## NASA-ISRO Synthetic Aperture Radar (NISAR) Satellite launched from Satish Dhawan Space Centre, Sriharikota

This is the first dual frequency Radar Imaging mission marking a major milestone in Indo-US space collaboration. **About NISAR** 

Earth Observation Satellite (EOS): Images global land and ice-covered surfaces including islands and selected oceans every 12 days (orbits Earth every 97 minutes). **NISAR: Key Benefits** 

changes in Woodv

biomass; extent of active

crops and wetlands.

- Weight: 2,392 kg.
- Launch Vehicle: ISRO's Geosynchronous Satellite Launch Vehicle (GSLV)-F16.
- Placing Orbit: Sun Synchronous Polar Orbit.
  - place a satellite into Sun-Synchronous orbit.
    - GSLV is typically used for placement in Geosynchronous Transfer Orbit/GTO (35,786 km).

## **Key Features**

- ⊕ Built around ISRO's I-3K spacecraft bus.
- Synthetic Aperture Radar (SAR): Dual band SAR operating on both L (by NASA) and S (By ISRO) bands.
  - SAR sends out a pulse of energy and then records the energy reflected back after its interaction with Earth creating high resolution images through radar motion.

Antarctica's ice sheets,

mountain glaciers.

Characterize land surface

deformation related to

landslides, etc.

**Urgent-response during** 

weather disasters like

hurricanes, storm surges

due to its cloud penetrating abilities.

- Processes radar signals received from different positions along the path, creating a larger "synthetic" aperture.
- SweepSAR technique: For high-resolution, wide-swath images across broad range of terrain.
- **Expected Mission Life:** At least 5 years.
- Open-Data Policy: Information collected will be freely available to global scientific community benefiting developing countries.

### About Sun Synchronous Orbit (SSO) and Polar Orbit

- SSO: Kind of polar orbit where satellites are in sync with Sun, matching earth's rotation around sun and appearing to be in the same position relative to sun.
- Polar Orbit: Type of Low Earth Orbit (altitudes under 2000 km) typically between 200 to 1000 km where satellites usually travel around Earth from one pole to another.

## United States announces 25% tariff on Indian exports plus a 'penalty' to be effective from August 1, 2025

Since January 2025, USA has taken tariff actions against some of its trading partners including India, announcing a 26% reciprocal tariff on India (in April 2025) which was put on hold.

## **Reasons for Current Tariffs**

- Trade Deficit: U.S. goods trade deficit with India was \$45.7 billion (2024), 5.4% higher than in 2023.
- India's alleged Non-monetary trade barriers: India's agricultural subsidies and sanitary and phytosanitary (SPS) measures for food safety are considered a hurdle for US exports.
- India's BRICS membership: The bloc is viewed by the USA as anti-dollar.
- India-Russia Relations: An unspecified penalty to be imposed due to India's Defence and Energy imports from Russia.
  - USA in its proposed Russian Sanctions Act, 2025 aims to impose 500% duties on countries that buy oil or other petroleum products from Russia.

## **Potential Implications of the Tariff Imposition**

- Bilateral Trade Agreement (BTA): Potentially pressurize India to fast track negotiations for an interim deal.
  - Both countries seek to more than double bilateral trade to \$500 billion by 2030 (currently at \$131.8 billion in 2024) and negotiate a multi-sector BTA.
- Competitive Disadvantage: In comparison to its competitors. E.g. tariffs on India are higher than Vietnam (20%), Indonesia
- Impact Exports: E.g. India is the largest exporter of non-patented drugs to the USA.
- Supply Chain Disruption: Inflate costs, delay shipments, etc.

## Conclusion

India remains committed to fair, balanced and mutually beneficial BTA prioritizing welfare of farmers, entrepreneurs, MSMEs and its national interests.





**Key Initiatives to Improve Food Systems** 

business and marketing skills.

COP28 UAE Declaration: 160 Governments agreed to link

COP15 & COP16 Biodiversity Frameworks: Set 23 targets

for food system reform, backed by an implementation plan

World Food Programme: Trains smallholder farmers for

good agricultural practices, post-harvest management,

Other initiatives: Food systems are now a top priority, with

initiatives like the Apulia Food Systems Initiative (by G7) and the G20 Global Alliance Against Hunger and Poverty.

food systems with national climate strategies.



## **UN Deputy Secretary-General Called For Urgent Action To Fix Global Food Systems**

The call for reform in the global food systems was made at the UN Food Systems Summit +4 Stocktake (UNFSS+4) in Addis Ababa (Ethiopia).

- She also launched the 2nd biennial UNFSS+4 report to review progress in global food systems.
- The UN Food Systems Summit was launched in 2021 for ensuring more resilient, inclusive, and sustainable food systems.

- Definition: It encompasses the entire range of actors and their interlinked value-adding activities involved in the production, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, etc.
- Importance: Global food systems carry hidden social, economic, and environmental costs of \$11.6 trillion.
  - Social: It has deep interconnections with all SDGs (health, Zero Hunger Goal, biodiversity, etc.).
    - ◆ 783 million people are chronically hungry.
  - **Economic:** Provide **significant employment** to agricultural households.
  - Environmental: Account for over
    - ◆ 30% of global emissions
    - ♦ 80% of biodiversity loss
    - ◆ 70% of freshwater use

## Why Food Systems Are Failing?

- Climate Shocks: Frequent disasters damage crops and disrupt food supply chains.
- Rising Debt: Debt burden in Least Developed Countries rose from 3.1% to 12% of revenue (2010-2023), reducing money for health and education.
- Weak Infrastructure: One-third of food is lost or wasted due to poor storage, transport, and market access.

## Way ahead for resilient Food Systems

- Private investment and build local capacity.
- Coordinated action linking emergency aid with long-term development.
- Community-led solutions, especially for women and youth.

## India's resolution on the 'Wise Use of Wetlands', adopted at Ramsar CoP15 in Zimbabwe

India's resolution on 'Promoting Sustainable Lifestyles for Wetlands' was adopted, with 172 countries supporting it for conservation efforts.

- The resolution aligns with the principles of Mission LiFE ('Lifestyle For Environment).
- Mission LiFE is an India-led global movement introduced at the UN Climate Change Conference in Glasgow (COP26) in
- It aims to nudge individuals and communities to practice a lifestyle that is synchronous with nature and does not harm it.

## **About Wise Use of Wetland**

- > It is the core principle of wetland conservation under the Ramsar Convention.
- The Convention defines wise use as maintaining the ecological character of wetlands using ecosystem-based approaches within the context of sustainable development.
  - Thus, it facilitates conservation and sustainable use of wetlands and all the services they provide, for the benefit of people and nature.
- Contracting parties are mandated to promoting wise use through **national** plans, legislation, management actions and public education.
- India's Approach to Wise Use
  - The National Plan for Conservation of Aquatic Ecosystems (NPCA).
  - Integrated Management Plans (IMPs) outline strategies for sustainable use.
  - India released a 2024 framework titled "Wetland Wise Use An Implementation Framework".
  - The 'Mission Sahbhagita' and 'Save Wetlands' Campaign have witnessed over 2 million citizens as volunteers, enabling the mapping of more than 170,000 wetlands.

## **About Ramsar Convention**

- Genesis: Adopted in the Iranian city of Ramsar in 1971 and came into force in 1975.
- **About:** It is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources.
- Wetland of International Importance: There are over 2,500 Ramsar Sites around the world.
  - **⊙** Designation Criteria for Wetland of International Importance: Wetland must meet at least one of the Nine Criteria established by Ramsar Convention.
  - Currently, India has 91 Ramsar Sites (Highest in Asia).







# Ministry of Statistics and Programme Implementation (MoSPI) to Reform Key Economic Indicators

## **Key Reforms Proposed**

- Gross Domestic Product (GDP): Updating Base year (Benchmark year for comparison) to 2022-23 from 2011-12 along with bolstering data sources.
  - E.g., exploring **GST, E-Vahan portal**, and **UPI data** in addition to data from Office of Controller General of Accounts (CGA), MCA-21, and RBI.
- Index of Industrial Production (IIP): Updating Base year to 2022-23 (from 2011-12).
- Consumer Price Index (CPI): Updating Base year to 2024 (from 2012).
  - Exploring alternative data sources, like online platforms for airfare, rail fare, OTT platforms and administrative records for petrol, diesel and LPG prices, etc.
- Conducting Annual Survey of Service Sector Enterprises (ASSSE): To measure the formal services sector along the lines of the Annual Survey of Industries.
- Household Consumption Expenditure Survey (HCES): To be held every three years instead of five.

### **Need for the Reforms**

- > Capture Changes in Economic Structure: E.g., shift in consumption pattern, sector weight and the incorporation of new sectors.
- Tapping Varied Data sources: E.g. GST returns for the manufactured products, capture both value and quantities of production.
- **Real Economic Growth:** Revision in Base year captures the real economic growth after **removing** the effect of **inflation**.

### **Key Economic Indicators**

- GDP: Measures the monetary value of final goods and services produced in a country in a given period of time.
- ▶ IIP: Compiled and published by Central Statistical Organisation (CSO) covering mining and quarrying, manufacturing and Electricity.
- ➤ CPI: Macroeconomic indicator of inflation measuring changes in general price level of goods and services meant for households consumption.

## **Also in News**



## **UNSC 1267 Committee**

A UN Security Council (UNSC) Monitoring Team report under the 1267 Sanctions Committee has confirmed that The Resistance Front (TRF), a proxy of Pakistan-based Lashkar-e-Taiba (LeT), was behind the Pahalgam terror attack.

The report is significant as it was adopted by consensus by all 15 UNSC members, including Pakistan (a non-permanent member).

## **About the 1267 Committee**

- It monitors sanctions on ISIS (Da'esh), Al-Qaida, and their affiliates
- Member states must act against listed individuals/groups.
- The committee is currently chaired by Denmark (till Dec 2025).



Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM).

The government said that loans worth over ₹11 lakh crore have been disbursed to women Self-Help Groups (SHGs) under the DAY-NRLM.

About DAY-NRLM

- Nodal Ministry: Ministry for Rural Development.
- Purpose: To organize and uplift rural poor women through SHGs.
- Support mechanism:
  - ⊕ Offers credit support through the Women Enterprise Acceleration Fund (WEAF).
  - Encourages both farm and non-farm income generation.
  - Uses Social Behaviour Change Communication (SBCC) to ensure participation of all, including the most marginalised.
- Outreach Scope: Across the country (except Delhi & Chandigarh).



## **Fundamental Right to Safe and Motorable Roads**

In the **UPP Tollways v. MP Road Development Corp.** case, the Supreme Court ruled that the **right to safe, motorable roads** is a fundamental Right.

## Key highlights of the judgement

- The right to safe, motorable roads is part of the right to life under Article 21 and freedom of movement under Article 19(1)(g) of the Constitution.
- The Court also held that road development is a public duty, and the State is responsible for maintaining roads under its control, not private contractors.



## Piprahwa Relics

India witnessed the return of Lord Buddha's sacred Piprahwa Relics.

About Piprahwa Relics

- Discovery: 1898 by British civil engineer William Claxton Peppé in Piprahwa, Siddharthnagar (ancient Kapilavastu), Uttar Pradesh.
- Significance: Associated with the mortal remains (Body relics) of Buddha.
- Key Features: Include bone fragments, soapstone and crystal caskets, a sandstone coffer, and offerings like gold ornaments, etc.
- Enshrined Around: 3rd century BCE.
  - A Brahmi script inscription on one of the caskets confirms them as Buddha relics, deposited by the Sakya clan.
- Current Status: Classified as 'AA' antiquities under Indian law, prohibiting their removal or sale.











## Appointment of State DGPs

The Centre has introduced a Single Window System for appointing State DGPs (Heads of Police).

The process follows the Prakash Singh Vs. Union of India (2006) case followed by UPSC 2009 guidelines.

#### **Appointment Process**

- States send a list of eligible officers to UPSC at least 6 months **before** the current DGP retires.
- Eligibility:
  - Minimum 30 years of service, or the rank of police chief (and) one below) stipulated for that state
  - Officers who have less than 6 months to retire are not eligible.
- **UPSC Empanelment Committee** selects a panel of 3 officers (or 2 for smaller states) based on merit.
- State government chooses the DGP from this panel



### **UN Women**

Recently UN Women marked its 15th anniversary.

## About UN women (Hq: New York, USA)

- Origin: 2010 by a UN General Assembly Resolution.
- Aim: Advance women's rights, gender equality, and their empowerment.
- Serves as secretariat to UN Commission on the Status of Women.
- Governance: General Assembly, Economic and Social Council and the UN Women Executive Board constitute a multi-tiered **intergovernmental governance structure** for the operational activities and operational policy guidance.
  - UN-Women Executive Board constitutes representatives from 41 Member States elected to three-year term by the UN Economic and Social Council.



## **Banking Laws (Amendment) Act, 2025**

Central Government notified 1st August 2025 as the date for key provisions of the Banking Laws (Amendment) Act, 2025 to come into

The Act amends five major banking laws (RBI Act, 1934; Banking -Regulation Act, 1949; SBI Act, 1955; Banking Companies Acts, 1970 & 1980) to strengthen governance.

## **Key Changes:**

- Substantial Interest Limit raised from ₹5 lakh to ₹2 crore (first update since 1968).
- Cooperative Bank Directors (excluding chairpersons and fulltime directors): Tenure increased from 8 to 10 years in line with the 97th Constitutional Amendment.
- Public Sector Banks (PSBs):
  - Can now transfer unclaimed shares/funds to the Investor **Education and Protection Fund (IEPF).**
  - Allowed to pay statutory auditors, helping attract better auditors.



## Supply and Use Tables (SUTs)

Ministry of Statistics and Programme Implementation Released the Supply and Use Tables (SUTs) for 2020-21 and 2021-22.

Covers 140 products and 66 industries, based on estimates published in National Accounts Statistics (NAS) 2024, survey data like Annual Survey of Industries (ASI), etc.

## **About SUTs**

- Presented as two interlinked matrices: the Supply Table and Use Table, structured in a product-by-industry matrix.
  - Supply Table captures the total supply of goods and services while the **Use Table** records the utilization of these products.
- Integrates three Gross Domestic Product (GDP) approaches viz. production, income, and expenditure methods.

## **Places in News**



## **United Arab Emirates (UAE) (Capital: Abu Dhabi)**

India and the UAE reaffirmed their commitment to deepen defence partnership during the India-UAE Joint Defence Cooperation Committee (JDCC) meeting in New Delhi.

## **Political Features**

- The UAE is a constitutional federation of seven emirates including Abu Dhabi, Dubai, Sharjah.
- Bordering Countries: Saudi Arabia (west and south), Oman (southeast).
- Maritime Boundary: Gulf of Oman (east), Persian Gulf (north and northwest). **Geographical Features**
- It is located in the Eastern part of the Arabian Peninsula.
- Strategic location along the Strait of Hormuz, a transit point for crude oil.
- Climate: Desert (hot and humid in summer, warm and sunny in winter); cooler in eastern mountains.
- Tropic of Cancer passes through UAE (Abu Dhabi emirate).























**PRAYAGRAJ** 







