


- 1. Kodaikanal Solar Observatory (KSO):** The Department of Posts has released a special commemorative postage stamp to mark the 125th anniversary of the **Kodaikanal Solar Observatory (KSO)**.

 - About KSO:** One of India's oldest and most prestigious scientific institutions dedicated to solar research.

 - Situated on the southern tip of the **Palani Hills in Kodaikanal, Tamil Nadu**.
 - Established:** In **1899**, by the **Indian Institute of Astrophysics**.
 - Set up to study the link between solar activity and the Indian monsoon.
 - Triggered by the Great Drought of 1875–1877, which caused massive famine and deaths across India and other countries.
 - The Famine Commission suggested creating a solar observatory for systematic solar monitoring.
 - Site Selection:** Kodaikanal was chosen for its **clear skies, low humidity, and minimal fog**—ideal for solar observations.
 - Scientific Contribution:** In **January 1909**, the **Evershed Effect** (radial gas flow in sunspot penumbrae) was discovered here—an important solar physics breakthrough.
- 2. Rajon ki Baoli:** The Archaeological Survey of India (ASI) has completed the restoration of **Rajon ki Baoli**, a 16th-century stepwell located in Mehrauli Archaeological Park, New Delhi.

 - The project was carried out in collaboration with the World Monuments Fund India (WMFI) and TCS Foundation under the broader framework of the Historic Water Systems of India initiative.
 - About Rajon Ki Baoli :** A **stepwell** that also includes a **mosque** and a **tomb** within the same complex.

 - Built around **1506 CE** during the rule of **Daulat Khan Lodhi**.
 - The name "**Rajon Ki Baoli**" comes from the word '**Rajbirs**' or '**Mistris**', which means **masons**. It got this name in the early 20th century when masons began living in the area permanently.

3. **Operation AAHT:** Recently, the Railway Protection Force (RPF) rescued four minor girls from a suspected human trafficking attempt aboard the Satyagrah Express at Raxaul Railway Station, under **Operation AAHT (Action Against Human Trafficking)**.
- **About Operation AAHT:** Launched by the Railway Protection Force (RPF) as a focused mission to combat human trafficking across the Indian railway network.
 - Established dedicated **Anti-Human Trafficking Units (AHTUs)** across Indian Railways.
 - Partnered with the National Commission for Women to improve coordination and victim support.
 - Uses infrastructure and intelligence to track and share data on victims, routes, and traffickers with law enforcement.
 - Cyber cells monitor online platforms for trafficking activity.
 - Focuses on trains from districts bordering Nepal, Bangladesh, and Myanmar to prevent cross-border trafficking.
 - **Achievements in FY 2024–25:** Rescued 929 victims and arrested 274 traffickers.
4. **National Accounts Statistics :** The Ministry of Statistics and Programme Implementation (MoSPI) has released the comprehensive '**National Accounts Statistics – 2025**' report, providing detailed data on India's national income, production, and expenditure aggregates.
- **Key Highlights :**
 - **Updated Estimates:** Final estimates for FY 2022-23 and first revised estimates for FY 2023-24, using updated administrative and survey data plus historical series from FY 2011-12.
 - **Detailed Economic Indicators:** Provides GDP, GVA, consumption, savings, capital formation, and other macroeconomic data at current and constant (2011-12) prices.
 - **Sectoral Insights:** In-depth analysis of agriculture, industry, and services to understand sector-wise growth and contributions.
 - **Disaggregated Data:** Detailed consumption, savings, and capital formation data for households, corporate, and government sectors.
 - **Methodology:** Estimates follow UN System of National Accounts (SNA) guidelines for international comparability and accuracy.

5. **Global Report on Food Crises (GRFC):** Recently, the Global Report on Food Crises (GRFC) 2025, published by the Global Network Against Food Crises (GNAFC), revealed that nearly 300 million people across 53 countries and territories faced acute hunger in 2024, an increase of 13.7 million from 2023.
- **Key Findings: 295 million** people faced acute food insecurity in 2024 (23% of assessed population), marking the sixth consecutive yearly rise.
 - **1.9 million** faced catastrophic hunger (IPC/CH Phase 5) and famine confirmed in **Sudan**, with hotspots in **Gaza, Haiti, South Sudan, and Mali**.
 - **38 million** children under five were acutely malnourished, with severe cases in **Gaza, Mali, Sudan, and Yemen**.
 - **95 million** forcibly displaced people lived in food-insecure countries, out of **128 million** globally.
 - **About GNAFC :** A multistakeholder initiative launched in 2016 by the European Union, FAO, and WFP, in collaboration with key UN organizations, the United States Agency for International Development (USAID), and various non-governmental partners.
 - To prevent, prepare for, and respond to food crises, with the overarching goal of supporting SDG 2 – Zero Hunger.
 - Established in response to the rising challenge of chronic global food insecurity, which is increasingly driven by conflict, economic shocks, climate extremes, and forced displacement.
6. **Retrospective Environmental Clearances:** Recently, the Supreme Court of India ruled that retrospective environmental clearances are unlawful.
- It struck down the 2021 and 2022 Office Memorandums that allowed post-facto approvals for industrial and mining projects started without mandatory clearances.
 - **Judicial Reasoning & Implications:** Environmental Clearances (ECs) must be obtained **before** starting any project activity.
 - Retrospective ECs legalize unauthorized projects and undermine environmental laws.
 - The Court struck down the 2021 Memorandum allowing such retrospective clearances.

- Prior EC is mandatory, including proper environmental impact assessment and public consultation.
 - Environmental protection cannot be compromised for economic development.
 - The government must protect the environment, not shield violators.
7. **Marang Buru/Parasnath Hill:** Recently, the Jharkhand High Court ordered the state to enforce a ban on meat, alcohol, and intoxicants on a hill sacred to Santal Adivasi and Jain communities.
- **About Marang Buru/Parasnath Hill :** Jharkhand's tallest peak (1,365 m), part of Parasnath Wildlife Sanctuary.
 - **Jain Significance:** Known as Sammed Shikharji, where 20 of 24 Tirthankaras attained liberation and home to 40+ Jain temples.
 - **Santhal Belief:** Revered as Marang Buru ("Great Mountain"), their supreme deity and key worship site, especially during Sohrai festival.
 - **Social Role:** Sacred groves are central to Santhal culture and the hill hosts the Lo Bir Baisi council for tribal dispute resolution.
 - **Historical Role:** Launch site of the 1855 Santal Hul rebellion against British rule.
8. **Shingles Vaccine :** Recent studies highlight added benefits of the shingles vaccine beyond infection prevention.
- Research from South Korea links it to a 23% lower risk of cardiovascular disease, while a Welsh study suggests it may also reduce the risk of dementia.
 - **About Shingles:** Shingles is caused by the **varicella-zoster virus (VZV)**, the same virus that causes chickenpox.
 - **Symptoms:** Appears as a **painful, itchy rash** on one side of the body, often in a band or stripe. Can lead to complications like **postherpetic neuralgia** (persistent nerve pain).
 - **Risk:** After a chickenpox infection, the virus remains dormant and may **reactivate later in life** as shingles.
 - **Vaccines:** **Zostavax** – a **live-attenuated vaccine**, used in the **Welsh study** exploring links between shingles vaccination and reduced dementia risk.
 - ✓ **Shingrix** – a **recombinant vaccine**, more widely used. A 2024 Oxford study found that vaccinated individuals in the U.S. had a 17% lower risk of dementia over six years.

- **About Dementia** : A general term for a **decline in memory, thinking, and daily functioning**.
 - **Symptoms**: Memory loss, behavior changes, and reduced ability to perform everyday tasks.
 - **Common Types**:
 - ✓ **Alzheimer's Disease**: Most common, with progressive memory and cognitive decline.
 - ✓ **Vascular Dementia**: Caused by blood flow issues in the brain.
 - ✓ **Mixed Dementia**: Combination of multiple dementia types.
 - **Other Causes**: Conditions like **thyroid disorders** or **vitamin deficiencies** can mimic dementia symptoms but are treatable.
- 9. **The World Economic Situation and Prospects** : Recently, the UN released a report titled The World Economic Situation and Prospects as of mid-2025.
 - **Key Highlights**: Global GDP growth for 2025 is revised down to 2.4% from 2.9% in 2024 and 2.8% projected earlier.
 - Least-developed countries' growth forecast cut to 4.1% from 4.5% in 2024.
 - Fiscal space shrinking due to lower export revenues, tighter financial conditions, and reduced development aid.
 - Increasing debt stress, especially in countries near or in default.
 - Food insecurity expected to worsen in fragile states like South Sudan, Mali, Haiti, and Gaza.
 - Inflation from 2020 to 2024: 35% rise in developing economies versus 20% in developed ones.
 - Poor households most affected due to higher prices of essentials such as food, fuel, and medicine.
 - **India-Specific Findings** : GDP growth for 2025 is revised to 6.3%, down from 7.1% in 2024 and 6.6% projected earlier.
 - Strengths include strong private consumption, public investment, and services exports.
 - Inflation is expected to ease to 4.3%, within the RBI's target.