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Weekly Current Affairs Compilation for UPSC TNPSC KPSC

Guiding Dreams, Empowering Future

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EXCLUSIVE CURRENT AFFAIRS BULLETIN

Newsletter | 4th Week, October 2026

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Right to Internet Access is a FUNDAMENTAL RIGHT

Why in News?

According to the supplied October 2026 bulletin, the Supreme Court in Just Rights for Children Alliance v. S. Harish (2026) held that the right to access and use the internet is a fundamental right under Articles 21 and 19(1)(a), including for children. This reported holding and its precise wording require confirmation against the judgment before publication.

The Court had earlier sought responses from the Centre and the National Commission for Protection of Child Rights on child-safe social media regulation, including privacy-preserving age verification and age-appropriate features. A 2025 ICSSR-supported study and research on developing minds raise questions about balancing innovation with children's cognitive, emotional and social well-being. UPSC relevance: constitutional freedoms, reasonable restrictions, digital inclusion, platform accountability and child safety.



Supreme Court's Interpretation of Internet Access

Fundamental-right acknowledgment and children's autonomy

- The supplied account states that access to and use of the internet is a fundamental right enjoyed by children regardless of age.
- Children's safety and freedom are presented as complementary rather than mutually exclusive objectives.

Rejection of blanket bans

- The reported judgment rejected blanket bans on minors' social-media or internet use as "unproven measures of proven disproportionality."
- Broad restrictions can treat the child as the problem, drive use to unregulated platforms and discourage reporting of exploitation.

Constitutional precedents

- Anuradha Bhasin v. Union of India (2020): protected the exercise of speech/expression and trade through the internet under Articles 19(1)(a) and 19(1)(g); this is not identical to declaring a standalone unrestricted fundamental right to internet access.
- Pragya Prasun v. Union of India (2025): the supplied notes identify digital access as intrinsic to Article 21; verify the precise holding and case citation.
- Secretary, Ministry of Information & Broadcasting v. Cricket Association of Bengal (1995): Article 19(1)(a) includes receiving and imparting information.

Three-pronged test for restrictions

- Restriction must have a basis in law.
- It must pursue a legitimate state objective.
- Its intrusion on rights must be necessary and proportionate to that objective.

Target the source, not the user

- The supplied account says safety interventions should target child sexual exploitation and abuse material (CSEAM), perpetrators and distribution networks rather than excluding children from the internet.

Impacts of the Digital Environment on Developing Minds

Neurodevelopment and usage patterns

- The prefrontal cortex, important for attention, impulse control and decision-making, continues maturing into early adulthood.

- A 2025 ICSSR-supported study is reported to have found that 97.6% of school-going children accessed the internet from home, mostly via smartphones, with average use of 4.5 hours daily; study population and methods should be checked before generalising nationally.
- Intensive repetitive use may influence developing attention and reward systems; claims of structural brain changes or underdeveloped circuits require stronger causal evidence.

Attention and reinforcement loops

- Likes, shares and unpredictable rewards can reinforce repeated checking and frequent switching between stimuli.
- High engagement may make sustained attention and ordinary offline activities harder for some children; effects vary by person, content and context.

Cognitive offloading through AI

- AI tools can support learning, but using them to generate essays, arguments and ideas in place of independent effort may reduce opportunities for critical reasoning and productive struggle.

Frictionless design and boredom

- Infinite scroll, autoplay, disappearing stories and read receipts remove stopping cues and create pressure to stay connected.
- Constant stimulation may displace unstructured time useful for reflection, imagination and creativity.

Mental and physical health

- Problematic or excessive social-media use is associated in some studies with anxiety, depression, loneliness, body-image concerns and sleep disruption; association does not prove causation.
- Potential concerns also include irritability when use is limited, compulsive patterns, academic disruption and reduced face-to-face interaction.

Approaches to Regulating Children's Social Media

Global and Indian approaches

- Australia: the supplied notes refer to a minimum-age-16 social-media policy introduced in December 2025.
- Norway: pursued measures for users below 16.
- Karnataka: reportedly announced an under-16 restriction in March 2026.
- Andhra Pradesh: reportedly proposed restrictions below age 13.
- These are distinct policy approaches; announcements, enactment, scope and implementation status should not be conflated.

Education and grassroots protection

- State education boards are considering responsible digital use and online safety in curricula.
- Mission Shakti supports awareness among girls and young women about grooming, privacy and cyberbullying.
- NCERT safe-online-learning guidance, school Cyber Clubs and cyber-hygiene programmes promote safe student behaviour.

Challenges in Regulating Children's Internet Use

Surveillance and age-verification risks

- The Digital Personal Data Protection Act, 2023 and relevant Rules provide for verifiable parental consent for processing children's personal data, with restrictions on tracking, behavioural monitoring and targeted advertising subject to statutory exceptions and applicable commencement provisions.
- Self-declared ages are easy to circumvent; digital KYC and biometric checks can create unnecessary collection and breach risks.
- K.S. Puttaswamy v. Union of India (2017) recognises privacy as a fundamental right and provides the constitutional context for assessing intrusive verification.

Parental digital literacy

- Parents may lack technical knowledge to configure controls, interpret privacy settings or understand recommendation algorithms, particularly across socio-economic and language divides.
- Consent-only regulation can therefore be difficult to implement equitably.

Privacy versus traceability

- Rule 4(2) of the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 concerns identification of the first originator by qualifying messaging intermediaries under specified lawful conditions.
- Traceability obligations raise difficult questions about encryption, privacy and technical feasibility; the legal status and scope should be checked before treating them as unconditional.

Safe harbour and algorithmic curation

- Section 79 of the Information Technology Act, 2000 offers conditional intermediary protection for third-party information, subject to due diligence and statutory limits.
- Algorithmic recommendation, monetisation and engagement optimisation complicate the distinction between hosting content and actively amplifying it.

Reporting and compliance failures

- The supplied account alleges gaps in reporting CSEAM to Indian police or Special Juvenile Police Units even when reports are sent to the US National Center for Missing & Exploited Children (NCMEC).
- The Protection of Children from Sexual Offences (POCSO) Act, 2012 contains reporting obligations; their application to particular intermediaries depends on the statutory facts and duties.

Migration to unregulated platforms and exclusion

- Blanket bans may shift children to poorly moderated platforms and reduce their willingness to report grooming or abuse.
- Restricting internet access can also disadvantage remote learners, children with disabilities and marginalised students who rely on digital educational resources.
- Regulation should focus on perpetrators and harmful content rather than treating young users as offenders.

Measures to Strengthen Online Safety Child mode & privacy-by-default

- The supplied account proposes a dedicated child mode with private-by-default accounts, age-appropriate features and proportionate parental supervision.
- Design safeguards should minimise profiling and intrusive identification.

National hash and URL database and reporting

- The supplied account attributes to the Court a direction to establish a national CSEAM hash-and-URL database and appoint dedicated grievance officers.
- It also reports a two-hour deadline for unknown-origin CSEAM after removal or complaint resolution and weekly consolidated reports for known-origin material; verify these precise directions against the judgment before citing them as binding.

Financial accountability

- The supplied notes advocate exemplary monetary penalties for persistent non-compliance by platforms, beyond potential loss of safe-harbour protection.

Curriculum and protection

- Schools should teach digital safety, consent, age-appropriate sexuality education, safe and unsafe touch, online exploitation, reporting routes and

help-seeking.

Key Concepts

Fundamental rights

- Article 19(1)(a): speech and expression, including receiving and imparting information.
- Article 19(1)(g): practising a profession and carrying on occupation, trade or business, including internet-enabled activity.
- Article 21: life and personal liberty, relevant to privacy, dignity and meaningful digital access.
- Restrictions must have lawful authority, a legitimate objective and proportionate design; Article 19 rights also operate within their specific constitutional restriction clauses.

Important judgments

- Anuradha Bhasin (2020): internet-mediated exercise of Articles 19(1)(a) and 19(1)(g).
- Pragya Prasun (2025): cited in supplied material on digital access and Article 21; exact ratio to verify.
- K.S. Puttaswamy (2017): constitutional right to privacy.
- Cricket Association of Bengal (1995): receiving and imparting information under Article 19(1)(a).
- Just Rights for Children Alliance v. S. Harish (2026): reported ruling in supplied bulletin; independently confirm official judgment and directions.

Statutory and regulatory framework

- IT Act, 2000, Section 79: conditional intermediary safe harbour.
- IT Rules, 2021, Rule 4(2): first-originator identification under specified circumstances.
- DPDP Act, 2023 and DPDP Rules, 2025: children's data, parental consent, tracking and advertising restrictions, subject to commencement and exceptions.
- POCSO Act, 2012: child sexual offences and reporting obligations.
- Whistle Blowers Protection Act, 2014: mentioned in supplied material but not directly central to children's internet access.

International comparisons

- Australia: under-16 policy.
- Norway: under-16 proposals.
- Contrast age-gating approaches with privacy-preserving child safety-by-design.

Conclusion

Child safety and digital liberty are not mutually exclusive. A rights-respecting digital framework must move away from blunt bans and toward child-appropriate platform design, robust legal enforcement against perpetrators, privacy-preserving age assurance, and digital literacy, ensuring the internet remains a safe, inclusive, and empowering space for children

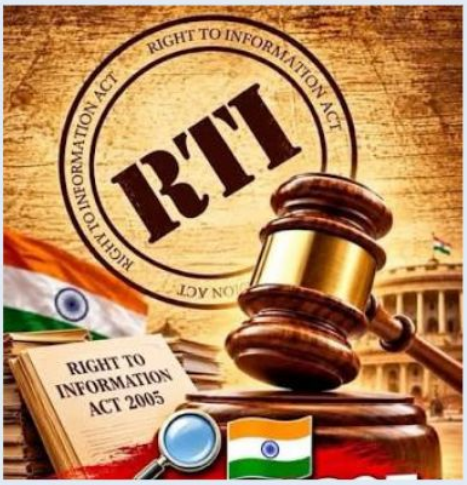
Prelims Previous Year Question (2021)

Q. "Right to Privacy" is protected under which Article of the Constitution of India?

(a) Article 15 (b) Article 19
(c) Article 21 (d) Article 29

Answer: (c) Article 21

21 Years of the Right to Information Act, 2005



Why in News?

The landmark Right to Information (RTI) Act, 2005 completed 21 years of its implementation on 12 October 2026. Marking the occasion, a report released by the Satark Nagrik Sangathan (SNS) highlighted severe implementation gaps and an institutional crisis that is systematically diluting the citizen's "Right to Know." This topic is important for civil services examination because it deals with transparency, accountability, citizen empowerment, probity in governance and the balance between privacy and the right to information.

What is the Right to Information (RTI) Act, 2005?

Background

- The genesis of the RTI Act lies in the Supreme Court's interpretation of the Constitution.
- In landmark judgments like State of U.P. v. Raj Narain (1975) and PUCL v. Union of India (2003), the apex court recognised the "Right to Know" as an intrinsic part of the Fundamental Right to Freedom of Speech and Expression under Article 19(1)(a).

Civil Society Movement

- The legislation was the culmination of years of grassroots campaigning by civil society groups.
- Most notably, the Mazdoor Kisan Shakti Sangathan (MKSS) played a key role.
- The RTI Act eventually replaced the largely ineffective Freedom of Information Act, 2002.

About the Act

- Enacted in 2005.
- The RTI Act transitions Indian governance from a colonial culture of official secrecy to a modern paradigm of structural transparency.
- It empowers citizens to hold elected functionaries and bureaucrats accountable.

Coverage
- Provides a statutory regime for citizens to secure access to information under the control of "public authorities."
- Public authorities include any body owned, controlled or substantially financed by the government.

Mechanism
- The Act establishes a multi-tier, quasi-judicial grievance redressal mechanism:
- Public Information Officers (PIOs): At the base level.
- First Appellate Authorities: Within departments.
- State and Central Information Commissions (SICs and CIC): As the final appellate bodies.

Key Provisions
Section 4 — Suo Motu Disclosure
- Legally binds every public authority to proactively publish 16 specific categories of information on their websites.
- Examples include budgets, procurement and policies.
- Aim: To minimise the need for citizens to file formal applications.

Section 8 — Exemptions
- Outlines specific scenarios where information can be denied.
- Examples include national security and sovereignty.

Section 20 — Penalties
- Empowers Information Commissions to impose financial penalties up to ₹25,000 on errant PIOs.
- Applicable for unreasonable delays, mala fide denials or providing misleading information.

Right to Information (Amendment) Act, 2019
Original Position
- Under the RTI Act, 2005, the Chief Information Commissioner and Information Commissioners served for 5 years or until age 65, whichever is earlier.
- Their salary and terms of service matched those of the Chief Election Commissioner and Election Commissioners.

2019 Amendment
- Changed this arrangement.
- Gave the Central Government the power to set their term of office, salaries, allowances and terms of service.

Key Achievements of the RTI Act Over Two Decades
Massive Public Usage
- One of the most widely utilised transparency laws globally.
- An estimated 4 to 6 million applications filed annually.

Exposing Systemic Corruption
- Instrumental in unearthing high-profile irregularities, including:
- Adarsh Housing Scam
- 2G spectrum allocation
- Secured vital data that led the Supreme Court to strike down the Electoral Bonds scheme.

Institutional Transparency
- Expanded the purview of accountability.
- Notably brought the Office of the Chief Justice of India (CJI) under the Act's scrutiny.

Empowering the Marginalised
- Citizens secured rations, pensions, scholarships, housing and wages under schemes such as:
- Public Distribution System (PDS)
- Janani Suraksha Yojana (JSY)
- Mahatma Gandhi National Rural Employment Guarantee Act (now Viksit Bharat–Guarantee for Rozgar and Ajeevika Mission (Gramin) Act, 2025 (VB–G RAM G), as stated in the source material)
- Examples include:
- Below Poverty Line (BPL) ration-card fraud exposed in Bilaspur (Chhattisgarh)
- Janani Suraksha Yojana maternity incentive released to a mother in Bikaner (Rajasthan)

Education
- In CBSE v. Aditya Bandopadhyay (2011), the Supreme Court ruled that evaluated answer scripts are "information" and "records" under the RTI Act.
- This gave students the right to inspect their marked scripts, including in UPSC and other recruitment exams (subject to applicable legal interpretation).

Major Gaps in Implementation
- Mounting Pendency and Inordinate Delays
- According to the 2025–26 SNS report, 3.85 lakh appeals and complaints are pending across 28 Information Commissions.
- Estimated waiting time to dispose of an appeal:
- Tripura: 19 years and 8 months
- Madhya Pradesh: 19 years and 2 months
- Chhattisgarh: 18 years

Failure of Proactive Disclosure
- The CIC's 2024–25 report reveals that only 62.7% of registered Public Authorities submitted their third-party transparency audit reports.
- Of those submitted, over 50% scored Grade C or below.
- This indicates poor compliance with digital transparency norms.

Procedural Hurdles
- Commissions are increasingly returning appeals over minor technical defects.
- Between July 2025 and June 2026, nine commissions returned over 37,700 cases without passing orders.
- Up to 95% of these are never refiled, disproportionately affecting the poor.

Legislative Dilution — Concerns Raised
RTI (Amendment) Act, 2019
- Granted the Central Government the power to fix the tenure, salaries and terms of service of Information Commissioners.
- Critics argue this compromises their operational autonomy.

Digital Personal Data Protection (DPDP) Act, 2023
- Amended Section 8(1)(j) of the RTI Act regarding disclosure of "personal information."
- Critics argue that removal of the express "larger public interest" caveat may shield information about official conduct and assets from public scrutiny; legal interpretation and other RTI provisions remain relevant.

Institutional Apathy and Whistleblower Vulnerability
- Information Commissions frequently suffer from chronic vacancies.
- Some State Information Commissions (like Jharkhand and Himachal Pradesh) have remained completely defunct for long periods.
- Reports cited in the supplied material indicate over 108 RTI activists have been killed and hundreds harassed.
- The source links these concerns to non-implementation of the Whistle Blowers Protection Act, 2014.

Measures Needed to Strengthen the RTI Act
Technological Modernisation and DPI Integration

- Integrate online RTI portals with Digital Public Infrastructure (DPI), including DigiLocker, for seamless applicant verification and real-time tracking.
- States should transition from static PDFs to dynamic, machine-readable open-data platforms.
- Model after Rajasthan's Jan Soochna Portal to automate Section 4 suo motu disclosures.
- Deploy AI-assisted chatbots to help citizens navigate the drafting process.
- Explore blockchain technology to ensure tamper-evident integrity of sensitive public records.

Adhering to Supreme Court Mandates

- State governments must comply with the Supreme Court's directions in Kishan Chand Jain v. Union of India (2023) on monitoring and auditing proactive disclosures.
- Public authorities should internalise the Court's observation in CBSE v. Aditya Bandopadhyay (2011) about the duty to maintain and disseminate information.
- This can make formal RTI requests the exception rather than the rule.

Aligning with Global Transparency Standards

- India's transparency framework should uphold the universal "Right to Know" reflected in:
- Universal Declaration of Human Rights (UDHR)
- International Covenant on Civil and Political Rights (ICCPR)

Harmonising Privacy and Transparency

- Consider judicial or legislative clarification to balance the DPDP Act, 2023, with the RTI Act.
- Restore or clarify a meaningful "larger public interest" test so privacy protections do not shield administrative malpractice.
- Enforce Section 4 through annual third-party transparency audits, updated departmental websites and disclosure of audit findings.

Reforming Information Commissions

- Establish statutory timelines to fill vacancies in Central and State Commissions to prevent functional paralysis.
- Consider a statutory limit (e.g., 90 days) for disposal of second appeals to prevent



waiting periods from stretching into decades.

Discontinuing Arbitrary Returns

- Commissions must adopt a citizen-centric approach.
- Admit appeals when basic material is provided instead of rejecting them over hyper-technical procedural flaws.

Protecting Information Seekers

- Operationalise the Whistle Blowers Protection Act, 2014, including necessary rules and safeguards.
- Strengthen physical and legal protection for grassroots transparency workers.

Adopting State-Level Best Practices

- Promote searchable RTI databases, following Maharashtra's example.
- Support community-based RTI assistance programmes such as Gujarat's RTI on Wheels initiative.

Key Concepts for Civil Services Examination

Constitutional Basis

- Right to Know is part of Article 19(1)(a)—Freedom of Speech and Expression.
- Supreme Court judgments: State of U.P. v. Raj Narain (1975), PUCL v. Union of India (2003).

RTI Act Structure

- Public Information Officers (PIOs)
- First Appellate Authorities
- State and Central Information Commissions

Key Sections

- Section 4: Suo Motu Disclosure
- Section 8: Exemptions
- Section 20: Penalties

Amendments and Their Impact

- RTI (Amendment) Act, 2019: Central Government's role in prescribing tenure and salaries of Information Commissioners.
- DPDP Act, 2023: Revised personal-information exemption and transparency concerns.

Whistleblower Protection

- Whistle Blowers Protection Act, 2014: Enacted; implementation and rulemaking remain concerns in the supplied material.
- Over 108 RTI activists reportedly killed (source figure; not independently verified).

Global Standards

- UDHR
- ICCPR
- SDG 16 (Peace, Justice and Strong Institutions)

Best Practices

- Rajasthan's Jan Soochna Portal
- Maharashtra's searchable RTI databases
- Gujarat's RTI on Wheels

Conclusion

- Transparency is the bedrock of democratic accountability, not an administrative burden. To prevent the RTI Act from becoming a 'dead letter,' India must bridge implementation gaps by filling Commission vacancies, enforcing proactive disclosures (Section 4), protecting RTI activists, and harmonising privacy rights with the citizen's constitutional Right to Know

Prelims Practice Question

Consider the following statements regarding the Right to Information (RTI) Act, 2005:

1. The Right to Information is a Fundamental Right implicitly guaranteed under Article 19(1)(a) of the Constitution.

2. The RTI Act, 2005 replaced the Freedom of Information Act, 2002.

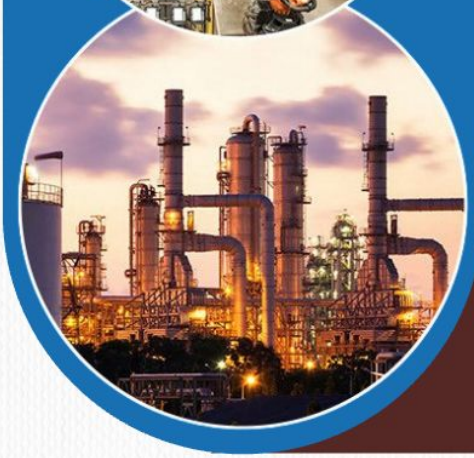
3. Under the RTI Act, the Chief Information Commissioner and Information Commissioners are appointed by the President on the recommendation of a committee consisting of the Prime Minister, the Leader of Opposition in Lok Sabha and the Chief Justice of India.

Which of the statements given above are correct?

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Answer: (a)





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Bharat Audyogik Vikas Yojna (BHAVYA)

Why in News?

The Government has launched the Bharat Audyogik Vikas Yojna (BHAVYA), a ₹33,660 crore initiative to develop 100 plug-and-play industrial parks across India. The scheme seeks to strengthen manufacturing infrastructure, attract investment, support MSMEs, create employment and improve the ease of doing business.

This topic is important for civil services examination because it deals with industrial policy, manufacturing competitiveness, infrastructure development, MSME empowerment and India's integration into global supply chains.

Key Facts About Bharat Audyogik Vikas Yojna (BHAVYA)

Manufacturing Growth and Context

- India's manufacturing sector contributes about 16–17% of GDP.
- It employs over 27 million workers.
- The National Manufacturing Mission aims to raise its GDP share to 25% by 2035.
- Technology-Intensive Manufacturing: Medium- and high-technology industries account for 46.3% of manufacturing value addition, reflecting a shift towards higher-value and technology-intensive manufacturing.
- Need for Industrial Infrastructure: Growing manufacturing demand and diversification of global supply chains have increased the need for reliable infrastructure, efficient logistics, well-connected industrial locations and predictable regulatory approvals.

About the Scheme

- The Bharat Audyogik Vikas Yojana (BHAVYA) was approved in March 2026.
- It was notified on 10 April 2026.
- It has an outlay of ₹33,660 crore.
- It aims to develop 100 plug-and-play industrial parks across India.

Objectives

- Strengthen manufacturing capacity.
- Attract investment.
- Support MSMEs.
- Generate employment.
- Reduce the time and cost of establishing industrial units through investment-ready infrastructure.

Implementation & Financial Assistance

- BHAVYA is being implemented in partnership with States and private developers.
- Emphasis on streamlined approvals, effective single-window systems and investor-friendly reforms to improve the ease of doing business.
- BHAVYA provides financial assistance of up to ₹1 crore per acre for eligible industrial parks, subject to scheme conditions.
- There are differentiated funding provisions for government-led projects and private-sector-led projects.

Core Infrastructure

- Internal roads.
- Power supply.
- Water networks.
- Drainage systems.
- Common effluent treatment facilities.
- ICT-enabled administration.
- Underground Utility Corridors: Will create a no-dig environment, enable efficient maintenance and minimise disruptions to industrial operations.

Ready-to-Use Facilities

- Ready-built factory sheds.
- Built-to-suit units.
- Testing and certification facilities.
- Warehousing.
- These facilities enable faster commencement of manufacturing operations.

Worker Amenities and External Connectivity

- Worker housing, healthcare facilities, skill development centres and other social amenities improve worker welfare and productivity.
- Up to 25% of approved funding can be allocated to external infrastructure, including road connectivity, rail connectivity and last-mile logistics connectivity.

Implementation Period and Phased Selection

- The scheme will be implemented over six years, from FY 2026–27 to FY 2031–32.
- In the first phase, up to 50 industrial parks will be selected.
- Selection will be through a challenge-based process across two rounds.
- The remaining parks will be selected in subsequent phases to reach the target of 100 parks.
- Selection will consider project readiness, land availability and industrial potential.

Park Size

- The minimum land requirement is generally 100 acres for non-hilly States.
- For eligible hilly States, northeastern States, Union Territories and smaller States, the minimum is 25 acres.
- Parks of up to 1,000 acres may also be considered under the scheme.

Institutional Framework and SPVs

- The scheme is administered by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.
- The National Industrial Corridor Development Corporation (NICDC) serves as the Project Management Agency.
- Dedicated Special Purpose Vehicles (SPVs) will oversee park development, operations, investor facilitation and long-term maintenance.

BHAVYA Portal

Launched in June 2026.

Facilitates project submission, appraisal, evaluation, implementation and monitoring.

- Supports a transparent and competitive selection process.

Evolution of India's Industrial Infrastructure Policy

Industrial Estates and SEZs

- India's initial approach focused on industrial estates and Special Economic Zones (SEZs).
- These provided industrial land, common infrastructure and regulatory incentives to promote manufacturing and exports.
- As of February 2026, India had 370 notified SEZs.
- These attracted investments worth ₹7.82 lakh crore.
- They generated employment for over 31.7 lakh people.

Expansion of Industrial Parks

- Industrial development gradually expanded towards larger manufacturing hubs.
- As of 14 October 2026, 4,164 industrial parks had been mapped on the India Industrial Land Bank (IILB).
- This improves access to information on industrial land and infrastructure.

National Industrial Corridor Development Programme (NICDP)

- The NICDP introduced an integrated approach combining industrial zones with modern utilities, multimodal logistics and urban services.
- Major examples: Dholera Special Investment Region (Gujarat); Shendra-Bidkin Industrial Area (Maharashtra); Vikram Udyogpuri (Madhya Pradesh); Integrated Industrial Township Greater Noida (Uttar Pradesh).

Shift Towards Plug-and-Play Ecosystems

- Building on industrial estates, SEZs and integrated industrial corridors, BHAVYA represents the next stage of India's industrial infrastructure policy.
- It focuses on nationwide development of investment-ready manufacturing parks.

What Are Plug-and-Play Industrial Parks?

Definition and Facilities

- Plug-and-play industrial parks are pre-developed industrial ecosystems.
- They provide ready-to-use land, trunk infrastructure, utilities and common facilities.
- These enable businesses to establish manufacturing operations with minimal delays.



Trunk Infrastructure

- Trunk infrastructure refers to shared infrastructure serving multiple industrial units.
- It includes main roads, water supply, drainage, sewerage, streetlights and electricity networks.

Streamlined Approvals and Economic Significance

- These parks often facilitate regulatory clearances through single-window systems, reducing administrative delays and enabling faster commencement of industrial operations.
- By reducing upfront infrastructure costs and ensuring predictable access to utilities, logistics and regulatory processes, plug-and-play parks help attract investment.
- They strengthen manufacturing competitiveness amid diversifying global supply chains.

Growing Adoption in India

- The Union Budget 2025–26 allocated ₹2,500 crore for developing plug-and-play industrial parks.
- As of October 2026, India had approximately 260 plug-and-play industrial parks.
- This reflects the expansion of investment-ready manufacturing infrastructure.

Sector-Specific Parks

- In July 2026, the government approved the separate BHAVYA-Rasayan Scheme.
- It has an outlay of 3,030 crore.
- It aims to develop three dedicated chemical parks equipped with common infrastructure and environmental safeguards.

Key Concepts for Civil Services Examination

Manufacturing Policy

- BHAVYA supports the National Manufacturing Mission's target of raising manufacturing's GDP share to 25% by 2035.
- It addresses the infrastructure bottleneck that has constrained India's manufacturing competitiveness.

MSME Empowerment

- Plug-and-play parks reduce the time and cost of setting up industrial units.
- This is particularly beneficial for MSMEs, which often lack the resources to develop infrastructure from scratch.
- Ease of Doing Business
- Single-window systems and streamlined approvals aim to improve the ease of doing business in India.
- Predictable regulatory processes attract foreign and domestic investment.

Centre–State Coordination

- BHAVYA is implemented in partnership with States.
- Dedicated SPVs ensure efficient management and long-term maintenance.
- Effective Centre–State coordination is critical for timely execution.

Global Supply Chain Integration

- Diversification of global supply chains presents an opportunity for India.
- Investment-ready infrastructure can attract multinational companies looking to set up manufacturing bases in India.

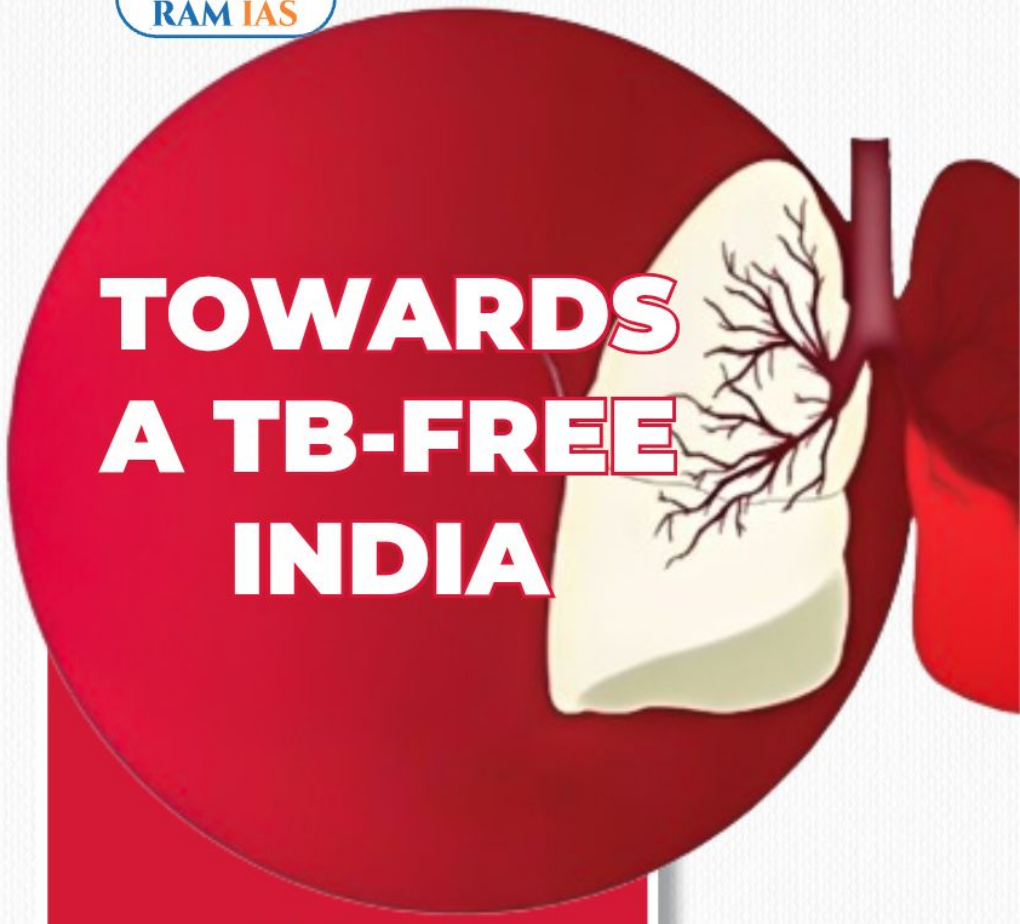
Comparison with SEZs and Industrial Corridors

- SEZs focused on exports and regulatory incentives.
- Industrial corridors focused on integrated, large-scale manufacturing hubs.
- BHAVYA focuses on plug-and-play, investment-ready parks that reduce setup time and cost for businesses.

Conclusion

BHAVYA marks a paradigm shift from merely acquiring land to building world-class, plug-and-play manufacturing ecosystems. By de-risking early-stage investments, enabling competitive federalism, and integrating sustainable worker-centric infrastructure, the scheme provides the structural push needed to elevate India's manufacturing competitiveness and plug into global supply chains."

TOWARDS A TB-FREE INDIA



Why in News?

India recorded a 21% decline in tuberculosis (TB) incidence between 2015 and 2024, compared with a global decline of 12%, as highlighted in WHO's Global Tuberculosis Report 2025. The government is intensifying the TB Mukt Bharat Abhiyaan, expanding screening and TB preventive treatment, and promoting JOSH (Joint Squad for Health) to deepen community participation.

Civil services relevance: public health governance, social determinants of health, technology-enabled healthcare, community mobilisation and Sustainable Development Goal (SDG) 3.



Tuberculosis: Essential Concepts

Causative agent and affected organs

- TB is caused by the bacterium Mycobacterium tuberculosis.
- Pulmonary TB primarily affects the lungs; extrapulmonary TB may involve the brain, kidneys, spine and other organs.

Latent infection and progression

- People with latent/inactive TB infection have no symptoms and cannot transmit infection.
- Progression to active TB is more likely in children, people living with HIV and those with weakened immunity. Malnutrition and diabetes also increase risk.

Clinical features and transmission

- Symptoms of active TB include persistent cough (sometimes with blood), chest pain, fever, night sweats, fatigue and unexplained weight loss; extrapulmonary symptoms depend on the organ involved.
- TB spreads through the air when a person with infectious pulmonary or laryngeal TB coughs, sneezes, speaks or sings, especially in poorly ventilated places.
- TB is not transmitted through handshakes, shared food or utensils, or public toilets.
- Infectiousness generally declines after effective treatment begins, often markedly within the first few weeks; the exact period depends on drug resistance and treatment response.
- Extrapulmonary TB is generally non-infectious, but laryngeal TB can spread infection.

Treatment, prevention and government support

- TB is preventable and curable with appropriate antibiotics; untreated active TB can be fatal.
- BCG (Bacille Calmette-Guérin) vaccination protects children against severe forms of TB.
- Under the National TB Elimination Programme (NTEP), free diagnosis and treatment are available at public facilities and through participating private providers. Ni-kshay Sampark offers TB-service guidance.

National Tuberculosis Elimination Programme (NTEP)

The Revised National Tuberculosis Control Programme (RNTCP) was renamed NTEP in 2020, reflecting India's stated TB-elimination target of 2025—five years earlier than the 2030 global SDG target. The target year is a policy aspiration, not a declaration that elimination has been achieved.

Four strategic pillars: Detect, Treat, Prevent, Build

- Detect: early identification using high-quality diagnostics, active case-finding and targeted community outreach, especially among vulnerable populations.
- Treat: timely, quality-assured medicines and appropriate regimens, including drug-resistant TB management.
- Prevent: contact tracing, TB preventive treatment for eligible household contacts, children, people living with HIV and other risk groups; airborne infection-control measures.
- Build: strengthen health systems, workforce, laboratory capacity, private-sector collaboration and programme accountability.

Cross-cutting programme features

- Private-sector engagement improves diagnosis, case notification, treatment linkage and continuity of care.
- Patient-centred services include nutritional/financial assistance through Direct Benefit Transfer (DBT) and community support from Ni-kshay Mitras.
- Multisectoral action addresses pover-

ty, malnutrition and inadequate living conditions.

Pradhan Mantri TB Mukt Bharat Abhiyaan

Launched on 9 September 2022 as an important community-support component complementing NTEP. It seeks to make TB elimination a Jan Andolan (people's movement), bringing individuals, civil-society organisations, community groups and corporate entities—including through CSR—into nutritional, psychosocial and other patient assistance to support adherence and recovery.

Ni-kshay Poshan Yojana and Ni-kshay Mitra

Ni-kshay Poshan Yojana

- Launched in 2018 to provide nutritional assistance to notified TB patients. The stated benefit is ₹1,000 per month during treatment through DBT.
- Since April 2018, approximately ₹4,454.68 crore has reportedly been transferred to the bank accounts of 1.38 crore beneficiaries.

Ni-kshay Mitra: community support

- A Ni-kshay Mitra ("TB friend") is a voluntary supporter: an individual, NGO, corporate entity or community group.
- Support may include food baskets, psychosocial care and vocational assistance during treatment and recovery.
- More than 2 lakh MY Bharat volunteers have reportedly volunteered as Ni-kshay Mitras. MY Bharat links young people aged 15–29 with government, private and civil-society opportunities.

100-Day TB Mukt Bharat Abhiyaan

Launch and operational model

- Launched by the Ministry of Health and Family Welfare on 7 December 2024 in 347 high-priority districts across 33 States and Union Territories.
- Priorities: vulnerability mapping, systematic screening and earlier diagnosis in high-risk groups.
- Over 30,000 elected representatives and 24 line ministries participated, demonstrating a whole-of-government and whole-of-society approach; strategies were later expanded nationwide.

Reported progress (as of June 2026)

- Over 28.1 crore people screened.
- Over 20 lakh people received TB preventive treatment (TPT).
- Approximately 5.7 lakh new Ni-kshay Mitras joined.
- A second phase starting March 2026 organised over 1.7 lakh Ayushman Arogya Shivirs across 1.2 lakh high-risk villages and wards.
- Participants included 32 lakh students and 1.9 lakh MY Bharat volunteers.
- Reported treatment success: 90%, compared with a cited global average of 88%.

Treatment and Prevention Innovations

BPaLM regimen for drug-resistant TB

- BPaLM comprises bedaquiline, pretomanid, linezolid and moxifloxacin.
- A shorter, approximately six-month regimen for eligible multidrug-resistant/rifampicin-resistant TB (MDR/RR-TB) patients, subject to clinical eligibility.
- More than 15,000 patients have reportedly started BPaLM.

TB Preventive Treatment (TPT)

- Preventive medication is offered to eligible people at risk of progressing from TB infection to active disease, including household contacts of TB patients, people living with HIV and other vulnerable groups.

Ayushman Arogya Mandirs and Primary Healthcare

- Ayushman Arogya Mandirs under Ayushman Bharat deliver comprehensive primary care, including TB screening and referral. As of 13 October 2026, the reported national network numbered 1,87,250 facilities, including sub-health centres, primary health centres, urban primary health centres and other designated centres.

Diagnostic and Digital Infrastructure

Testing and imaging

- More than 9,800 rapid molecular testing facilities and 107 culture/drug-susceptibility testing laboratories support early diagnosis and drug-resistance detection.
- Over 500 AI-enabled handheld chest X-ray units deployed for community screening; another 1,500 were being supplied to States/UTs.
- Handheld X-ray deployment reportedly contributed to a 34-fold increase in X-ray screening.
- Radiographer posts under the National Health Mission and availability of Truenat and CBNAAT machines have been strengthened.

Patient management and citizen engagement

- The Ni-kshay digital platform supports TB notification, case management, follow-up and DBT-linked nutritional assistance.
- The TB Mukt Bharat App supports citizen engagement and programme monitoring.
- The AI-powered Khushi chatbot supplies information on TB symptoms and helps locate diagnostic centres.

Artificial Intelligence in TB Control

Cough Against TB (CATB)

- Acoustic AI examines a roughly three-second cough recording through a smartphone app for signatures potentially associated with TB.
- Over 1.62 lakh people reportedly screened; 12–16% additional case yield reported compared with conventional methods.
- AI cough screening is a triage tool, not a substitute for confirmatory microbiological diagnosis.

Adverse-outcome prediction

- Predictive analytics flags patients at higher risk of treatment failure or other adverse outcomes for timely follow-up.
- A 27% decline in adverse treatment outcomes was reported following nationwide deployment; this is a programme-reported outcome, not proof of causality.

DeepCXR

- AI analyses digital chest radiographs to identify abnormalities suggestive of TB, such as nodules and cavities.
- Reportedly deployed in eight States/UTs and offered to government free of cost to help address specialist shortages.
- Chest X-ray findings require appropriate clinical and microbiological assessment.

JOSH — Joint Squad for Health

- The Ministry of Health and Family Welfare promoted a nationwide social-media campaign featuring JOSH teams, with pilot implementation across 11 States and 55 districts.
- Each team brings together MY Bharat volunteers, National Cadet Corps (NCC) cadets and a designated Class-I officer.
- Focus: TB awareness, earlier screening, timely treatment, treatment adherence, youth mobilisation and stigma reduction.
- Represents the Jan Andolan approach to grassroots public health delivery.

UPSC-Oriented Analytical Dimensions

Public health governance & social justice

- TB control requires action beyond

hospitals: nutrition, housing, poverty alleviation, occupational risks and equitable access to services.
- The NTEP's Detect–Treat–Prevent–Build framework integrates service delivery and system strengthening.
- DBT and volunteer-led nutritional support illustrate welfare convergence and patient-centred governance.

Technology and institutional capacity

- Molecular diagnostics, AI-assisted chest X-rays, acoustic screening and predictive analytics can improve case detection and follow-up.
- Ni-kshay, TB Mukt Bharat App and Khushi chatbot demonstrate digital public-health management and citizen engagement.
- Human oversight, diagnostic confirmation, privacy and equitable access remain important safeguards.

Community participation and SDG 3

- Ni-kshay Mitras and JOSH demonstrate the value of youth participation and Jan Andolan in reducing stigma and improving adherence.
- India is estimated to account for about 25% of global TB cases; reported treatment coverage has reached 92%.
- The 21% decline in TB incidence in 2015–2024 indicates progress, but continued action is needed.
- SDG 3 calls for ending the TB epidemic by 2030; India adopted a more ambitious 2025 elimination target.

Conclusion

India's accelerated progress against tuberculosis demonstrates that technology, public funding, and community involvement can transform public health outcomes. To achieve total elimination, India must maintain this momentum by expanding rapid diagnostic tech, strengthening nutritional support, tackling drug resistance, and ensuring equitable, patient-centred care for vulnerable populations.

Prelims Practice Question

Which of the following are objectives or components of the National Tuberculosis Elimination Programme (NTEP)?

1. Early diagnosis through high-quality diagnostic testing.
2. Free TB diagnosis and treatment at public health facilities.
3. Nutritional support to TB patients through Direct Benefit Transfer.
4. Eliminating TB by 2030, aligning with the SDGs.

(a) 1, 2 and 3 only
(b) 2, 3 and 4 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Answer: (a).

Kufri Jamunia: India's Biofortified Purple Potato

Why in News?

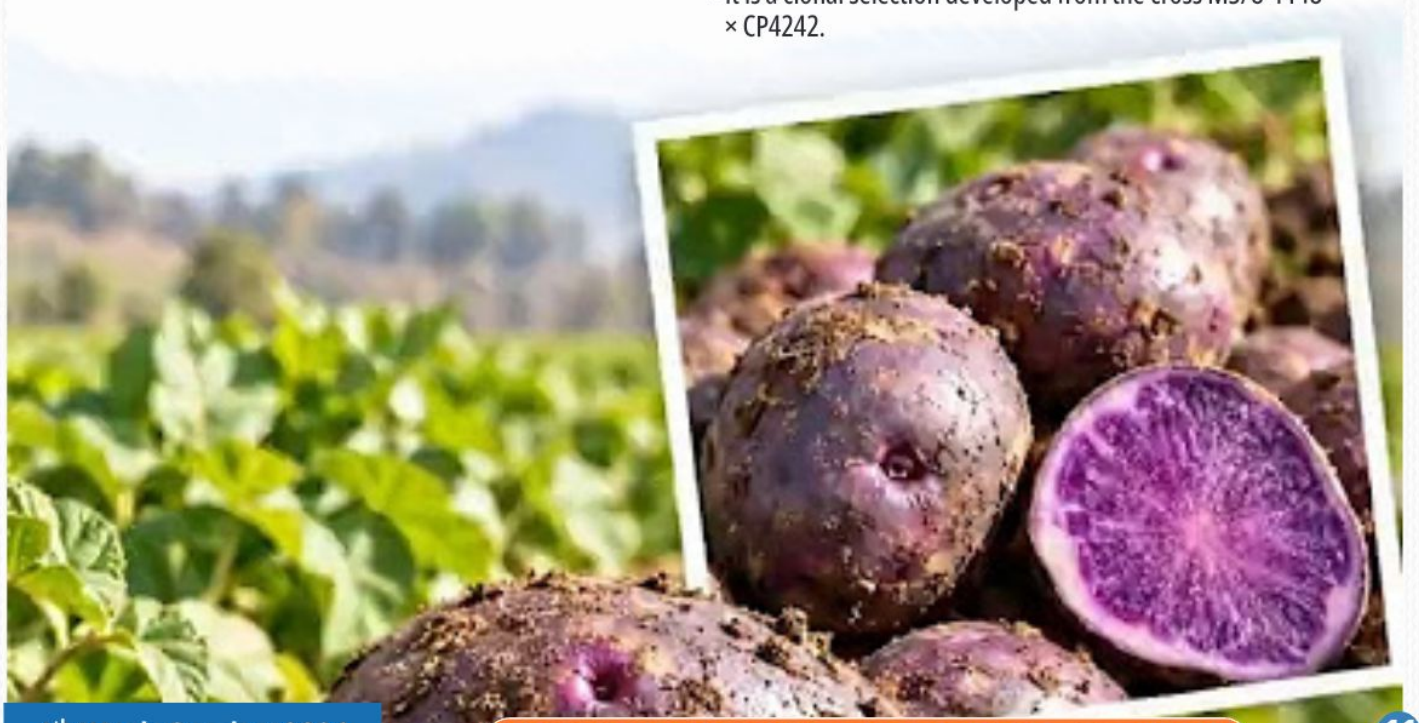
The ICAR–Central Potato Research Institute (ICAR-CPRI) recently highlighted Kufri Jamunia, a biofortified purple potato variety, for its potential to address hidden hunger and improve nutritional security.

UPSC relevance: agricultural innovation; biofortification as a tool for nutritional security; and the role of scientific research in addressing micronutrient deficiencies.

Key Facts About Kufri Jamunia

About the Variety

- Kufri Jamunia is a biofortified purple potato variety developed by ICAR–Central Potato Research Institute (ICAR-CPRI).
- Officially released in 2024.
- It is a clonal selection developed from the cross MS/8-1148 × CP4242.

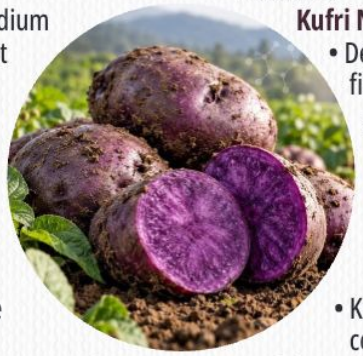


- Recommended for release at the 41st Group Meeting of AICRP (Potato) in October 2023 and subsequently notified by the Central Sub-Committee on Crop Standards Notification and Release of Varieties for Horticultural Crops in July 2024.

Biofortification Explained

- Biofortification improves the nutritional content of crops through plant breeding.
- It addresses hidden hunger: micronutrient deficiencies even among people consuming adequate calories.
- It is a potentially cost-effective, sustainable way to deliver essential vitamins and minerals through staple foods.

Characteristics



- Plant: medium tall; medium maturity; semi-compact canopy.
- Tubers: dark purple skin and purple flesh; oblong shape; shallow eyes; mealy texture.
- Tubers per plant: 10–12 medium to large tubers.
- Dormancy: 6–8 weeks; very good keeping quality.
- Dry matter: moderate, 17–19%.

Yield Performance

- Yield under recommended cultivation: 32–35 tonnes per hectare.
- Station-trial yield: up to 49 tonnes per hectare over 90 days.
- Nearly 90% of the total trial yield was marketable.

Nutritional Value

- Vitamin C: 52 mg/100 g fresh weight, versus 11–30 mg/100 g reported for white potatoes.
- Anthocyanins: 32 mg (unit basis not specified in supplied material); responsible for purple pigmentation and associated with antioxidant properties.
- Carotenoids: 163 µg/100 g fresh weight.
- Iron: 32 ppm, dry-weight basis.
- Zinc: 23 ppm, dry-weight basis.
- Reported to contain higher vitamin C, anthocyanins and carotenoids than earlier coloured varieties such as Kufri Neelkanth and Kufri Manik.

Culinary Uses

- Suitable for traditional foods such as parathas and puris, snacks, processed foods, bakery products and anthocyanin-rich potato flour.
- Easy to cook, with mealy texture, mild flavour and no after-cooking discoloration.
- Potential specialty products include dalia, suji, ice cream and biscuits.

Cultivation

- Recommended for the North Indian plains, including Northern, Central and Eastern plains.
- Demonstrated stable performance in multi-location trials.
- Adaptable across states including Gujarat, Rajasthan and West Bengal.

Disease Resistance

- Moderately resistant to late blight under laboratory conditions.
- Found susceptible to late blight under field conditions; field disease management remains important.
- Related Biofortified Potato Varieties from ICAR-CPRI

Kufri Neelkanth

- Developed by ICAR-CPRI as the first purple-skinned specialty potato variety.
- Released in 2018.
- Suitable for Punjab, Haryana, Uttar Pradesh, Uttarakhand, Bihar, Madhya Pradesh and Chhattisgarh.
- Known for high antioxidant content.

Kufri Manik

- Released in 2021.
- Produces deep-red, round tubers with yellow flesh.
- Rich in anthocyanin, zinc and iron.

Nutritional Significance of Biofortified Varieties

- Higher levels of zinc, iron, vitamin C and antioxidants can enhance the nutritional contribution of potatoes beyond basic starch.
- Such varieties have potential as functional foods that support public-health and dietary-diversity goals.
- They can help address hidden hunger; claims of preventing lifestyle diseases require separate clinical evidence.

Key Concepts for Civil Services Examination

Hidden Hunger

- Hidden hunger means micronutrient (vitamin and mineral) deficiencies despite sufficient calorie intake.
- It is a major public-health challenge in India.
- Biofortification offers a sustainable food-based response.

Biofortification

- Breeding or other crop-improvement approaches used to increase desirable nutrient concentrations in edible plant parts.
- Complements supplementation and conventional food fortification.
- Can be cost-effective because it uses existing food systems and may require less behavioural change.

ICAR-CPRI

- Central Potato Research Institute is a premier institute under the Indian Council of Agricultural Research (ICAR).
- Headquarters: Shimla, Himachal Pradesh.
- Responsible for potato research, variety development and seed production in India.

Potato in India

- Potato is a major Indian food crop.
- I• ndia is the world's second-largest potato producer.
- Cultivated in subtropical plains as a winter crop and in temperate highlands.
- Major growing states: Uttar Pradesh, West Bengal, Bihar, Gujarat and Madhya Pradesh.

Nutrition Security

- Nutrition security goes beyond calorie availability: it requires access to adequate, safe and nutritious food.
- Biofortified crops can improve the nutrient content of commonly consumed foods.
- Relevant to the objectives of POSHAN Abhiyaan / National Nutrition Mission.

Conclusion

Kufri Jamunia exemplifies a vital shift in Indian agriculture from volume-driven production to nutrient-centric biofortification. By integrating essential micronutrients into everyday staple crops, agricultural R&D provides a scalable, cost-effective solution to combat hidden hunger, enhance public health, and secure sustainable livelihoods for farmers.

Prelims Practice Question

Consider the following statements regarding biofortification:

1. Biofortification involves improving the nutritional content of crops through genetic modification only.
2. Biofortified crops can help address hidden hunger, which refers to micronutrient deficiencies occurring even when calorie intake is adequate.
3. Kufri Jamunia is a biofortified purple potato variety developed by ICAR-CPRI.
Which of the statements given above are correct?
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Answer: (b) 2 and 3 only.

NSAP / Pradhan Mantri Samajik Sahayata Yojana

WHY IN NEWS?

The Union Cabinet, chaired by the Prime Minister, approved the continuation of the National Social Assistance Programme (NSAP) for five years from 2026–27 to 2030–31 with a total outlay of ₹53,428 crore. The programme has been renamed Pradhan Mantri Samajik Sahayata Yojana, and its four sub-schemes have also been renamed. The most significant policy change is a major revision in the disability pension scheme, expanding both coverage and eligibility.

National Social Assistance Programme (NSAP)

Historical Background

- Launched on 15 August 1995 as a Centrally Sponsored Scheme.
- Gives effect to Article 41 of the Constitution, which directs the State to provide public assistance in cases of unemployment, old age, sickness and disablement.
- Provides 100% central assistance to ensure minimum support for persons below the poverty line across India.
- Covers rural and urban areas; BPL household status is the basic eligibility condition across components.

Previous Components (Before Renaming)

- Indira Gandhi National Old Age Pension Scheme (IGNOAPS): BPL persons aged 60 and above.
- Indira Gandhi National Widow Pension Scheme (IGNWPS): BPL widows aged 40–59 years.
- Indira Gandhi National Disability Pension Scheme (IGNDPS): BPL persons aged 18–59 with severe and multiple disabilities.
- National Family Benefit Scheme (NFBS):



Lump sum on death of the primary breadwinner.
- Annapurna: Free food grains for eligible senior citizens not covered under NOAPS.

Major Revision in Disability Pension

Enhanced central assistance:

- ₹375 per month for ages 0–79, compared with ₹300 previously.
- ₹625 per month for ages 80 and above, compared with ₹500 previously.

Revised eligibility:

- Disability threshold reduced from 80% to 40%, aligning with the Rights of Persons with Disabilities (RPwD) Act, 2016 definition of benchmark disability.
- Minimum age requirement of 18 years removed; eligibility now begins from birth.
- Beneficiary coverage expands from 8.33 lakh to 27.48 lakh.
- Rationale: The RPwD Act, 2016 requires alignment with the 40% benchmark disability threshold and provides for disability-related assistance to be at least 25% higher than comparable schemes for other categories.

Continuation of Other Schemes

- Old-age pension, widow pension and family benefit continue with existing rates and eligibility.
- Old-age pension: ₹200 per month for ages 60–79; ₹500 per month for ages 80+.
- Widow pension: ₹300–₹500 per month.
- Family benefit: One-time ₹20,000 following death of the primary breadwinner aged 18–59.

Scale, Coverage and Funding

- Total beneficiaries: 3.20 crore across all 36 States/UTs, compared with approximately 3.09 crore earlier.
- Old-age pension: approximately 221.31 lakh beneficiaries.
- Widow pension: approximately 67.38 lakh beneficiaries.
- Disability pension: approximately 27.48 lakh beneficiaries after expansion.
- Family benefit: up to 3.59 lakh beneficiaries.



State and UT Top-Ups

- States and UTs supplement the central pension amount.
- As of September 2026, reported top-ups range from ₹50 to ₹5,700 per month per beneficiary.
- Average monthly pension in most States/UTs is approximately ₹1,100.

Financial Allocation

- 2025–26 NSAP allocation: ₹9,652 crore, including ₹290 crore for disability pension.
- Five-year allocation for 2026–27 to 2030–31: ₹53,428 crore.

Implementation Framework

Administrative Structure

- Nodal ministry: Ministry of Rural Development, working with State/UT governments.
- Implementation is handled by social welfare departments and, in some States, rural development, women and child development, revenue or labour departments.
- Gram Panchayats and municipalities help identify eligible beneficiaries.

Payment Mechanism

- Pensions are disbursed through Direct Benefit Transfer (DBT), supporting transparency and reducing intermediary-related leakages.

Implementation Timeline

- Guidelines on disability eligibility, beneficiary numbers and assistance rates are expected to be issued and implemented within three months.

Constitutional and Governance Concepts

- Article 41 - Directive Principles of State Policy
- Within the limits of its economic capacity and development, the State shall make effective provision for the right to work, education and public assistance in cases of unemployment, old age, sickness, disablement and other cases of undeserved want. NSAP is an instrument of Article 41.

Article 42

- The State shall make provision for just and humane conditions of work and maternity relief.

Social Security in India



- NSAP is non-contributory: beneficiaries do not make contributions to receive assistance.
- It supports vulnerable BPL groups including elderly people, widows, persons with disabilities and families that have lost their primary breadwinner.
- It complements the Employees' Provident Fund (EPF), Public Distribution System (PDS) and Ayushman Bharat.
- Rights of Persons with Disabilities Act, 2016
- Benchmark disability means not less than 40% of a specified disability.
- Disability-related assistance must be at least 25% higher than comparable assistance for other categories.
- These provisions underpin the proposed expansion in pension eligibility and rates.

Federalism and Centrally Sponsored Schemes

- The Centre funds the base assistance at 100%, setting a minimum floor nationwide.
- States and UTs can add top-ups, producing differences in actual pension amounts.
- This illustrates cooperative federalism: central minimum standards with state-level supplementation.

Direct Benefit Transfer

DBT routes benefits directly to recipients, aiming to reduce intermediaries, leakage and payment delays.

Conclusion

The continuation of NSAP as Pradhan Mantri Samajik Sahayata Yojana with ₹53,428 crore for 2026–31 strengthens social-security support for vulnerable groups. The key reform is in disability pension: eligibility now begins at 40% disability instead of 80%, with no minimum age, expanding coverage from 8.33 lakh to 27.48 lakh beneficiaries. Serving about 3.20 crore people, the scheme remains a major tool for implementing Article 41 and delivering welfare through DBT.

Prelims Practice Question

Q. Consider the following statements regarding the National Social Assistance Programme (NSAP):

NSAP was launched in 1995 to give effect to Article 41 of the Constitution.

The programme provides 100% central assistance to beneficiaries below the poverty line.

Under the revised disability pension scheme, the benchmark disability requirement has been reduced from 80% to 40%.

Which of the statements given above are correct?

(a) 1 and 2 only (b) 2 and 3 only

(c) 1 and 3 only (d) 1, 2 and 3

Answer: (d) 1, 2 and 3.

NHAI Mandates Independent Design Checking for Major Bridges

Why in News?

NHAI introduced a uniform independent design-and-drawing checking system for major bridges and critical structures, effective 1 December 2026, as announced by the Ministry of Road Transport & Highways. Significance: bridge safety, technical quality assurance, early detection of design failures and accountability in national highway projects.

Policy at a Glance

- Covered: major river bridges with design discharge ≥3,000 m^3/s; structures/bridges with an individual effective span ≥40 m; major bridges and viaducts; and other special or complex structures identified by NHAI.
- Reviewers: empanelled IITs, reputed government technical institutions, and experienced technical firms specialising in bridge engineering and hydraulic studies.
- Selection: three institutions/firms proposed from the NHAI empanelled list; one or more selected based on project needs.
- Verification: structural calculations and analysis,

design drawings, and hydrological/hydraulic studies where applicable.
- Hydraulic assessment: water flow, flood levels, adequacy of bridge waterway openings, and foundation safety against scour.
- Applicable to new EPC, HAM and BOT projects and projects whose proof checking/design verification has not begun.

Independent Checking: Six-Step Process

1. Contractor/concessionaire submits designs and drawings for contractual review or approval.
2. NHAI proposes three empanelled institutions or firms.
3. One or more are selected according to project requirements.
4. Selected reviewer independently checks designs and submits observations/recommendations.
5. Contractor/concessionaire considers observations and revises designs where necessary.

Why the Reform Matters

- Bridge distress: as reported to Parliament in August 2026, 471 National Highway bridges were identified with structural distress; remedial work completed on 159, while repairs on 312 were targeted by December 2028.
- Pre-construction checks can detect faulty assumptions about loading, ground conditions, flood flows or structural response before costly, irreversible construction.
- Bridge safety requires both load-bearing structural integrity and river interaction:



flood discharge, scour and stability of foundations.
- Highway structures are expected to serve for 100 years or more; scrutiny supports long-term structural safety, serviceability and durability.

Conclusion

The policy institutionalises independent scrutiny of structural, geotechnical and hydraulic design for critical National Highway bridges. By combining specialised review with IRC-based checklists, defined accountability, and contractual timelines, it aims to detect errors before construction and improve long-term durability. Its relevance is underscored by reported bridge distress and the need for proactive infrastructure governance.

Prelims Practice Question

Q. Consider the following statements about NHAI:

1. NHAI was constituted under the National Highways Authority of India Act, 1988.
2. NHAI is responsible for the development, maintenance and management of National Highways.
3. The new independent checking policy applies to all bridges irrespective of span or design discharge.
(a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

Answer: (a). Statements 1 and 2 are correct.



INS Mangrol (P82)

Why in News?

As reported in the supplied bulletin, the Indian Navy commissioned INS Mangrol (P82), the third Mahe-class Anti-Submarine Warfare Shallow Water Craft (ASW-SWC), at Naval Dockyard, Mumbai, on 12 October 2026. Vice Admiral Sanjay Vatsayan, Flag Officer Commanding-in-Chief, Western Naval Command, presided over the ceremony.
Exam relevance: Indigenous defence manufacturing, coastal maritime security, anti-submarine warfare (ASW), Indian Ocean strategy and naval modernisation.

INS Mangrol: Essential Facts

- Class/programme: Third Mahe-class ASW-SWC; third of eight planned vessels.
- Builder: Cochin Shipyard Limited (CSL), Kochi.
- Indigenisation: Over 80% indigenous content, highlighting domestic warship design, construction, systems integration and participation of Indian defence industries and MSMEs.
- Name: Derived from Mangrol, a coastal town and fishing harbour in Junagadh district, Gujarat.
- Legacy: Reuses the name of INS Mangrol (M85), a former Indian Navy minesweeper that served until 7 April 2004; reflects naval naming traditions.

Mission roles and operational capability

- Anti-submarine warfare; underwater surveillance; low-intensity maritime operations (LIMO); mine warfare-related tasks.
- Designed for littoral, coastal and shallow waters where larger warships may face limitations.
- Can coordinate with maritime patrol aircraft, helicopters and warships to detect and counter submarines.
- Strengthens protection of ports, harbours and coastal approaches and supports wider Indian Ocean Region (IOR) fleet operations.

Weapons, sensors and propulsion

- Abhay hull-mounted sonar for underwater detection.
- Lightweight torpedoes and an indigenous anti-submarine rocket launcher for countering underwater threats.
- Maareech Advanced Torpedo Decoy System for defensive countermeasures.
- Three diesel engine-driven waterjet propulsion units provide high manoeuvrability and rapid response in confined and shallow waters.

Strategic Significance

- ASW capability: Enhances detection, tracking and countering of underwater threats in complex coastal acoustic conditions.
- Coastal defence: Protects maritime approaches and interests, improves maritime domain awareness and strengthens littoral preparedness.
- Aatmanirbhar Bharat / Make in India: Over 80% indigenous content demonstrates progress in Indian shipbuilding and technology self-reliance.
- Industry ecosystem: CSL, domestic defence companies and MSMEs contribute to construction, equipment and systems integration.

Concepts for Prelims and Mains

Anti-Submarine Warfare (ASW)

- Detection, tracking and neutralisation of hostile submarines using sonar, torpedoes, depth charges, ships, helicopters and maritime patrol aircraft.
- Shallow-water ASW is difficult because of complex sound propagation, confined manoeuvring space and civilian maritime traffic.

Shallow Water Craft

- Smaller, manoeuvrable platforms suited to harbours, coastal waters and restricted depths.
- Complement larger surface combatants through specialised equipment and coastal-defence missions.

Waterjet Propulsion

- A pump accelerates and expels water to generate thrust.
- Advantages: manoeuvrability, shallow-draft suitability and reduced exposure of propulsion hardware to debris; acoustic performance depends on design and operating conditions.

Indigenous Defence Manufacturing

- Rising domestic content in naval platforms supports strategic autonomy, local industrial capacity and supply-chain resilience.
- The ASW-SWC programme illustrates the role of CSL and the Indian shipbuilding ecosystem.

Indian Ocean Region: Maritime Security

- India's geographic position makes sea-lane and coastal security strategically important.
- Threats include submarine incursions, maritime terrorism, piracy, illegal fishing and arms trafficking.
- Coastal surveillance and ASW complement broader maritime security and naval deterrence.

Conclusion

INS Mangrol highlights India's progress in indigenous warship construction and specialised coastal anti-submarine warfare. Built by Cochin Shipyard Limited with over 80% indigenous content, the Mahe-class craft combines sonar, torpedoes, anti-submarine rockets, decoy systems and manoeuvrable waterjet propulsion to operate in shallow and confined waters. Its induction strengthens coastal defence, maritime domain awareness and wider Indian Ocean security while reinforcing Aatmanirbhar Bharat, domestic industrial participation and the Navy's modernisation agenda.

Prelims Practice Question

Q. Consider the following statements regarding INS Mangrol:

1. INS Mangrol is an Anti-Submarine Warfare Shallow Water Craft built by Cochin Shipyard Limited.
2. The ship has over 80% indigenous content and is equipped with the Abhay hull-mounted sonar.
3. INS Mangrol is named after a coastal town in Gujarat and carries forward the legacy of a former minesweeper.
(a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

Answer: (d) — All three statements are correct



KHET BACHAO ABHIYAN Rabi 2026



Why in News?

The Union Ministry of Agriculture and Farmers Welfare launched the nationwide Khet Bachao Abhiyan – Rabi 2026 at Karnal, Haryana, on 22 October 2026.

The campaign runs until 30 November 2026 to promote sustainable agriculture, better soil health and judicious use of farm resources.

UPSC relevance: soil health governance, extension services, balanced fertiliser use, diversification and behavioural change in farming.

Key Facts and Objectives

Parameter	Details
Launched by	Union Agriculture Minister Shivraj Singh Chouhan
Location	Karnal, Haryana
Duration	22 October–30 November 2026 (40 days)
Target	Approximately 1 crore participants
Field teams	4,150 KVK–ATMA teams envisaged
Personnel	More than 12,000 scientists and ATMA functionaries expected

Key focus areas

- Soil testing and Soil Health Card-based nutrient recommendations; integrated nutrient management and balanced fertilisation.
- Green manuring, compost, farmyard manure and biofertilisers; conservation agriculture and zero tillage.
- Residue mulching, composting and incorporation into soil; intercropping, rice-fallow use and integrated farming systems.
- Post-harvest drying, grading, safe storage and value addition.
- Awareness about green ammonia as a fertiliser-related input.
- Farmer ID creation, PMFBY crop insurance awareness and wider Kisan Credit Card (KCC) access.

Implementation and Outreach

- Coordinated by State Agriculture Departments, Krishi Vigyan Kendras (KVKs), ICAR institutes, State Agricultural Universities (SAUs) and Agricultural Technology Management Agencies (ATMA).
- Includes scientists, Farmer Producer Organisations (FPOs), cooperatives, Self-Help Groups (SHGs) and progressive farmers.
- Activities: farmers' conferences, Kisan Chaupals, training and field demonstrations at state, district, block and Gram Panchayat levels.
- Outreach via local-language IEC material, radio, Doordarshan, social media and other channels.

Background: Kharif 2026 Edition

- Launched from Raisen, Madhya Pradesh; held 1–30 June 2026.



Slogan: "Save the Soil, Save Farming, Save Farmers".

- Focused on soil protection, reducing excessive fertiliser/pesticide use, scientific farming, soil tests, Soil Health Cards, balanced nutrients, natural farming, water conservation, improved seeds, seed treatment, green manure, modern sowing and water-efficient techniques.
- Also addressed counterfeit seeds, fertilisers and pesticides; connected farmers to PM-Kisan, crop insurance, KCC and mechanisation programmes.

Ground-Level Case Study: ICAR–MGIFRI, Bihar

- ICAR–Mahatma Gandhi Integrated Farming Research Institute (MGIFRI), Motihari, launched the Rabi campaign at Jasauli Patti Gram Panchayat, Kotwa Block, East Champaran, with 57 farmers and local stakeholders.
- Scientists discussed Rabi planning, diversification, integrated nutrient management, efficient resource use and sustainable residue management.
- The institute director advocated economically viable, climate-resilient integrated systems combining crops, horticulture, livestock, fisheries and other enterprises.
- Technical advice: soil testing, Soil Health Cards, balanced fertilisers, and use of farmyard manure, compost, green manure, residues and biofertilisers instead of indiscriminate fertiliser application.
- Crop-specific guidance covered wheat, maize, mustard and pulses: suitable varieties, sowing time, seed treatment, seed rates, irrigation scheduling and weed management.

Core Concepts for Prelims and Mains

Soil Health Card Scheme

- Launched in 2015; provides crop-wise soil nutrient recommendations.
- Soil-test-based fertilisation can lower input costs and protect fertility. A National Productivity Council study reported 8–10% lower chemical fertiliser use and 5–6% higher yields among farmers following card advice.

Balanced fertilisation and NPK

- NPK means nitrogen, phosphorus and potassium. Excessive reliance on urea (N) can create nutrient imbalance.
- Integrated nutrient management combines appropriate chemical nutrients with farmyard manure, compost, green manure and biofertilisers.

Residue management

- Rabi sowing follows paddy harvest in north-western India, where burning residue is a rapid but polluting clearing method.
- Alternatives: mulching, composting and incorporation into soil. Timely machinery availability is necessary beyond awareness campaigns.

Agricultural extension architecture

- KVKs: more than 700 frontline agricultural extension centres across India.
- ICAR: apex agricultural research and education organisation.
- ATMA: district-level agency for agricultural technology dissemination.
- SAUs: state-level research, education and extension partners.

Natural farming and policy incentives

Natural farming, often linked to Zero Budget Natural Farming (ZBNF), seeks to reduce or eliminate synthetic chemical inputs.

The campaign simultaneously advocates natural farming and balanced fertiliser use. Subsidised urea can weaken incentives to shift toward alternatives.

Challenges

- Behavioural change: entrenched stubble burning, overuse of chemicals and monocropping are difficult to change.
- Scale versus depth: 1 crore people across 4,150 teams over 40 days equals about 60 participants per team per day, limiting personalised advice.
- Policy contradiction: fertiliser subsidies can favour chemical inputs despite natural-farming messaging.
- Input quality: awareness against counterfeit inputs cannot substitute for robust enforcement.
- Crop diversification: weak market linkages and low prices for pulses and oilseeds can deter adoption.

Conclusion

Khet Bachao Abhiyan – Rabi 2026 is a strong extension-led effort to promote sustainable farming through soil-test-based nutrient use, crop diversification, residue management and water conservation. With a target of 1 crore participants through 4,150 teams, supported by ICAR, KVKs, SAUs and ATMA, it shows serious institutional capacity. However, lasting change will depend on affordable alternatives, access to machinery, effective input regulation, suitable subsidies and assured markets for alternative crops

Prelims Practice Question

Q. Consider the following statements regarding Khet Bachao Abhiyan – Rabi 2026:

It aims to promote balanced and judicious use of fertilisers based on soil testing.

It is implemented through KVKs, ICAR institutes and State Agricultural Universities.

It exclusively promotes organic farming and prohibits chemical fertilisers.

Which statements are correct?
(a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

Answer: (a). Statements 1 and 2 are correct

Swachhata Special Campaign 6.0 & ICAR Cleanliness Drives

Why in News?

- DARE and ICAR launched Swachhata Special Campaign 6.0 on 2 October 2026; implementation runs through 31 October 2026 across ICAR institutions nationwide.
- Focus: clean workplaces, sanitation, scientific waste management, administrative efficiency, public accountability and sustainable institutional practices.









Special Campaign 6.0: Framework

- Coordinating department: Department of Administrative Reforms and Public Grievances (DARPG); government-wide annual initiative.
- Preparatory phase: 15–30 September 2026; implementation phase: 2–31 October 2026.
- Objectives: cleanliness and Shramdaan in offices, villages and public spaces; office beautification and space management; review/weeding of physical files and e-files; disposal of scrap with revenue generation.
- Pendency reduction: public grievances, MP references, Parliamentary Assurances and PMO references; scientific collection, segregation and disposal of e-waste.
- Monitoring: SCDPM portal (scdpm.nic.in/specialcampaign6); Joint Secretary-level nodal officers in Ministries/Departments; high-resolution before/after photographs and videos.

ICAR Participation: Scale, Actions and Results

- Launch on Swachh Bharat Diwas/Gandhi Jayanti (2 October); ICAR Headquarters participated at National Agricultural Science Complex (NASC), Pusa, New Delhi.
- Network: 114 ICAR institutes along with Regional Centres, ATARIs and KVKs across India.
- Cleanliness: Shramdaan in campuses, villages, roads, pathways and public spaces; plogging and litter removal; dustbin distribution/placement.
- Community outreach: special Gram Sabhas, Swachhata Sabhas and hygiene, sanitation, waste-management awareness programmes.
- Greening: plantation of cleaned spaces under "Ek Ped Maa Ke Naam"; environmental sustainability and campus upkeep.
- Waste-to-resource: vermicomposting of water hyacinth; systematic review and disposal of outdated records and unserviceable items.

Reported achievements as of 20 October 2026

- Nearly 4,000 cleanliness campaigns across ICAR establishments.
- Approximately 1.3 lakh sq. ft. of space freed through scrap disposal and file weeding.
- Approximately ₹10 lakh revenue from disposal of electronic and non-electronic scrap.

Institution-specific examples

- ICAR–IARI, New Delhi: "Swachhta Mein Sahbhag – Swachh Bharat, Viksit Bharat"; DARE Secretary and ICAR DG Dr Mangi Lal Jat urged year-round cleanliness, employee well-being, public health, scientific advancement, teamwork, second-line leadership and accountability.
- ICAR Research Complex for Eastern Region, Patna: cleaning farm surroundings and internal pathways, removing unwanted vegetation, litter and waste; reducing exposure to harmful insects.
- ICAR–CCARI, Goa: weeded physical vouchers under retention guidelines; identified guest-house scrap—70 kg metal, 200 kg MCB panels, 100 kg fencing wire and 20 kg plastic—for disposal.

Broader Context: Swachhata Hi Seva (SHS) 2026

- SHS dates: 17 September–2 October 2026; theme: "Swachhata Mein Sahbhag; Swachh Bharat, Viksit Bharat".
- 1. Cleanliness Target Units (CTUs): Transform neglected garbage spots through removal, beautification and upkeep; public/community toilets assessed using FACES: Functional, Accessible,

Clean, Eco-friendly, Safe.

2. Swachh Paathshala – Yuva for Swachhata: Classes 6–12 join Swachhata Gyan Yatras on sanitation and waste management.
3. SafaiMitra Suraksha Seva Evam Samman Shivirs: Health services, protective equipment, welfare and recognition for sanitation workers and families.
4. Jan Bhagidari for Swachhata: Citizen/institution participation; awareness of Solid Waste Management Rules, 2026, four-way source segregation, home composting and avoidance of single-use plastics.

Key UPSC Concepts

Swachh Bharat Mission (SBM)

- Launched 2 October 2014. SBM–Gramin targets rural sanitation/open-defecation elimination; India declared ODF on 2 October 2019; Phase II (2020–25) emphasised solid and liquid waste management.
- SBM–Urban focuses on urban sanitation, solid waste management and elimination of manual scavenging.

Public administration and record management

- Special Campaign editions 1.0–6.0 combine cleanliness with file disposal, reduction of pendency and more efficient use of public assets.
- The Public Records Act, 1993 and associated rules govern public record management; weeding must follow prescribed retention rules, not indiscriminate destruction.



Waste management and sustainability

- 3R hierarchy: Reduce, Reuse, Recycle; vermicomposting uses earthworms to turn biodegradable matter into nutrient-rich compost.
- E-waste requires scientific segregation, collection and authorised handling under E-Waste (Management) Rules, 2022.

Safai Mitras, dignity and rights

- Recognition of sanitation workers should accompany occupational safety, protective equipment and welfare support.
- Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013: legal framework prohibiting manual scavenging and providing rehabilitation.

Conclusion

Swachhata Special Campaign 6.0 illustrates the integration of institutional cleanliness, scientific waste disposal, record management, pendency reduction and respect for sanitation workers. ICAR's reported campaigns, reclaimed space and scrap revenue show the operational potential of coordinated public institutions. Its long-term impact will depend on routine upkeep, safe disposal, transparent measurement and sustained citizen and employee participation, rather than a one-month drive alone.

Prelims Practice Question

Q. Consider the following statements regarding the Swachhata Special Campaign:

1. It is coordinated by the Department of Administrative Reforms and Public Grievances (DARPG).

2. It focuses exclusively on cleanliness drives and does not address record management or pendency reduction.

3. DARE/ICAR undertakes cleanliness drives across its institutes as part of the campaign.

(a) 1 and 2 only (b) 1 and 3 only (c) 2 and 3 only (d) 1, 2 and 3

Answer: (b). Statements 1 and 3 are correct.

Sukhna Wetland & Sauj Jheel Become Ramsar Sites

Why in News?

India's total number of Ramsar sites has increased to 103, following the designation of Sukhna Wetland (Chandigarh) and Sauj Jheel (Uttar Pradesh) as Wetlands of International Importance under the Ramsar Convention.

Civil Services relevance: wetland conservation, international environmental conventions, biodiversity, and India's efforts to protect critical ecosystems supporting migratory birds and local communities.

Key Facts About the Newly Added Ramsar Sites

Sukhna Wetland (Chandigarh)

Location: Situated at the foothills of the Outer Himalayas (Shivalik Hills) in Chandigarh. It is a peri-urban reservoir that helps regulate water and sediment flows from its surrounding catchment.



Ecological significance: Supports open water, littoral vegetation, scrub and forests; serves as an important feeding, breeding, roosting and wintering ground for migratory waterbirds along the Central Asian Flyway.

Key species: Vulnerable Common Pochard; Endangered Pallas's Fish Eagle; Endangered black pond turtle.

Conservation challenges: Sedimentation, soil erosion and invasive species threaten ecological health, requiring catchment conservation and invasive-species management.



Sauj Jheel (Uttar Pradesh)

Location: A shallow lake surrounded by agricultural fields in the Ganga River floodplain, near Saman Bird Sanctuary, another Ramsar site.

Ecological significance: Part of an interconnected wetland network; regularly supports over 30,000 waterbirds; provides nesting, breeding and feeding habitats.

Key species and vegetation: Vulnerable Sarus Crane; Vulnerable Greater Spotted Eagle; Sacred Lotus and Wild Sugarcane.

Conservation status: Recognised as an Important Bird and Biodiversity Area (IBA) by BirdLife International.

Proposed conservation measures: Seasonal fishing restrictions, limits on fine-mesh fishing nets and regulated cattle access.

How Does a Wetland Qualify as a Ramsar Site?

A wetland may qualify for Ramsar designation by meeting at least one of the nine criteria established under the Convention.

Criterion 1 — Representative, rare or unique wetland

A rare or unique natural or near-natural wetland type within a biogeographic region.

Criterion 2 — Threatened species

Supports vulnerable, endangered or critically endangered species or threatened ecological communities.

Criterion 3 — Biological diversity

Supports species or ecological communities important for maintaining biodiversity of a biogeographic region.

Criterion 4 — Critical life-cycle stages

Supports species at critical stages in their life cycles, or provides refuge during adverse conditions.

Criterion 5 — 20,000 waterbirds

Regularly supports at least 20,000 waterbirds.

Criterion 6 — One per cent of waterbird population

Regularly supports at least 1% of the individuals in a population of one species or subspecies of waterbird.

Criterion 7 — Fish diversity

Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, interactions and/or populations representative of wetland benefits and values.

Criterion 8 — Fish food source, spawning or migration

An important food source for fishes, spawning ground, nursery and/or migration path on which fish stocks depend.

Criterion 9 — Non-avian wetland-dependent animals

Regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal.

Exam accuracy note: Criteria 7–9 are presented using the formal Ramsar distinctions. Criterion 8 concerns fish spawning/nursery/migration, while Criterion 9 concerns the 1% threshold for non-avian wetland-dependent animals.

About the Ramsar Convention

What is the Ramsar Convention?

- International treaty adopted in 1971 in Ramsar, Iran.
- Promotes wetland conservation and the wise use of wetlands.
- Oldest of the modern global intergovernmental environmental agreements.

India and the Convention

- India became a party on 1 February 1982.
- As reported in the supplied October 2026 bulletin, India has 103 Ramsar sites, the highest in Asia.
- India added 20 new sites between 2024 and 2026, reflecting an expanding conservation network.

Obligations Under the Convention

- Designate wetlands of international importance.
- Promote the wise use of all wetlands.
- Formulate and implement wetland conservation policies.
- Cooperate internationally on wetland conservation.

Key Terms

Wise Use: Sustainable use of wetlands for the benefit of humanity while maintaining their ecological character.

Ecological Character: The combination of biological, physical and chemical components of a wetland and their interactions.

Montreux Record: A register of Ramsar sites where changes in ecological character have occurred, are occurring or are likely to occur due to human interference.

Key Concepts for Civil Services Examination

Wetland Conservation

Wetlands are among the most productive ecosystems on Earth. They provide water purification, flood control, groundwater recharge, carbon sequestration and biodiversity conservation, while supporting livelihoods of millions of people.

Central Asian Flyway (CAF)

The Central Asian Flyway is a migratory

bird flyway covering 30 countries, extending from the Arctic to the Indian Ocean. India is a key stopover; Sukhna Wetland provides feeding and roosting habitat for migratory birds.

Important Bird and Biodiversity Areas (IBAs)

IBAs are sites identified as globally important for bird conservation by BirdLife International. Sauj Jheel is recognised as an IBA.

Invasive Species

Non-native species that spread and harm native ecosystems. Invasive species threaten Sukhna Wetland and require active management.

Sedimentation and Soil Erosion

Sedimentation is the accumulation of soil and sediment in water bodies. Erosion from surrounding catchments contributes to sedimentation, reducing water depth and affecting aquatic habitats.

Ramsar Sites in India

State-wise figures supplied for October 2026: Tamil Nadu — 20 (highest among states); Uttar Pradesh — 15; Punjab — 7; Kerala — 4; Gujarat — 4.

Notable sites: Keoladeo Ghana National Park (Rajasthan); Chilika Lake (Odisha); Loktak Lake (Manipur); Sundarbans (West Bengal); Sambhar Lake (Rajasthan).

Legal and Institutional Framework for Wetlands in India

Wetlands (Conservation and Management) Rules, 2017: Notified by the Ministry of Environment, Forest and Climate Change. Restrict prohibited activities including encroachment, certain construction, waste dumping and industrial effluent discharge, and establish State Wetlands Authorities.

National Plan for Conservation of Aquatic Eco-systems (NPCA): Centrally sponsored scheme supporting conservation and management of wetlands and State management action plans.

Wetlands Mission: Initiative focusing on wetland conservation and restoration.

Conclusion

India's growing tally of Ramsar sites underscores its leadership in Asian wetland conservation. However, formal international recognition must be backed by active habitat management—addressing siltation, invasive species, and human encroachment—to preserve the ecological integrity of these vital ecosystems and the migratory flyways they support

Previous Year Question (Prelims 2014)

Q. Consider the following pairs:

Wetlands - Confluence of rivers

Harike Wetlands — Confluence of Beas and Satluj/Sutlej

Keoladeo Ghana National Park — Confluence of Banas and Chambal

Kolleru Lake — Confluence of Musi and Krishna

Which of the above pairs is/are correctly matched?

(a) 1 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

Answer: (a) 1 only.

