

## UPSC Daily Current Affairs| Prelim Bits 22-01-2025

### Breast cancer cases in India

#### Why in news?

According to a recent study the number of breast cancer cases in India is projected to rise by 50,000 annually this decade, with the economic burden estimated to an average \$19.55 billion per year.

- **Breast Cancer** - Breast cancer is one of the most common cancers that affects women and people assigned female at birth (AFAB).
- It happens when cancerous cells in your breasts multiply and become tumors.
- About 80% of breast cancer cases are invasive, meaning a tumor may spread from your breast to other areas of your body.

Common types of breast cancer	Less common breast cancer types
• Invasive (infiltrating) ductal carcinoma (IDC)	• Triple-negative breast cancer (TNBC)
• Lobular breast cancer	• Inflammatory breast cancer (IBC)
• Ductal carcinoma in situ (DCIS)	• Paget's disease of the breast

- **Symptoms** - Lumps, Skin changes, Nipple changes, Nipple discharge, Pain and others.
- **Complications** - The most significant complication is metastatic breast cancer, spreads to other areas of your body, including your brain, bones, liver and lungs.
- **Treatment** - Breast cancer is treated with a combination of surgery, radiation therapy, chemotherapy, hormonal therapy, and targeted therapy.

#### Study Findings

- **Cancer rate** - Cancer is now reported as the 5<sup>th</sup>-leading cause of death in India (5.7% of all deaths), as per the Medical Certification of Cause of Death (2018).
- The rise of around 11.5% in cancer incidence is recorded in India, along with a 13.8% increase in cancer-related deaths every year.
- **Breast cancer rate** - Over the past 26 years, the age-standardized incidence rate of breast cancer in females increased by 39.1% from 1990 to 2016, with the increase observed in every State.
- The number of breast cancer cases in India is projected to rise by 50,000 annually this decade.
- **Vulnerable** - Current trends point out that a higher proportion of the disease is occurring at a younger age in Indian women, as compared to the West.
- **Survival rate in India** - The survival rate of patients with breast cancer is poor in India as compared to Western countries.

- It is due to earlier age at onset, late stage of disease at presentation, delayed initiation of definitive management and inadequate/fragmented treatment.
- **Associating factors** - Firstly, breast cancer is associated with lower levels of physical activity, socioeconomic status, utilization of health facilities and health insurance.
- A survey showed that 14.2% of patients discontinued treatment, and only 9% of the patients were covered by any health insurance scheme.
- **Co-morbidity** - Breast cancer is also associated with high co-morbidity, with hypertension and diabetes being the most common co-morbidities, thus contributing to a high economic burden.

## Reference

[The Hindu | Breast cancer cases in India](#)

## Kashmir Chinars

### Why in News?

*J&K Forest Research Institute (FRI) of J&K Forest Department recently geo-tagged and equipped with QR-code of chinara trees in Kashmir for digital protection and to conserve the rich heritage.*

- It is a large deciduous tree with a spreading crown and a long life.
- **Scientific Name** - *Platanus orientalis*.
- Chinara is also known as Oriental plane tree, maple tree and locally it is called as Bouena.
- **Habitat** - It is a distinctive feature of the Kashmir valley and is found all around it.
- **Origin** - It is believed to have been introduced in Kashmir from Persia.
- **Height** - It can grow up to 30 meters in height and have a girth of 10 to 15 meters at ground level.
- It takes around 150 years for a Chinara to reach its full size.
- **Uniqueness** - One of the unique characteristics of this tree is that its leaves change colors.
- During the summer season, the chinara tree's leaves are deep green. But, as the autumn season sets in, the leaves change color to a beautiful blood-red, amber and yellow.

*'Char Chinara' is an island on the Dal Lake in Srinagar, gets its name after the Chinara Tree.*

- Kashmir is home to world's oldest Chinara, which is 647 years old and located in central Kashmir's Budgam district.
- **Uses**
  - Ornamentation,
  - Leaves, and bark are used as traditional medicine,
  - Used for creating wood products,
  - Twigs and roots can be used as fabric dye.

## Reference

## Electoral Trusts

### Why in News?

*Supreme Court struck down electoral bonds last year, shifting political funding to electoral trusts.*

- It is a Trust set up by companies with the sole objective to **distribute the contributions** received by it from other Companies and individuals to the political parties.
- **Qualification** - Under '**The Electoral Trusts Scheme, 2013**', any company registered under Section 25 of the Companies Act, 1956, can form an electoral trust.
- **Governed by** - The Companies Act, 1956, and the Income Tax Act, 1961.
- **Eligibility to donate** - Under Section 17CA of the Income-tax Act, 1961
  - Any citizen of India,
  - A company registered in India, or
  - A firm or Hindu Undivided Family or
  - Association of persons living in India, can donate to an electoral trust.
- It shall not accept contributions from
  - An individual who is not a citizen of India
  - A foreign entity whether incorporated or not
  - Other Electoral Trusts (approved under the Electoral Trusts Scheme)
  - Contributors without PAN
  - NRIs without a passport number
- **Renewal** - The electoral trusts have to apply for renewal **every 3 financial years**.
- **Distribution of funds** - For administrative expenses, the Electoral Trusts are permitted to set aside a maximum of 5% of the total funds.
- They must donate **95%** of contributions received in a financial year to political parties registered under the Representation of the People Act, 1951.
- The contributors' PAN (in case of a resident) or passport number (in case of an NRI) is required at the time of making contributions.
- **Transparency** - Trusts are required to maintain detailed accounts of donors, including PAN details, donation amounts and payment modes.
- Unlike electoral bonds, these contributions are **partially transparent** as donor and recipient identities must be disclosed, albeit separately.
- **Reporting** - These records are audited annually, with reports submitted to the commissioner of income tax and the Election Commission (EC).

*Among the 18 registered electoral trusts, the Prudent Electoral Trust (PET) stands out as the largest and most influential.*

### Reference

[India Today | Electoral Trusts](#)

## One Liners 22-01-2025

### History, Art and Culture

#### Parakram Diwas

- **Parakram Diwas** - To commemorate Netaji's birth anniversary.
- **Organized by** - Ministry of Culture.
- **1<sup>st</sup> Edition in** - 2021, held at Victoria Memorial, Kolkata.
- **2025 Parakram Diwas** - on 128<sup>th</sup> birth anniversary, to be held at Cuttack, Netaji's birthplace.
- **Recognition** - His house has now been converted to a museum dedicated to him.
- In 2023, a hologram statue of Netaji unveiled at India Gate, New Delhi and 21 unnamed islands in Andaman and Nicobar named after 21 Param Vir Chakra Awardees.

#### Tripura, Manipur and Meghalaya Statehood Day 2025

- **Foundation Day** - 1972, 21<sup>st</sup> January.
- **Meghalaya** - Once a part of Assam, Meghalaya gained autonomy through the Assam Reorganisation (Meghalaya) Act of 1969.
- The constitutional framework for this significant transition was established by the North Eastern Areas Reorganisation Act, 1971.

### Geography

#### Tripura

- **Borders** - Bangladesh (East Bengal) to the north, south, and west, and Assam and Mizoram to the east.
- **Demography** - Majority are the Hindu Bengali people, while indigenous communities or tribes, account for about 30%.
- **Tribal groups** - Among the 19 recognised tribes, those speaking the Kokborok language form the largest group.

#### Manipur

- **Historical background** - It was under British rule and officially merged with India when Maharaja Budhachandra signed the Treaty of Accession in 1949.
- **Capital** - Imphal, also known as Kangleipak and Sanaleibak.
- **Bordered by** - Nagaland to the north, Mizoram to the south, Assam to the west, and Myanmar (Burma) to the east.
- **Population demography** - It includes diverse ethnic groups like Meetei, Kuki, Naga, and Pangal, who primarily speak Sino-Tibetan languages.

#### Meghalaya

- The term 'meghalaya' meaning 'the abode of clouds' in Sanskrit.
- **Borders** - Bangladesh to the south & west and Assam to the east.
- **Capital** - Shillong, is nestled in the Khasi Hills.
- **Primary languages** - Khasi, Pnar, Garo, and English.
- It is known as the wettest region in India, around 70% of Meghalaya is covered in lush forests.

### Polity & Governance

### **All India Presiding Officers' Conference (AIPOC)**

- **AIPOC** - It is the apex body of the Legislatures in India.
- **1st Edition in** - 1921, has completed its 100 years in 2021.
- **85<sup>th</sup> edition** - It held in Patna, has adopted 5 resolutions on
  - Tributes to founding fathers
  - Respect for values in constitution
  - Barrier-free and orderly debates
  - Celebration of 75<sup>th</sup> years of constitution
  - Use of digital technology

### **One Nation, One Legislative Platform**

- **Vision of** - Indian Prime Minister.
- **Concept** - A unique platform to Indian citizens, enabling them to access Parliament debates and legislative debates on any topic through keyword, metadata, and AI-powered search.
- **Current progress** - Parliament debates are being made available online by translating them into both Hindi and English.
- State legislatures have also made remarkable progress in digitizing their current and past debates.

## **Agriculture**

### **Livestock Conclave 2025**

- **Theme** - Dialogue for Holistic Development of Livestock Sector in North East India.
- **Held in** - Shillong, Meghalaya.
- **Objectives** - To discuss strategies for the holistic development of the livestock & poultry sector in the North East Region (NER) states.
- To assess the present status and challenges, explore opportunities for growth and development through value chain strengthening, technological interventions and policy support.

## **Science**

### Huntington's Disease

- **Cause due to** - A fault in HTT gene, which is responsible for making the huntingtin (Htt) protein.
- **Condition** - Mutated gene creates dysfunctional Htt protein.
- **Symptoms** - It causes degeneration of neurons affecting movement, cognition, and memory.
- **Recent findings** - Modified fruit flies show mutated human HTT gene effects.

### Hypersonic Missiles

- **Speed** - It travel faster than Mach 5 (over 5,400 km/hr)
- **Capabilities** - Capable of bypass existing Air Defense Systems & can delivering rapid and impactful strikes.

### Scramjet Engine Technology

- **Technology** - An air breathing engines that enable combustion at supersonic speeds.
- **Mechanism** - Flame stabilization technique maintains continuous flame at high air speeds.
- **Development in India** - Defense Research & Development Laboratory (DRDL) has taken the initiative in developing a long-duration Supersonic Combustion Ramjet or Scramjet powered hypersonic technology.
- Advanced Computational Fluid Dynamics (CFD) simulation tools were used for their evaluation & performance prediction.

### Defense Research & Development Laboratory (DRDL)

- **Part of** - DRDO.
- **Located in** - Hyderabad.
- **Role** - For the design and development of state-of-the-art Missile Systems and technologies required for the deterrence and defence of the country.
- **Technologies deployed on** - Underwater, sea, land as well as air based platforms.
- **R&D** - Aerodynamics and Airframe Design, Computational Fluid Dynamics, Ramjet and Scramjet Propulsion, Precision Fabrication, Systems Analysis, as well as the Command and Control systems for missile based weapon systems.

## **Index**

### Readiness Assessment Methodology (RAM)

- **RAM** - It includes a range of quantitative and qualitative questions designed to gather information about different dimensions related to a,
  - Country's AI ecosystem.
  - Legal, regulatory, social, cultural, economic, scientific, educational, technological and infrastructural.
- **Purpose** - To support member states in their implementation of the UNESCO recommendation on the Ethics of AI.

### AI RAM in India

- It marked the 2<sup>nd</sup> in a series of 5 consultations to shape India's AI policy.
- **Aim** - To craft an India-specific AI policy report, identifying strengths and growth opportunities within India's AI ecosystem.
- **Initiated by**
  - United Nations Educational, Scientific and Cultural Organization (UNESCO).
  - Ministry of Electronics and Information Technology (MeitY).