



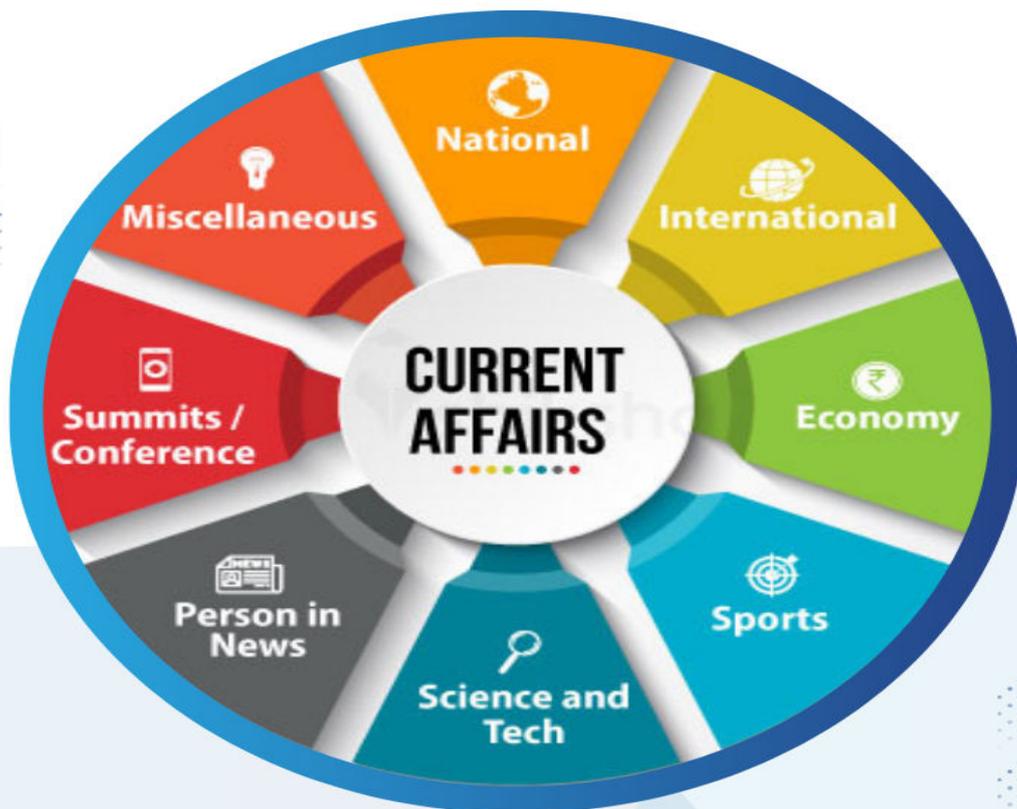
“ We help you reach for the star ”

VIDHVATH IAS KAS ACADEMY & **STUDY CENTRE**

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 13/10/2025 (MONDAY)



9972258970 & 9740702455

**#317/A SKB Arcade, D. Subbaiah Road,
Ramaswamy Circle, Mysuru-570004**



Table of Contents

1. India-AI Global Impact Challenges 2025-26: Empowering Inclusive AI Innovation	2
2. Employees' Enrolment Campaign (EEC) 2025: Expanding Social Security Coverage in India	4
3. Migration of Central Government Email System to Zoho Platform: Strengthening Digital Sovereignty and Data Security	5
4. Delhi's Air Quality Improvement: Progress, Challenges, and Governance Measures	7
5. India's First QR Code-Based Traffic Challan Payment Kiosk: A Step Toward Smart Governance and Digital Policing	10
6. Tribal Rally in Ranchi Against Kurmi Demand for Scheduled Tribe (ST) Status: Protecting Indigenous Rights and Representation	12
7. Discovery of Iron Age Culture at Thirumalapuram, Tenkasi (Tamil Nadu): Expanding Insights into Ancient South Indian Civilization	14
8. India-EFTA Trade and Economic Partnership Agreement (TEPA): A Historic Milestone in India-Europe Relations	16
9. Revamped Sugamya Bharat App: Advancing Digital Accessibility and Inclusion in India.....	18
10. Andhra Pradesh CRDA Office Achieves Net Zero Energy Certification: A Milestone in Sustainable Urban Governance	21



1. India-AI Global Impact Challenges 2025-26: Empowering Inclusive AI Innovation

1. Overview of the Initiative

- The **Government of India**, under the Ministry of Electronics and Information Technology (MeitY), has launched **three Global Impact Challenges**—AI for All, AI by HER, and YUVAi—as part of the **India-AI Impact Summit 2026**.
- Total **prize pool: ₹5.85 crore**.
- Objective: To **promote inclusive, responsible, and scalable AI innovation** with high **social and economic impact** globally.
- The selected innovations will be **showcased at the India-AI Impact Summit 2026 (Feb 19–20, New Delhi)**.



2. Key Flagship Challenges

- **(a) AI for All: Global Impact Challenge**
 - Aimed at developing **AI-based deployable solutions** addressing **national and global challenges** in areas like **agriculture, climate, healthcare, financial inclusion, education, mobility**, etc.
 - **Awards:** ₹2.5 crore (top 10 winners).
 - **Eligibility:** Open to students, researchers, professionals, companies, and startups with pilot-stage or scalable AI models.
 - **Support:** Mentorship, investor access, cloud credits, and accelerator programs.
- **(b) AI by HER: Global Impact Challenge**
 - Dedicated to **women-led AI innovation** under the **Women Entrepreneurship Platform (WEP), NITI Aayog**.
 - Focus areas: **Agriculture, Cybersecurity, Digital Wellbeing, Energy, Climate, and Education**.
 - **Awards:** ₹2.5 crore (top 10 winners).
 - **Eligibility:** Women-led teams, student groups, or startups with working AI prototypes.
 - **Support:** Virtual bootcamps, investor engagements, and travel sponsorships for 30 finalists.
- **(c) YUVAi: Global Youth Challenge**
 - Designed for **young innovators (13–21 years)** to create AI solutions for **public good**.
 - **Themes:** Empowerment, sustainability, smart infrastructure, community well-being.
 - **Awards:** ₹85 lakh total; ₹15 lakh for top 3 winners, ₹10 lakh for next 3, special prizes for innovation.
 - **Support:** Bootcamps, mentorship, investor showcases, and global visibility.

3. Implementation Timeline



- **Applications Open:** October 10, 2025
- **Deadline:** October 31, 2025
- **Bootcamps:** November 2025
- **Finalists Announced:** December 31, 2025
- **Showcase Event:** India-AI Impact Summit, February 19–20, 2026

4. Constitutional, Legal, and Policy Framework

- **Article 51A(h):** Fundamental duty to develop scientific temper and spirit of inquiry.
- **Article 38 & 39:** Directive Principles promoting equitable development and use of technology for social welfare.
- **Digital India Mission & National AI Strategy (NITI Aayog, 2018):** Advocates for “AI for All” to foster inclusive growth.
- **STIP 2020 (Science, Technology and Innovation Policy):** Encourages responsible AI aligned with ethics and public good.
- **Data Protection & AI Ethics:** Initiatives complement **Digital Personal Data Protection Act, 2023** and India’s evolving **Responsible AI Framework**.

5. Key Concepts and Definitions

- **Artificial Intelligence (AI):** The simulation of human intelligence by machines for tasks like reasoning, learning, and perception.
- **Responsible AI:** Ensures AI systems are **ethical, transparent, accountable, and non-discriminatory**.
- **Inclusive Innovation:** Technological development ensuring **participation and benefit of all sections** of society, including women and youth.

6. Significance and Strategic Relevance

- Strengthens India’s position as a **global hub for ethical AI innovation**.
- Encourages **public-private-academic collaboration** for socio-economic transformation.
- Promotes **gender equality and youth empowerment** in technology.
- Aligns with **UN SDGs (4, 5, 9, 10, 13)** and **India’s Digital Economy Vision 2030**.

Conclusion

The **India-AI Global Impact Challenges 2025–26** represent a major stride toward **leveraging AI for public welfare**, fostering **inclusive growth**, and nurturing a **globally competitive innovation ecosystem**. By empowering innovators across demographics, the initiative positions India as a leader in **Responsible and Human-Centric AI Development**.

UPSC Relevance

- **GS Paper 2:** Government policies, Digital governance, Women empowerment.
- **GS Paper 3:** Science & Technology, IT & AI applications, Innovation ecosystem.
- **Essay & Ethics Paper (GS 4):** Role of technology in social justice, innovation ethics.



- **Current Affairs Section:** AI Policy, MeitY Initiatives, NITI Aayog programs.

2. Employees' Enrolment Campaign (EEC) 2025: Expanding Social Security Coverage in India

1. Overview of the Initiative

- The **Ministry of Labour and Employment** has launched the **Employees' Enrolment Campaign (EEC) 2025** to **expand the social security coverage** of workers under the **Employees' Provident Fund Organisation (EPFO)**.
- The campaign will be **operational from November 1, 2025, to April 30, 2026**.
- Objective: To bring **unregistered employees** under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**, ensuring comprehensive social protection for workers.
- Builds upon the success of the **2017 enrolment drive** that covered employees left out between 2009–2016.

2. Key Features of EEC 2025

- **Eligibility:** Employers can enroll all employees who joined between **July 1, 2017, and October 31, 2025**, and are currently employed but **not previously enrolled** in EPF.
- **Waiver:** The **employee's contribution** for the past period (2017–2025) will be **waived off**, provided it was not deducted from wages; **employers need to pay only their own share**.
- **Penalty Relief:** Only a **nominal lump-sum penalty of ₹100** per declaration, significantly lower than regular penalties under the Act.
- **Applicability:** Open to **all establishments**, even those under ongoing inquiries under **Section 7A of EPF Act, 1952**, or relevant scheme provisions.
- **Digital Compliance:** Employers can file declarations **online via EPFO portal**, linking employee details to the **Electronic Challan-cum-Return (ECR)**.

3. Additional Benefits and Incentives

- Employers participating in EEC 2025 can **also avail benefits under the Pradhan Mantri-Viksit Bharat Rojgar Yojana (PMVBRY)**, encouraging formal job creation.
- EPFO will not initiate **suo motu legal action** against compliant employers for employees who have left service before declaration.
- The initiative promotes **ease of doing business** by simplifying compliance and reducing litigation burden for employers.

4. Constitutional and Legal Framework

- **Article 41:** Directive Principle—State to make effective provision for securing the right to work and public assistance in cases of unemployment and old age.
- **Article 43:** Promotes living wages and decent conditions of work ensuring social and economic justice.
- **EPF & MP Act, 1952:** Mandates provident fund, pension, and insurance benefits for organized sector employees.



- **Code on Social Security, 2020:** Consolidates and rationalizes social security laws, extending coverage to unorganized and gig workers.
- **ILO Convention 102 (Minimum Standards of Social Security):** India's initiatives like EEC align with global commitments to expand social protection floors.

5. Key Concepts and Definitions

- **Social Security:** Protection provided by the state or other institutions to ensure income security and access to healthcare during unemployment, illness, or old age.
- **EPFO (Employees' Provident Fund Organisation):** Statutory body under the Ministry of Labour managing provident fund, pension, and insurance schemes for workers.
- **Regularization:** Process of bringing informal or non-compliant employees under formal social security coverage through official declaration and contribution payment.

6. Expected Impact and Significance

- Enhances **financial inclusion and retirement security** of millions of workers.
- Encourages **formalization of employment** and compliance among small and medium enterprises (SMEs).
- Reduces **legal risks and penalties** for employers, fostering cooperative compliance.
- Strengthens the **social protection ecosystem** in line with India's vision of "Sabka Saath, Sabka Vikas" and **Sustainable Development Goals (SDGs 1, 8, and 10)**.

Conclusion

The **Employees' Enrolment Campaign 2025** represents a progressive step toward **universal social security coverage** in India's labor sector. By simplifying compliance, providing penalty waivers, and promoting inclusivity, the scheme aligns with the government's broader objectives of **formalizing the workforce, improving labor welfare, and ensuring equitable economic growth**.

UPSC Relevance

- **GS Paper 2:** Government policies, welfare schemes, social security legislation.
- **GS Paper 3:** Employment generation, labor reforms, and economic inclusion.
- **GS Paper 4 (Ethics):** Role of state in ensuring welfare and justice for workers.
- **Essay Paper:** Themes on labor rights, social justice, and inclusive growth.
- **Current Affairs Section:** Labour Ministry initiatives, EPFO reforms, implementation of Social Security Code 2020.

3. Migration of Central Government Email System to Zoho Platform: Strengthening Digital Sovereignty and Data Security

1. Overview of the Initiative

- The **Government of India** has migrated **12 lakh official email accounts**, including those of the **Prime Minister's Office (PMO)**, from the **National Informatics Centre (NIC)**-based system to a **Zoho-developed platform**, a Tamil Nadu-based multinational technology company.



- The transition reflects the government’s emphasis on **data security, digital sovereignty, and indigenous technological solutions**.
- The **Zoho Office Suite**, integrated with the NIC mail system, is now the **default platform for official email, document creation, and collaboration** for all Union government employees.

2. Objectives and Rationale

- The shift aims to **eliminate the use of open-source and third-party applications** by government officials that may compromise security.
- Ensures **confidentiality and integrity of official data** by consolidating communication and document tools within a secure, government-approved ecosystem.
- Promotes the “**Digital India**” and “**Atmanirbhar Bharat**” (Self-Reliant India) vision by leveraging **homegrown technological solutions**.
- Aligns with India’s aspiration to transform from a **service-based economy to a product-driven innovation ecosystem**.



3. Key Features and Implementation

- The **Zoho suite** includes email, text document creation, spreadsheets, presentations, and collaboration tools – all within the government’s secure digital infrastructure.
- **Mandatory adoption:** Ministries and departments have been directed to use the Zoho platform exclusively for official purposes.
- **Security enhancement:** The platform prevents the use of unverified external software, reducing risks of data leakage and cyberattacks.
- The **Union Education Ministry’s directive (October 3, 2025)** highlighted that this move strengthens **India’s digital sovereignty** and **supports the Swadeshi movement** in software development.

4. Constitutional, Legal, and Policy Framework

- **Article 19(1)(a):** Protects the right to information and communication in a secure environment.
- **Article 51A(h):** Fundamental duty to develop scientific temper and a spirit of innovation among citizens.
- **Information Technology Act, 2000:** Provides a legal framework for data security, cyber law enforcement, and protection of digital assets.
- **Digital Personal Data Protection Act, 2023:** Reinforces accountability and responsible data handling by public and private entities.
- **National Cyber Security Policy (2013)** and **National Data Governance Policy (2023):** Promote indigenous infrastructure and safe handling of government data.

5. Key Concepts and Definitions

- **Digital Sovereignty:** The state’s ability to control and protect its digital infrastructure, data, and communication systems from foreign influence or dependency.



- **Swadeshi Movement (in Digital Context):** A modern revival emphasizing **use of indigenous software and hardware solutions** to reduce technological dependence on foreign entities.
- **Data Localization:** The practice of storing data within the national borders to ensure legal and security oversight by domestic authorities.

6. Significance and Broader Impact

- Enhances **cybersecurity resilience** and ensures **data protection** for sensitive government communications.
- Promotes **indigenous innovation and R&D** in India's tech ecosystem.
- Reduces reliance on foreign software providers like Google or Microsoft, aligning with India's **strategic autonomy goals**.
- Strengthens **trust, transparency, and efficiency** in e-governance operations.
- Encourages **public-private collaboration** in developing homegrown technology solutions with global competitiveness.

Conclusion

The migration of government email systems to Zoho's indigenous platform marks a **significant leap toward digital self-reliance and national data security**. It not only safeguards sensitive government communications but also symbolizes India's **technological empowerment** and **commitment to indigenous innovation** in the digital domain. This move reflects a decisive shift from dependency to **digital sovereignty**, aligning with India's long-term vision of becoming a **global leader in secure and homegrown technology solutions**.

UPSC Relevance

- **GS Paper 2:** Government policies, e-governance initiatives, data protection, and digital infrastructure.
- **GS Paper 3:** Cybersecurity, IT sector development, "Atmanirbhar Bharat" in technology, data localization.
- **GS Paper 4 (Ethics):** Responsible technology use, public data integrity, and accountability in governance.
- **Essay Paper:** "Digital Sovereignty and Self-Reliance in India's Technological Future."
- **Current Affairs Section:** MeitY initiatives, Data Protection Act 2023, Digital India vision, and cybersecurity governance.

4. Delhi's Air Quality Improvement: Progress, Challenges, and Governance Measures

1. Current Status of Air Quality in Delhi

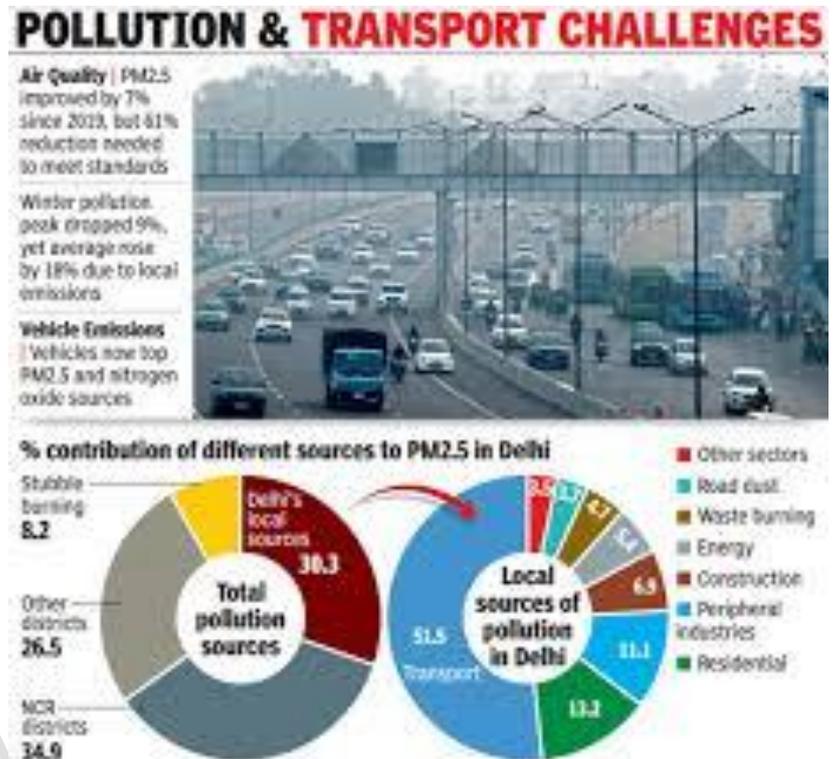
- Delhi's **Air Quality Index (AQI)** improved slightly, recording **167 ('Moderate' category)** on Sunday, compared to **199 ('Poor')** the previous day, according to the **Central Pollution Control Board (CPCB)**.
- The **Air Quality Early Warning System** forecasts that Delhi's air quality will remain **moderate till October 14**, but is likely to **deteriorate to the 'poor' category** from October 15 onward.



- Despite short-term fluctuations, the city has shown a **positive long-term trend** toward improved air quality, with **199 clean air days in 2025 (till date)** compared to **110 in 2016**, indicating nearly **100% improvement**.

2. Government's Role and Initiatives

- **Union Environment Minister Manjinder Singh Sirsa** credited the improvement to an **integrated, technology-backed strategy** led by **Prime Minister Narendra Modi** and **Chief Minister Rekha Gupta**.
- Measures include **real-time monitoring, use of technology in policy implementation, and cross-departmental coordination** under the **Commission for Air Quality Management (CAQM)** and **Graded Response Action Plan (GRAP)**.
- The government emphasizes **continuous monitoring, dust control, biomass management, and vehicular emission checks** to sustain cleaner air.
- Delhi Police and municipal bodies have also been directed to enforce **anti-pollution laws, prevent open garbage burning, and ban firecrackers**.



3. Law Enforcement and Festive Vigilance

- Delhi Police have launched **citywide night patrolling** across all 15 districts to ensure compliance with environmental and safety regulations.
- In north-east Delhi's Gokalpuri area, police **seized 675 kg of banned firecrackers** and arrested one person, enforcing the **complete ban** on the **sale, manufacture, and storage of firecrackers** across Delhi-NCR.
- These actions aim to reduce **seasonal pollution spikes** commonly associated with Diwali festivities and **illegal combustion activities**.

4. Constitutional and Legal Framework

- **Article 21 (Right to Life):** Interpreted by the Supreme Court to include the **Right to a Healthy Environment**.
- **Article 48A:** Directive Principle mandating the State to **protect and improve the environment** and safeguard forests and wildlife.
- **Article 51A(g):** Fundamental Duty of every citizen to **protect and improve the natural environment**.



- **Air (Prevention and Control of Pollution) Act, 1981:** Legal framework to regulate and prevent air pollution through central and state pollution control boards.
- **Environment (Protection) Act, 1986:** Umbrella legislation empowering the government to take comprehensive environmental protection measures.
- **National Clean Air Programme (NCAP, 2019):** Targets **20–30% reduction in PM2.5 and PM10 levels** by promoting sustainable and technological interventions.

5. Key Concepts and Definitions

- **Air Quality Index (AQI):** A standardized indicator developed by CPCB to measure air pollution based on concentrations of pollutants like PM2.5, PM10, NO₂, and O₃.
- **Clean Air Days:** Days when air quality remains within ‘Good’ or ‘Satisfactory’ categories (AQI below 100).
- **Graded Response Action Plan (GRAP):** A framework prescribing preventive and corrective measures depending on pollution levels in NCR.
- **Stubble Burning:** Agricultural practice of burning crop residue, a major contributor to Delhi’s seasonal air pollution.

6. Broader Significance and Way Forward

- The data suggests that **policy consistency, technological adoption, and public awareness** are improving Delhi’s air quality trajectory.
- Continued focus on **urban waste management, sustainable mobility, renewable energy use, and public participation** remains crucial.
- Enforcement of **firecracker bans, construction dust control, and biomass management** will be vital ahead of the winter season.
- The government’s **technology-driven environmental governance** serves as a model for other urban regions combating pollution.

Conclusion

Delhi’s recent improvement in air quality reflects a **gradual transition toward sustainable environmental governance**, supported by **scientific monitoring, coordinated policy execution, and active law enforcement**. However, the challenge of maintaining air quality through **seasonal and behavioral changes** remains significant. Long-term progress will depend on **collective responsibility, citizen awareness, and consistent policy implementation** rooted in India’s constitutional commitment to environmental protection.

UPSC Relevance

- **GS Paper 2:** Governance, government policies, inter-departmental coordination in environmental management.
- **GS Paper 3:** Environmental pollution, conservation efforts, Air Act 1981, NCAP, and climate action strategies.
- **GS Paper 4 (Ethics):** Ethical dimensions of sustainable living and intergenerational responsibility.
- **Essay Paper:** “Balancing Urban Growth and Environmental Sustainability.”
- **Current Affairs Section:** Delhi air pollution trends, GRAP enforcement, firecracker ban, and technological initiatives for clean air.



5. India's First QR Code-Based Traffic Challan Payment Kiosk: A Step Toward Smart Governance and Digital Policing

1. Overview of the Initiative

- **Gurugram** has become the **first city in India** to introduce a **QR code-based kiosk** for **digital payment of traffic challans**, marking a major step in the integration of technology with urban governance.
- The initiative was **jointly developed by the Gurugram Police and the Gurugram Metropolitan Development Authority (GMDA)** under a **Corporate Social Responsibility (CSR)** partnership.
- The first kiosk was installed at **Ambience Mall** and inaugurated by **Deputy Commissioner of Police (Traffic) Rajesh Mohan**.
- Objective: To make challan payments **faster, transparent, and citizen-friendly**, reducing manual intervention and enhancing efficiency.



2. Key Features and Functioning

- The **QR-based kiosk** allows vehicle owners to **check and pay outstanding challans** by simply **entering their vehicle number and scanning the displayed QR code**.
- Payments can be made instantly using **UPI, debit/credit cards, or digital wallets**, promoting **cashless and paperless governance**.
- Kiosks are designed for **self-service**, ensuring quick access for citizens at high-footfall areas like malls and public hubs.
- **Limitations:** Challans pending in courts or overdue beyond **90 days** cannot be paid via the kiosk.
- The initiative will soon be **expanded across Gurugram** after evaluating the success of this pilot project.

3. Associated Technological and Policing Advancements

- The initiative complements other **smart policing innovations**, such as **video-based emergency call points**, connected directly to the **Police Commissioner's Control Room**, ensuring **24x7 surveillance and response**.
- These projects form part of Gurugram's effort to become a **"Smart and Safe City"**, leveraging **digital infrastructure for real-time governance and public service delivery**.
- It will also **reduce the workload of traffic police**, minimize cash handling, and enhance transparency in the enforcement of traffic laws.

4. Constitutional, Legal, and Policy Framework

- **Article 21 (Right to Life):** Interpreted to include the **Right to Safety and Dignity** of citizens on public roads.
- **Article 38:** Mandates the State to ensure social and economic justice, achievable through efficient governance and technological reforms.



- **Article 243W:** Empowers municipalities to handle local governance, including urban mobility and digital initiatives.
- **Motor Vehicles (Amendment) Act, 2019:** Strengthens road safety, enhances electronic enforcement mechanisms, and enables digital payments for challans and penalties.
- **Digital India Mission (2015):** Promotes the use of **technology-driven citizen services**, digital payments, and e-governance for transparency.
- **Smart Cities Mission (2015):** Aims to integrate **ICT (Information and Communication Technology)** tools for urban management, including traffic regulation and citizen facilitation systems.

5. Key Concepts and Definitions

- **Challan:** A formal notice issued by law enforcement for violation of traffic or other legal rules, requiring payment of a penalty.
- **QR Code (Quick Response Code):** A machine-readable digital code used for fast and secure data access or payment processing.
- **E-Governance:** Application of ICT in government processes to improve efficiency, transparency, and accessibility of public services.
- **CSR (Corporate Social Responsibility):** Legal mandate under **Section 135 of the Companies Act, 2013**, requiring companies to undertake socially beneficial projects.

6. Significance and Broader Impact

- Enhances **citizen convenience** by simplifying payment processes and reducing the need for physical interactions with law enforcement.
- Strengthens **digital infrastructure** for urban management and ensures **accountability and traceability** in revenue collection.
- Reduces corruption and delays by automating traffic fine management through **secure digital platforms**.
- Encourages **public trust in governance**, promoting **behavioral change** toward responsible driving and compliance.
- Acts as a **replicable model for other Indian cities**, aligning with the **Smart City and Digital India frameworks**.

Conclusion

The launch of India's first **QR code-based traffic challan payment kiosk** marks a significant step toward **digitally empowered policing and citizen-centric governance**. By integrating convenience, transparency, and technology, this innovation enhances public service delivery while reinforcing India's transition toward a **cashless, efficient, and accountable governance ecosystem**. The initiative exemplifies how **technology-led urban reforms** can improve both administrative efficiency and citizen experience.

UPSC Relevance

- **GS Paper 2:** Governance, transparency in administration, citizen charter, e-governance initiatives.
- **GS Paper 3:** Technology in public service delivery, Digital India, Smart Cities, CSR in governance.
- **GS Paper 4 (Ethics):** Accountability, public service innovation, integrity in law enforcement.



- **Essay Paper:** “Technology as an Enabler of Good Governance.”
- **Current Affairs Section:** Urban innovation, e-policing, road safety measures, Digital India progress.

6. Tribal Rally in Ranchi Against Kurmi Demand for Scheduled Tribe (ST) Status: Protecting Indigenous Rights and Representation

1. Background and Context

- Thousands of people from **32 tribal communities in Jharkhand** organized an ‘**Akrosh Maharally**’ in Ranchi to **protest the Kurmi community’s demand for inclusion in the Scheduled Tribe (ST) list**.
- The rally began from **Morabadi Ground** and culminated at **Ramdayal Munda Football Ground**, with participants including tribal leaders, youth, and women from across the state.
- Protesters warned of **larger statewide agitations** if the Central or State Government moves to grant ST status to the Kurmis.
- Tribal leaders claimed that the **demand threatens the socio-political and constitutional rights** of existing Scheduled Tribes in Jharkhand.



2. Key Concerns of Tribal Communities

- **Protection of Constitutional Rights:** Tribal leaders alleged a “**conspiracy to usurp**” the rights granted to Scheduled Tribes under the Constitution, including **political representation, reservation in education and employment, and land rights**.
- **Socio-cultural Identity:** They emphasized that the move would **dilute the distinct identity and cultural integrity** of Jharkhand’s tribal communities.
- **Representation & Resources:** Inclusion of new groups under ST could **reduce benefits and representation opportunities** for existing Scheduled Tribes in resource allocation and welfare schemes.
- **Unity Among Tribes:** Organizations like **Kendriya Sarna Samiti** highlighted that all tribes are **united to defend their legal and ancestral entitlements**.

3. Legal and Constitutional Framework

- **Article 342 (1):** Empowers the President of India to specify the tribes or tribal communities to be included in the **Scheduled Tribes list** for each State or Union Territory, subject to **Parliamentary approval** for any modification.
- **Fifth Schedule:** Provides special governance mechanisms for **Scheduled Areas** and **tribal welfare** in states like Jharkhand.
- **Articles 15(4), 16(4), and 46:** Authorize the State to make **special provisions for the advancement of socially and educationally backward classes**, including Scheduled Tribes.
- **PESA Act, 1996 (Provisions of Panchayats – Extension to Scheduled Areas Act):** Safeguards **self-governance and community rights** of Scheduled Tribes in their traditional habitats.



- **Forest Rights Act, 2006:** Recognizes **land and forest use rights** of forest-dwelling Scheduled Tribes and traditional forest communities.

4. Key Concepts and Definitions

- **Scheduled Tribes (ST):** Communities recognized under Article 342 of the Constitution as socially and economically disadvantaged, entitled to affirmative action and special protections.
- **Tribal Identity:** Refers to the **distinct socio-cultural, linguistic, and ancestral heritage** that differentiates tribal communities from other social groups.
- **Reservation Policy:** A system of **positive discrimination** that ensures representation and participation of marginalized groups in education, employment, and politics.
- **Sarna Religion:** Indigenous faith followed by several Jharkhand tribes, emphasizing nature worship, land sanctity, and community living.

5. Broader Socio-Political Significance

- The issue reflects **tensions over affirmative action benefits** and **ethnic classification politics** in India's federal structure.
- It highlights the **importance of accurate ethnographic and anthropological assessments** before altering ST lists, to prevent **policy misuse** and **inter-community conflict**.
- The protest also underscores the **growing assertion of tribal consciousness** and the **demand for safeguarding indigenous autonomy and identity**.
- The government faces the challenge of **balancing inclusion with protection** of existing ST groups' constitutional safeguards.

6. Way Forward

- Need for a **transparent, evidence-based review process** by the **Registrar General of India and National Commission for Scheduled Tribes (NCST)** before any community is added to the ST list.
- **Community consultation** and **ethnographic studies** should precede political decisions.
- Strengthening **tribal welfare programs, land rights enforcement, and representation mechanisms** can prevent insecurities among existing tribal groups.

Conclusion

The Ranchi tribal rally reflects the **deep-rooted anxieties among Scheduled Tribes** over potential dilution of their **constitutional rights, identity, and representation**. While social justice demands inclusion of genuinely marginalized groups, such inclusion must not **undermine the distinct cultural and legal protections** of India's tribal populations. A **balanced, evidence-based approach** that respects both constitutional mandates and community sentiments is vital to sustain **social harmony and equitable development**.

UPSC Relevance

- **GS Paper 1:** Indian society, tribal culture, and diversity; social empowerment.
- **GS Paper 2:** Constitutional provisions for vulnerable sections, role of NCST, affirmative action policies.
- **GS Paper 3:** Inclusive development, issues related to land rights, and tribal welfare programs.



- **GS Paper 4 (Ethics):** Equity, justice, and rights of marginalized communities.
- **Essay Paper:** “Balancing Identity and Inclusion in India’s Affirmative Action Framework.”
- **Current Affairs Section:** Tribal movements, demands for ST status, and constitutional safeguards for Scheduled Tribes.

7. Discovery of Iron Age Culture at Thirumalapuram, Tenkasi (Tamil Nadu): Expanding Insights into Ancient South Indian Civilization

1. Overview of the Discovery

- The **Tamil Nadu State Department of Archaeology (TNSDA)** has unearthed evidence of **Iron Age culture** during the first excavation season at **Thirumalapuram** in **Tenkasi district**, near the **Western Ghats**.
- Preliminary findings suggest that the site may date back to the **early to mid-third millennium BCE**, contemporaneous with other major archaeological sites like **Adichanallur** and **Sivagalai**.
- The excavation, covering nearly **35 acres**, lies between two **seasonal streams** emerging from the Western Ghats, near the **Kulasegarapereri tank**, indicating the importance of water sources in early settlements.
- The discovery adds to the growing evidence of **early Iron Age habitation and cultural continuity in southern India**, particularly in the **Tamil region**.

2. Major Archaeological Findings

- **Burial Site Features:** A unique **rectangular stone slab chamber** with **urn burials** was discovered — the first of its kind in Tamil Nadu — constructed using **35 stone slabs** filled with **cobblestones up to 1.5 metres deep**.
- **Artefacts and Pottery:** Excavations revealed various types of ceramics, including **white-painted black-and-red ware, red ware, red-slipped ware, black-polished ware, and coarse red ware**.
- The **white-painted designs** on black-and-red ware pottery are a distinctive trait previously noted in sites like **Adichanallur, T. Kallupatti, Sivagalai, Thulukkarpatti, and Korkai**, suggesting **cultural interlinkages across the Tamil region**.
- **Symbolic Markings:** The urns featured **symbols and markings**, providing potential clues to **proto-script or ritual practices**, indicating an advanced social and symbolic system among early Iron Age communities.



3. Cultural and Historical Significance

- The site provides further confirmation that **South India had a flourishing Iron Age culture**, parallel to the northern Indian developments in the same period.
- Evidence of **urn burials and advanced pottery** indicates **settled communities, social stratification**, and possibly **ritualistic burial traditions**.
- The findings also suggest early **trade, technology, and metallurgical activities**, given the Iron Age context and the strategic location near the **Western Ghats**, which were rich in mineral resources.



- The similarity of artefacts with other Tamil Nadu sites demonstrates **regional cultural uniformity and inter-site communication** during prehistoric times.

4. Constitutional, Legal, and Institutional Framework

- **Article 49:** Directs the State to protect monuments and sites of historic and artistic interest.
- **Article 51A(f):** Fundamental duty of citizens to value and preserve the rich heritage of India's composite culture.
- **Ancient Monuments and Archaeological Sites and Remains Act, 1958:** Provides for the **preservation of ancient monuments and regulation of archaeological excavations.**
- **Tamil Nadu Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1966:** Governs protection and excavation of heritage sites within the state.
- **UNESCO Convention (1972):** India is a signatory, emphasizing the **conservation of cultural heritage and archaeological integrity.**

5. Key Concepts and Definitions

- **Iron Age (c. 1500–500 BCE in India):** Period characterized by the widespread use of iron tools and weapons, leading to advancements in agriculture, warfare, and settlement structures.
- **Urn Burial:** A funerary practice where cremated remains or bodies were placed in ceramic urns, symbolizing beliefs in an afterlife.
- **Black-and-Red Ware:** A distinctive pottery type associated with Iron Age South India, marked by dual-coloring achieved through specific firing techniques.
- **Archaeology:** The scientific study of material remains (artefacts, structures, and biofacts) to understand human history and prehistory.

6. Broader Impact and Way Forward

- The Thirumalapuram findings **reinforce Tamil Nadu's position as a cradle of ancient civilization**, with deep cultural continuity from prehistoric to historic periods.
- They provide fresh opportunities for **scientific dating (Carbon-14, thermoluminescence) and DNA studies** to establish cultural links across South Asia.
- The discovery may reshape historical narratives about **urbanization, trade networks, and socio-religious practices** in ancient South India.
- The state's proactive archaeological initiatives signify the growing focus on **cultural heritage preservation and academic research** in regional archaeology.

Conclusion

The excavation at **Thirumalapuram, Tenkasi**, stands as a major milestone in understanding **Tamil Nadu's prehistoric past**, revealing a sophisticated Iron Age culture marked by distinctive burial practices, pottery styles, and symbolic communication. It highlights the **continuity of civilization, technological advancement, and ritual sophistication** in South India, parallel to other early global civilizations. The findings underscore the importance of **scientific archaeology and heritage protection** in reconstructing India's deep cultural roots.

UPSC Relevance

- **GS Paper 1:** Indian culture, ancient history, archaeological sources, and prehistoric developments.



- **GS Paper 2:** Role of government and institutions in heritage preservation.
- **GS Paper 3:** Science and technology in archaeology, use of dating and preservation techniques.
- **GS Paper 4 (Ethics):** Responsibility towards cultural heritage and national identity.
- **Essay Paper:** “Rediscovering India’s Ancient Civilizations through Archaeology.”
- **Current Affairs Section:** Archaeological discoveries in Tamil Nadu, heritage conservation efforts by TNSDA.

8. India–EFTA Trade and Economic Partnership Agreement (TEPA): A Historic Milestone in India–Europe Relations

1. Overview and Significance

- The **India–EFTA Trade and Economic Partnership Agreement (TEPA)**, signed on **10 March 2024** and implemented on **1 October 2025**, marks **India’s first Free Trade Agreement (FTA)** with four developed European nations—**Switzerland, Norway, Iceland, and Liechtenstein**.
- It is a landmark trade pact designed to attract **USD 100 billion in investments** and create **1 million direct jobs** in India over 15 years—the **first binding investment and employment commitment** in any Indian FTA.



- The agreement aligns with India’s **Atmanirbhar Bharat vision** and the **Digital India** and **Make in India** initiatives, focusing on **manufacturing, innovation, and sustainability**.
- EFTA covers **92.2% of tariff lines (99.6% of India’s exports)**, while India covers **82.7% (95.3% of EFTA’s exports)**, ensuring a **balanced approach** that safeguards sensitive domestic sectors.

2. Key Provisions and Economic Impact



- **Investment and Job Creation:** Under Article 7.1, EFTA pledges **USD 50 billion FDI in the first 10 years** and another **USD 50 billion in the next five**, aimed at sectors like **renewable energy, life sciences, digital transformation, and engineering**.
- **Balanced Market Access:** EFTA eliminated tariffs on most Indian exports (machinery, textiles, processed foods, chemicals), while India phased tariff reductions for sensitive products under **Make in India and PLI schemes**.
- **Sectoral Gains:**
 - **Agriculture:** Zero tariffs on Indian exports like rice, basmati, guar gum, fruits, and vegetables.
 - **Marine Products:** Duty elimination up to 13% across EFTA nations, enhancing India's seafood competitiveness.
 - **Industrial Goods:** Boosts exports of engineering goods, electronics, gems, and chemicals.
 - **Services Sector:** Facilitates **digital delivery (Mode 1)**, **commercial presence (Mode 3)**, and **professional mobility (Mode 4)** through **Mutual Recognition Agreements (MRAs)** in fields like nursing, accountancy, and architecture.

3. Innovation, IPR, and Technology Cooperation

- TEPA's **Intellectual Property Rights (IPR)** chapter aligns with **TRIPS** while safeguarding India's **public health flexibility** and **generic medicine sector**.
- It strengthens collaboration between **India's skilled workforce** and **EFTA's high-innovation economies**, particularly **Switzerland**, a global innovation leader.
- Focus areas include **AI, fintech, smart manufacturing, climate tech, and R&D**, integrating Indian MSMEs into global supply chains.
- The establishment of an **India–EFTA Investment Facilitation Desk** enhances ease of doing business and supports **SME partnerships**.

4. Sustainability and Inclusive Development

- TEPA is among the first Indian trade agreements to embed **sustainability, social progress, and environmental protection** as core principles.
- It promotes **transparent trade procedures, green technology, and responsible investment** aligned with **UN Sustainable Development Goals (SDGs)**.
- EFTA's focus on climate technology and India's renewable energy sector creates scope for **low-carbon industrial transition** and **green jobs**.

5. Constitutional, Legal, and Institutional Framework

- **Article 253:** Empowers Parliament to make laws implementing international agreements.
- **Article 51(c):** Promotes respect for international law and treaty obligations.
- **Foreign Trade (Development and Regulation) Act, 1992:** Provides the legal basis for trade negotiations and export–import management.
- **Special Economic Zones (SEZ) Act, 2005:** Enables India to attract FDI and facilitate exports through liberalized economic environments.



- **National IPR Policy (2016)** and **Foreign Direct Investment Policy** support innovation-led trade liberalization and technology partnerships.

6. Key Concepts and Definitions

- **Free Trade Agreement (FTA):** A pact between two or more nations to reduce or eliminate trade barriers such as tariffs and import quotas.
- **EFTA (European Free Trade Association):** A four-member intergovernmental body—**Switzerland, Norway, Iceland, and Liechtenstein**—founded in 1960 to promote free trade and economic integration.
- **Mutual Recognition Agreement (MRA):** An arrangement allowing professional qualifications to be recognized across signatory countries, facilitating skilled mobility.
- **Atmanirbhar Bharat:** India's strategy for self-reliance by promoting domestic manufacturing, exports, and technological advancement.

Conclusion

The **India–EFTA TEPA** is a **transformational trade pact** that balances market access with domestic protection, secures long-term investments, and enhances India's integration into global value chains. It exemplifies a **modern, trust-based partnership** focused on innovation, sustainability, and inclusive growth. By embedding commitments on investment, job creation, and technology transfer, TEPA represents a **new generation of FTAs** that advance India's economic diplomacy and strengthen its position in global trade architecture.

UPSC Relevance

- **GS Paper 2:** India's foreign policy, international relations, bilateral agreements, and global governance.
- **GS Paper 3:** Indian economy, liberalization, industrial growth, FDI, and trade policy.
- **GS Paper 4 (Ethics):** Global cooperation, economic fairness, and sustainable development.
- **Essay Paper:** "India's Trade Policy in a Changing Global Order" or "Balancing Global Integration with Domestic Priorities."
- **Current Affairs Section:** India's trade diplomacy, FTAs, economic engagement with Europe, and implications for Atmanirbhar Bharat.

9. Revamped Sugamya Bharat App: Advancing Digital Accessibility and Inclusion in India

1. Overview of the Initiative

- The **Department of Empowerment of Persons with Disabilities (DEPwD)** under the **Ministry of Social Justice and Empowerment** launched the **revamped Sugamya Bharat App** at the **Purple Fest, Goa (October 2025)**.
- The app represents a key milestone under the **Accessible India Campaign (Sugamya Bharat Abhiyan)**, aligning with the government's goal of creating a **digitally inclusive and barrier-free India**.



- Developed with the support of the **SBI Foundation**, and in collaboration with **NAB Delhi, ISTEM, and Mission Accessibility**, the app embodies the principle of **universal design**, ensuring accessibility for persons with disabilities (PwDs) across platforms.
- It provides a **one-stop digital solution** offering accessibility mapping, grievance redressal, and information on schemes, education, and employment opportunities for PwDs.

2. Key Features and Functionalities

- **Accessibility Mapping:** Users can **locate, rate, and review public spaces** on accessibility parameters such as ramps, signage, and restrooms, promoting **community-led accountability**.
- **Information and Schemes Directory:** The app integrates a **comprehensive database of government schemes, scholarships, benefits, and employment listings**, streamlining access to welfare resources.
- **Grievance Redressal System:** Enables users to **report inaccessible infrastructure or services directly**, ensuring better **institutional response and monitoring**.
- **Inclusive Design:** The app supports **multi-language access, screen readers, voice navigation, and assistive technologies**, ensuring usability across different disability types.
- **Employment and Education Hub:** Features curated listings from both **government and private sectors**, facilitating **economic inclusion and career empowerment**.



3. Constitutional and Legal Framework

- **Article 14 & 15:** Guarantee equality and prohibit discrimination on the grounds of disability, ensuring equal access to opportunities.
- **Article 41:** Directs the State to make provisions for securing the **right to work, education, and public assistance** for citizens in case of disablement.
- **Rights of Persons with Disabilities (RPwD) Act, 2016:**
 - Mandates accessibility in **public buildings, transport, ICT systems, and services** (Sections 40–46).
 - Establishes **equal opportunity policies** and **non-discrimination obligations** for employers and public authorities.
- **Accessible India Campaign (2015):** Launched to make public infrastructure, transport, and digital services universally accessible.
- **Digital India Initiative:** Promotes **inclusive digital infrastructure** and e-governance for all citizens, including marginalized groups.

4. Key Concepts and Definitions

- **Accessibility:** The design of products, devices, services, and environments so that they can be used by persons with disabilities on an equal basis with others.



- **Universal Design:** An approach ensuring usability of systems and infrastructure by people of all abilities without adaptation or specialized design.
- **Digital Inclusion:** Ensuring equitable access to information and communication technologies (ICT) for marginalized or differently-abled groups.
- **Sugamya Bharat Abhiyan:** A flagship national program launched in 2015 to make **India barrier-free** by improving accessibility in the built environment, transportation, and ICT ecosystem.

5. Broader Significance and Impact

- The revamped app represents a **citizen-driven model of accessibility governance**, empowering PwDs to become active participants in **policy monitoring and feedback mechanisms**.
- Promotes **digital empowerment** through equitable access to government schemes, job opportunities, and education resources.
- Enhances **accountability in public spaces**, reinforcing inclusivity in both urban and digital planning.
- Supports India's commitments under the **UN Convention on the Rights of Persons with Disabilities (UNCRPD)** and aligns with **Sustainable Development Goals (SDGs 4, 8, 10, and 11)** on inclusive education, employment, and sustainable cities.
- Fosters **public-private partnership (PPP)** in social inclusion through collaboration with SBI Foundation and civil society organizations.

6. Way Forward

- Continuous **integration of real-time feedback and AI-based accessibility audits** can strengthen responsiveness.
- Expansion of the app's coverage to **rural areas, educational institutions, and transport systems** will ensure broader inclusion.
- Linking the app with **Digital India portals, urban local bodies, and state accessibility cells** can enable seamless cross-platform functionality.
- Encouraging **citizen participation and awareness campaigns** will be key to sustaining the momentum of accessible governance.

Conclusion

The **revamped Sugamya Bharat App** represents a transformative leap in India's journey toward **digital inclusion and accessibility for all**. By integrating accessibility mapping, information dissemination, and grievance redressal, it empowers persons with disabilities to assert their rights and actively shape the nation's accessibility ecosystem. The initiative reflects India's **commitment to inclusive governance**, ensuring that technology serves as a **tool for empowerment, equity, and dignity** for every citizen.

UPSC Relevance

- **GS Paper 2:** Welfare schemes for vulnerable sections, government policies for social empowerment, inclusive digital governance.
- **GS Paper 3:** ICT and e-governance applications for inclusive development, Digital India Mission.
- **GS Paper 4 (Ethics):** Equity, empathy, and inclusive governance as ethical imperatives.
- **Essay Paper:** "Technology as a Tool for Social Inclusion" or "Digital Accessibility: The Next Frontier of Empowerment."



- **Current Affairs Section:** Accessibility initiatives, DEPwD reforms, RPwD Act implementation, and Digital India inclusion efforts.

10. Andhra Pradesh CRDA Office Achieves Net Zero Energy Certification: A Milestone in Sustainable Urban Governance

1. Overview of the Achievement

- The **Andhra Pradesh Capital Region Development Authority (AP CRDA) Project Office in Amaravati** has been awarded the **'Net Zero Energy (Design)' Certification** by the **Indian Green Building Council (IGBC)** under the **Confederation of Indian Industry (CII)**.
- This recognition marks a significant milestone in promoting **sustainable infrastructure** and **energy-efficient urban development** in India.
- The building has been designed to meet **100% of its annual energy demand from renewable energy sources**, positioning it as a model for **green governance and environmental responsibility**.

2. Key Features of the Net Zero Energy Design

- The building achieves **net zero energy status** by generating renewable energy equivalent to its total energy consumption annually.
- A **540 kWp rooftop solar photovoltaic (PV) system** is installed to cater to the building's energy needs.
- Any residual or additional energy requirements are met through **green power procurement**, ensuring complete reliance on clean energy sources.
- The design emphasizes **passive cooling techniques, efficient lighting, and energy conservation technologies**, minimizing overall energy consumption.
- The project demonstrates **integration of sustainability principles in government infrastructure**, reflecting Amaravati's vision as a **smart and green capital city**.



3. Significance and Broader Implications

- This certification aligns with India's national commitments toward **Net Zero Emissions by 2070** under the **Paris Climate Agreement (COP26)**.
- It showcases how **urban governance bodies** can lead by example in **energy-efficient practices**, inspiring replication across public buildings in India.
- Promotes **renewable energy adoption, reduction of carbon footprint, and energy security** in the public sector.
- Encourages integration of **green building standards** in infrastructure projects under **Smart Cities Mission and Amrit 2.0**.
- Strengthens India's pursuit of **Sustainable Development Goal 7 (Affordable and Clean Energy)** and **Goal 13 (Climate Action)**.



4. Constitutional and Legal Framework

- **Article 48A:** Directs the State to protect and improve the environment and safeguard natural resources.
- **Article 51A(g):** Makes it a fundamental duty of every citizen to protect and improve the natural environment.
- **Energy Conservation Act, 2001:** Empowers the Bureau of Energy Efficiency (BEE) to promote efficient energy use in buildings through Energy Conservation Building Codes (ECBC).
- **National Action Plan on Climate Change (NAPCC, 2008):** Includes the **National Solar Mission** and **National Mission on Sustainable Habitat**, encouraging green infrastructure.
- **Buildings (Energy Efficiency) Regulations, 2018:** Mandate adoption of energy-efficient designs and renewable energy systems in government and commercial buildings.

5. Key Concepts and Definitions

- **Net Zero Energy Building (NZEB):** A structure that generates as much renewable energy on-site as it consumes annually, achieving a balance between energy use and production.
- **Green Building:** A building designed to minimize environmental impact through efficient resource use, energy conservation, and sustainable materials.
- **Rooftop Solar System:** Solar panels installed on rooftops to capture sunlight and convert it into electricity for on-site consumption.
- **IGBC Certification:** A green building rating system developed by the **Indian Green Building Council** to evaluate sustainable design and energy performance.

6. Broader Impact and Way Forward

- The CRDA office sets a **benchmark for sustainable governance infrastructure** in India, demonstrating economic and environmental benefits of renewable integration.
- Encourages other public institutions and state agencies to adopt **net zero and green building models**.
- Strengthening **policy frameworks** for **green public procurement, energy audits, and solar mandates** in government complexes can accelerate India's net zero transition.
- Public awareness and capacity-building initiatives for architects, engineers, and planners are essential to scale similar projects nationwide.

Conclusion

The **Net Zero Energy Certification** of the AP CRDA office in Amaravati symbolizes a **progressive shift toward environmentally responsible governance**. It reflects India's growing commitment to integrating **sustainability, innovation, and energy efficiency** into public infrastructure. As the country advances toward its **Net Zero 2070 vision**, such initiatives will play a pivotal role in shaping a **resilient, green, and future-ready India**.

UPSC Relevance

- **GS Paper 2:** Government initiatives in urban development and sustainable governance.
- **GS Paper 3:** Environment, energy conservation, renewable energy, climate change mitigation.



- **GS Paper 4 (Ethics):** Ethical responsibility toward environmental sustainability and intergenerational equity.
 - **Essay Paper:** “Sustainable Infrastructure: The Foundation of a Green Future” or “Net Zero Buildings: Balancing Development and Ecology.”
 - **Current Affairs Section:** IGBC certifications, Smart Cities Mission, Renewable energy adoption in public infrastructure, and India’s Net Zero roadmap.
-

VIDHVATH IAS