

Today's Prelims Topics

PSLV Rockets

Context

ISRO set to launch earth observation satellite using PSLV rockets.

About PSLV Rockets

• Stands For: Polar Satellite Launch Vehicle.

• **Generation:** 3rd

• Title Given: Workhorse of ISRO (due to highest success

rate).

Variants: 4 (CA,DL,QL,XL)

• First Flight: September 20, 1993

• Significance:

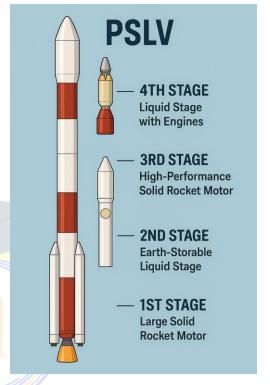
 1st Indian launch vehicle to be equipped with liquid stages.

Successfully launched two spacecraft –
Chandrayaan-1 in 2008 and Mars Orbiter
Spacecraft in 2013.

 Launch various satellites into Geosynchronous and Geostationary orbits, like satellites from the Indian Regional Navigation Satellite System (IRNSS) Constellation

Applications of IRNSS

- Terrestrial, Aerial and Marine Navigation
- Disaster Management
- Vehicle tracking and fleet management
- Integration with mobile phones
- Visual and voice navigation for drivers
- Precise Timing
- Mapping and Geodetic data capture



Source: The Hindu: ISRO set to launch earth observation satellite using PSLV rockets on Sunday



State of Unemployment: PLFS Report

Context

The first monthly bulletin of the Periodic Labour Force Survey (PLFS) released by the Union Ministry of Statistics & Programme Implementation (MoSPI).

Key Employment and Unemployment Indicators

- Labour Force Participation Rate (LFPR): Refers to the proportion of people in the population who are either employed, actively seeking work, or available for work.
- Worker Population Ratio (WPR): Indicates the percentage of people who are employed out of the total population.
- **Unemployment Rate (UR):** Represents the share of unemployed individuals among the total labour force (i.e., those working or seeking work).
- **Current Weekly Status (CWS):** Denotes a person's employment status based on their activity during the 7-day period prior to the date of the survey.

What are the Key Findings

Labour Force Participation Rate (in per cent) in CWS for persons of age 15 years and above during April 2025

sector	age group	male	female	person
rural	15-29 years	63.5	23.8	43.4
	15 years and above	79.0	38.2	58.0
	all ages	57.5	28.8	42.9
urban	15-29 years	59.1	21.5	41.2
	15 years and above	75.3	25.7	50.7
	all ages	58.5	20.5	39.9
rural + urban	15-29 years	62.0	23.1	42.7
	15 years and above	77.7	34.2	55.6
	all ages	57.8	26.2	42.0

2. Worker Population Ratio (in per cent) in CWS for persons of age 15 years and above during April 2025

during April 2025					
sector	age group	male	female	person	
rural	15-29 years	55.3	21.2	38.0	
	15 years and above	75.1	36.8	55.4	
	all ages	54.7	27.7	41.0	
urban	15-29 years	50.2	16.4	34.1	
	15 years and above	71.0	23.5	47.4	
	all ages	55.1	18.7	37.3	
rural + urban	15-29 years	53.6	19.8	36.8	
	15 years and above	73.7	32.5	52.8	
	all ages	54.8	24.9	39.8	



3.Unemployment Rate (in per cent) in CWS for persons of age 15 years and above during April 2025

sector	age group	male	female	person
rural	15-29 years	13.0	10.7	12.3
	15 years and above	4.9	3.9	4.5
	all ages	4.9	3.8	4.5
urban	15-29 years	15.0	23.7	17.2
	15 years and above	5.8	8.7	6.5
	all ages	5.8	8.7	6.5
rural + urban	15-29 years	13.6	14.4	13.8
	15 years and above	5.2	5.0	5.1
	all ages	5.2	5.0	5.1

Source: PIB: Periodic Labour Force Survey (PLFS) - Monthly Bulletin [April 2025]





Mukurthi National Park

Context

An expert panel of MoFCC has granted permission to carry out an environmental impact assessment (EIA) study for the proposed Upper Bhavani pumped hydropower project to a location in Nilgiri hills which is 1 km away from Mukurthi National Park.

About Mukurthi National Park



- Location: Nilgiri district of Tamil Nadu, within Nilgiri Biosphere Reserve (UNESCO World Heritage Site).
- Reason For Creation: The National Park was created to protect the Nilgiri tahr.
- **Vegetation**: Montane grasslands and shrublands interspersed with sholas.
- Fauna: Nilgiri tahr, Indian elephant, Bengal tiger, Nilgiri marten, Nilgiri langur.
- River: River Pykara (Originates from Mukurthi peak).
 - The river is sacred to the Toda tribe (which live inside the park).
 - Conservation Status of Nilgiri Tahr:
 - o IUCN Endangered
 - o WPA, 1972 Schedule 1
 - CITES Appendix 1
 - Eravikulam National Park (Kerala) has the highest density and largest surviving population of Nilgiri tahr.



Source: Indian Express: Pumped Hydropower Project in Nilgiri gets preliminary approval



Mahadayi River

Context

A new scientific paper by CSIR-NIO and INCOIS claims that Karnataka's diversion of Mahadayi River will have limited ecological impact on Goa, sparking protests by local groups in Goa.

About Mahadayi River

- **Type:** Rain-fed river.
- Origin: Bhimgad Wildlife Sanctuary, Belagavi district, Karnataka.
- Flows Through: Karnataka, Maharashtra, and Goa.
- **Mouth**: Arabian Sea near Panaji,
- Major tributaries: Kalasa, Banduri, Mapusa, Ragada, Nanuz, Valvoti, Nerul, St. Inez Creek, Dudhsagar.
- Significance:
 - o Lifeline of Goa.
 - O Known for Dudhsagar Falls, Salim Ali Bird Sanctuary on Chorão Island.



Dispute:

- **Core Issue**: Karnataka's plan to divert water from Mahadayi's tributaries (Kalasa and Banduri) to the Malaprabha basin.
- Goa's Concern: The diversion would reduce river flow, affecting ecology, drinking water supply, and biodiversity in Goa.

Source: The Hindu: Mahadayi river diversion: protests over study claiming its limited impact on Goa



Haze

Context

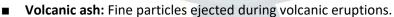
Delhi and the National Capital Region (NCR) faced thick, dusty haze, with visibility sharply reduced across the city.

What is Haze?

- Haze is an atmospheric phenomenon where fine dust, smoke, and other dry particles become suspended in the air.
- Causes of Haze:
 - Natural Sources:
 - Windblown dust: Fine soil particles carried by the wind.
 - Smoke from wildfires:

Combustion

products released during forest and land fires.



- Sea salt: Tiny salt crystals that become airborne from ocean spray.
- Man-made Sources (Air Pollution):
 - **Combustion of fossil fuels:** Emissions from vehicles, power plants, and industrial facilities release particulate matter, sulfur dioxide, and nitrogen oxides, which can form haze.
 - Industrial processes: Manufacturing operations can release dust, smoke, and chemical aerosols.
 - **Agricultural activities:** Activities like stubble burning and plowing in dry conditions can generate dust and smoke.
- Smog is similar to haze but with condensation, which is absent in haze.

Source: India Today: Delhi-NCR covered in gloomy dusty haze





IAEA

Context

International Atomic Energy Agency (IAEA), has said that there has been "no radiation leak" from any nuclear facility in Pakistan after the escalated military engagement with India.

About International Atomic Energy Agency (IAEA)

- About: Intergovernmental forum
 - Also known as the "Atoms for Peace and Development" agency within the UN system.
- Created In: 1957 for response to the deep fears and expectations generated by the discoveries and diverse uses of nuclear technology.
 - IAEA was initially set up as the world's "Atoms for Peace" organization within the United Nations family.
- Aim: It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.



- Functions: The IAEA, although it submits reports to the Economic and Social Council (ECOSOC), reports primarily to the General Assembly directly, and may also report to the UN Security Council whenever necessary.
- Governance: The policy making bodies include the General Conference of all Member States and the 35-member Board of Governors.
- Total Membership: 178 countries including India.
- **Headquarters:** Vienna.

Source: The Hindu: Pakistan's nukes should come under IAEA watch



None of the Above (NOTA)

Context

Vidhi Centre for Legal Policy filed a Public Interest Litigation (PIL) seeking to make the NOTA (None of the Above) option compulsory in all elections, even if there is only one candidate.

What is NOTA?

- It is an option on electronic voting machines (EVMs) that allows voters to **reject all candidates** contesting in an election.
- Origin:
 - Introduced in India in 2013.
 - Implemented following the Supreme Court judgment in the case of People's Union for Civil Liberties (PUCL) vs. Union of India (2013).
 - O The Court ruled that the **right to secrecy in voting** is a fundamental right under Article 19(1)(a) (freedom of speech and expression), and hence NOTA should be included as an option to ensure free and fair elections.
- First Usage
 - o First implemented: Chhattisgarh Assembly Elections, November 2013.
 - Later used in Lok Sabha elections (2014 onward) and in state assembly elections.
- Impact:
 - Even if NOTA gets the highest number of votes, the candidate with the next highest number of votes is declared elected.
 - NOTA does not lead to re-elections or rejection of candidates.
 - Its impact is symbolic, not decisive.

Source: The Hindu: Should NOTA be included in all elections compulsorily?



News in Shorts

Saraswati Pushkaralu

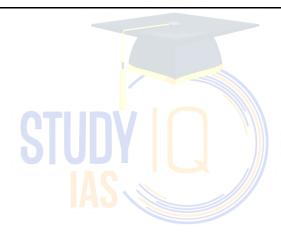
News? The 12-day Saraswati Pushkaralu have begun in Kaleshwaram (Telangana).

About Saraswati Pushkaralu

- **Duration**: It is celebrated for **12 days**.
- Frequency: The festival occurs once every 12 years.
- Celestial Timing: It is observed when Jupiter enters the zodiac sign Gemini (Mithuna Rasi).
- River Worship: Dedicated to River Saraswati, regarded as an invisible and subterranean river in Hindu belief.
- **Key Location**: The festival holds special significance at **Triveni Sangamam in Kaleshwaram**, where the **Saraswati**, **Godavari**, and **Pranahita** rivers are believed to meet.

Related Fact

 According to legend, a devotee named Pushkara performed intense penance and was blessed by Lord Shiva with the power to reside in water and purify rivers. On Jupiter's request, Pushkara agreed to enter and sanctify one sacred river at a time.





Places in News

Belgium



News? Belgium officials abandoned plans to phase down nuclear power.

About Belgium

- Location: Northwestern Europe.
- **Bordered by:** Netherlands, Germany, Luxembourg, France, and the North Sea.
- Capital: Brussels
 - O Brussels is de facto capital of EU.
 - Also it hosts the headquarters of many major international organizations such as NATO.
- Belgium is a founding member of the **Eurozone, NATO, OECD, and WTO**.





Editorial Summary

Is Bihar's high replacement rate a consequence of poverty?

Context

According to the Sample Registration System report for 2021 released by the Registrar General of India Bihar reported the highest TFR at 3.0.

Is Bihar's High Replacement Rate a Consequence of Poverty?

While poverty plays a significant role, **cultural**, **social**, **and structural factors** are equally influential in maintaining Bihar's high Total Fertility Rate (TFR).

Reasons for High TFR in Bihar

- Cultural Preferences: Only 49.6% of Bihari women think two children is ideal (vs 67% nationally).
 - Strong **son preference** persists; families often desire at least **two sons**.
- Economic and Social Factors: Poverty and reliance on children for economic security.
 - Agrarian economy and lack of industrialisation lead to high dependency on family labour.
 - Low female literacy and employability (53% female literacy as per 2011 Census).
- **Urban-Rural Paradox:** Even in urban Bihar, TFR is **above replacement level** (2.3), unlike the **national urban average** of 1.6.
 - Suggests fertility is a conscious cultural choice, not just economic compulsion.
- Weak Health Infrastructure: Limited autonomy of women in reproductive decisions; mother-inlaws mediate between ASHA workers and young women.

Implications

- **Demographic and Development Challenges:** High TFR can strain public services, education, health, and employment sectors.
 - O Despite declining **infant mortality** (27 per 1000), fertility remains high.
- Political Impact Delimitation Debate: Northern States (high TFR) like Bihar may gain more seats in Parliament post-delimitation.
 - O Southern States (low TFR) may get penalised for population control, raising issues of federal fairness and representational equity.
- Policy Implications: Need for comprehensive female education, women empowerment, and reproductive autonomy.
 - Fertility transition must be aligned with **employment opportunities**, **urbanisation**, and **social reform**.

Conclusion

Bihar's high TFR is a multi-dimensional issue involving **culture**, **economics**, **education**, **and governance**. Without proactive intervention, the **demographic divergence** between north and south India could pose serious **socio-political and federal challenges** in the coming decades.

Source: The Hindu: Is Bihar's high replacement rate a consequence of poverty?



Digital Exclusion for PwDs

Context

Recently, the Supreme Court (SC) directed revisions to Know-Your-Customer (KYC) digital norms to ensure accessibility for 'persons with disabilities' (PwD), reinterpreting Article 21 of the Constitution to encompass the 'right to digital access'.

What approach does the Rights of Persons with Disabilities (RPwD) Act, 2016 take?

The **RPwD Act, 2016** adopts a **social-barrier model** of disability. This model shifts the focus from the individual's impairments to the **environmental, attitudinal, and systemic barriers** that hinder their full and effective participation in society.

Key Features:

- **Disability is not just medical** but includes psycho-social and societal factors.
- Emphasizes **equal participation** in all spheres civil, political, economic, cultural.
- Aligns with the UN Convention on the Rights of Persons with Disabilities (UNCRPD).
- Section 42 mandates accessible digital, print, and electronic media using:
 - Audio descriptions
 - Sign language interpretation
 - o Captions
 - Universal design standards
- Enshrines substantive equality and non-discrimination under the law.

Why do banks and other financial and government institutions mandate collecting KYC details?

KYC (Know Your Customer) is a **mandatory regulatory mechanism** under the **Prevention of Money Laundering Act, 2002**, aimed at:

- Preventing money laundering, terrorism financing, identity fraud, and tax evasion.
- Ensuring **identity verification** of individuals accessing banking, telecom, insurance, pension, and other services.
- Facilitating government benefit delivery such as:
 - Aadhaar-linked Direct Benefit Transfers (DBT)
 - Scholarships
 - Pensions and subsidies
- Regulatory Framework
- RBI's Master Directions on KYC (2016) introduced:
 - O Customer Due Diligence (CDD) frameworks
 - Video-based Customer Identification Process (V-CIP)
- SEBI, IRDAI, and DoT also mandate digital KYC for investor and telecom services.

How does the current digital KYC framework exclude visually impaired individuals and acid attack survivors?

The **present KYC systems are not inclusive** and often violate accessibility mandates, effectively **excluding PwDs** from remote identity verification.

- Exclusionary Aspects:
 - O Visual-based prompts:
 - Eye-blinking
 - Reading on-screen flashing codes
 - Aligning faces or ID cards on camera not screen-reader or audio-friendly
 - Signature requirements:
 - PAN applications don't accept **thumb impressions**.
 - Digital forms often reject assistive devices or alternate methods.
 - Biometric challenges:



- Aadhaar biometric scanners lack accessibility features like audio feedback.
- Devices are rarely designed to accommodate people with facial disfigurement.
- O Website and app issues:
 - Violate ICT Accessibility Standards (2021, 2022)
 - No screen-reader compatibility, audio cues, or clear form navigation
- Regulatory rigidity:
 - RBI directions prohibit **prompting**, even though many PwDs require assistance.
 - Lack of uniformity: each institution designs its own tests without PwD inputs.

Legal Backing for Intervention

- Supreme Court rulings (e.g., Rajive Raturi v. Union of India, 2024) have affirmed that:
 - O Accessibility is central to Article 21 (Right to Life and Dignity).
 - O Digital access must be **inclusive by design**, not as an afterthought.
 - Exclusion of PwDs from digital services violates Articles 14, 15, 21, and 38.

Conclusion

The current digital KYC framework, while crucial for national security and governance, **structurally excludes** many disabled citizens. A **universal design approach**, informed by the RPwD Act, 2016 and Supreme Court directives, is needed to ensure **equitable digital inclusion** for all.

Source: The Hindu: Does Article 21 include right to digital access?

