tamil Nadu.
- ❖ The Parliamentary Standing Committee has recommended the release of pending funds under Samagra Shiksha Abhiyan (SSA).
- ❖ PM SHRI is a model school scheme developed under the NEP, and the SSA is the programme to achieve the NEP goals.
- ❖ 33 out of 36 States and Union Territories had signed the MoU for PM SHRI and are implementing the scheme.
- ❖ During FY 2024-25, States like Tamil Nadu was allocated ₹3,586 crore under the SSA, with the Union government expected to contribute ₹2,152 crore.

## SCIENCE AND TECHNOLOGY NEWS

### Parker Solar Probe near the sun

- ❖ NASA's Parker Solar Probe arrived recently within 6.1 million km from the star's surface.
- ❖ This is a short distance to be from the sun: no spacecraft has ever made such a close approach.
- ❖ Even the Parker Solar Probe took seven years to get here.

- ❖ ISRO's Aditya-L1 probe is stationed at about 150 million km from the star.



## ENVIRONMENT NEWS

### IUCN Status of Lion in Africa and India



- ❖ IUCN released its first Green Status assessment for the lion (*Panthera leo*).
- ❖ The species has been ranked as 'Largely Depleted'.

- ❖ The new assessment tool is divided into nine recovery categories: Fully recovered, slightly depleted, moderately depleted, largely depleted, critically depleted, extinct in the wild, and indeterminate.
- ❖ Lions were previously described as two subspecies: the African Lion (*Panthera leo leo*) and the Asiatic Lion (*Panthera leo persica*).
- ❖ The IUCN SSC Cat Specialist Group currently divides lions into
  - *Panthera leo leo* (found in Central Africa,
  - West Africa and Asia) and
  - *Panthera leo melanochaita* (found in Southern and East Africa).

### Threats to Fungi and Frankincense Trees



- ❖ The IUCN has identified threats like fungi extinction, and the endangered status of frankincense trees.
- ❖ There are now more than 1,000 species of fungi that are threatened with the extinction.
- ❖ The IUCN Red List now includes 169,420 species, of which 47,187 are threatened with extinction.
- ❖ Fungi constitute their own kingdom, distinct from animals and plants.
- ❖ They are the second biggest kingdom after animals, with an estimated 2.5 million species, of which around 155,000 are named.
- ❖ There are five main species of *Boswellia* from which frankincense is derived.
- ❖ The aromatic resin has been used for centuries in perfumes, incense as well as for medicinal purposes.
- ❖ The best known are *B. serrata* (Indian Frankincense), *B. carterii*, and *B. sacra*.

- ❖ The IUCN status of these species updated as
  - 5 species of frankincense (*Boswellia*) on Socotra Island, Yemen, have moved from Vulnerable to Endangered,
  - One from Vulnerable to Critically Endangered, and
  - 3 species have been assessed for the first time as Critically Endangered.

## REPORTS AND INDICES

### 2025 USCIRF Annual Report



- ❖ The United States Commission on International Religious Freedom (USCIRF) has recently released its 2025 report.
- ❖ It recommends to designating India as a “Country of Particular Concern” (CPC) due to alleged religious freedom violations.
- ❖ It also recommended to the US government to conduct a "review the arms sales to India, such as MQ-9B drones under Section 36 of the Arms Export Control Act.
- ❖ 12 out of 28 states in India attempted to introduce or strengthen existing anti-conversion laws” in 2024.
- ❖ In April 2024, “the Gujarat government issued a circular mandating that Hindus wishing to convert to Buddhism, Sikhism or Jainism obtain approval from their district magistrate”.

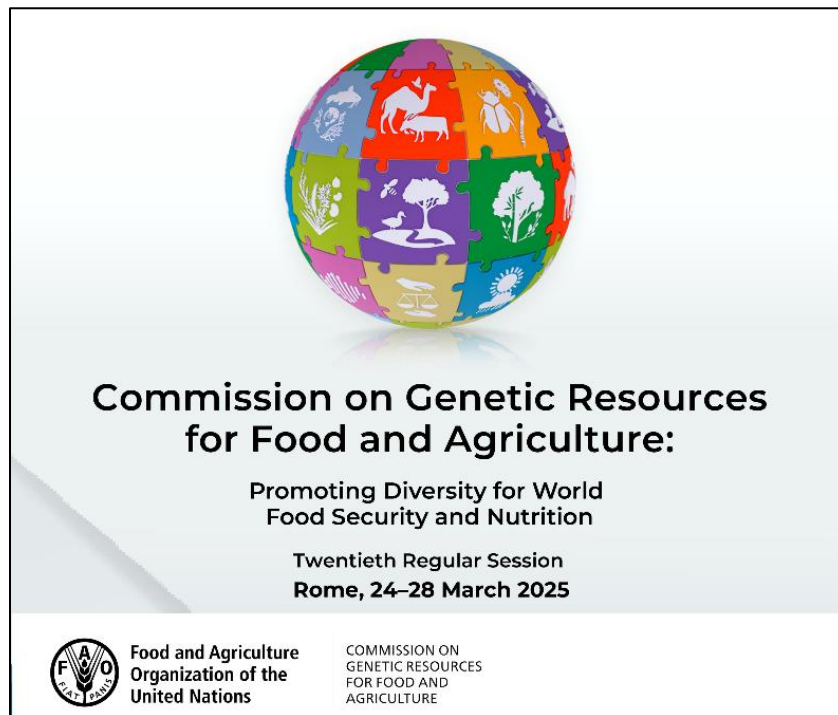
## PERSONALITIES, AWARDS, AND EVENTS

### CGRFA 20 – Rome

- ❖ The 20<sup>th</sup> meeting of the Commission on the Genetic Resources for the Food and Agriculture (CGRFA-20) was held in Rome.



- ❖ The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture and the Second Report on the State of the World's Forest Genetic Resources was released during the event.
- ❖ The Plant Genetic Resources report provides some insights into the global trends, conservation efforts and challenges in preserving crop diversity.
- ❖ The World's Forest Genetic Resources evaluates the status of forest biodiversity worldwide.
- ❖ It also emphasises on the importance of genetic diversity in the sustainable forest management and climate adaptation.



## MISCELLANEOUS NEWS

### **Tirzepatide Drug**

- ❖ One of the most advanced weight loss drugs, Mounjaro, is to be sold in India by US pharma major Eli Lilly.
- ❖ Mounjaro contains an active substance called tirzepatide.
- ❖ It mimics the action of certain gut hormones to improve secretion of the blood-sugar regulating insulin, inhibits secretion of glucagon.
- ❖ It mimics the two hormones, glucagon-like peptide-1 (GLP-1) and the glucose-dependent insulinotropic polypeptide (GIP), to lower the blood sugar and promote weight loss.

- ❖ Tirzepatide is primarily intended for the people with Type 2 diabetes who cannot control their blood sugar despite following a proper diet and taking some other medications.

