

# **UPSC Prelims Exam Based on Current Affairs Analysis – 9 Oct 2025**

## **1. INS Vikrant Carrier Battle Group Deploys with Indigenous TEJAS-Naval Aircraft, Showcasing Maritime Prowess**

**Source: Indian Express, PIB**

**Context:** In a significant display of 'Aatmanirbharta' (self-reliance) in defence, the Indian Navy today deployed its aircraft carrier, INS Vikrant, for a full-scale operational exercise in the Arabian Sea. For the first time, the carrier is operating with a full squadron of the indigenously developed TEJAS-Naval Light Combat Aircraft, alongside other naval assets.

### **Significance:**

- This marks the full operational integration of the indigenous naval fighter jet with the indigenous aircraft carrier, a landmark achievement for India's domestic defence manufacturing ecosystem.
- It demonstrates the Indian Navy's capability to project power and maintain maritime security in the Indian Ocean Region (IOR) and beyond.
- The successful deployment enhances India's credibility as a net security provider in the region, crucial for safeguarding vital sea lanes of communication.
- It provides a major boost to HAL and ADA, the developers of the TEJAS, and will encourage further development of more advanced naval aviation platforms like the Twin Engine Deck-Based Fighter (TEDBF).

**Analysis:** The operationalization of the TEJAS-Naval on INS Vikrant is a milestone that has been decades in the making. It overcomes the immense technological challenges associated with developing a fighter jet capable of operating from the short and demanding deck of an aircraft carrier. This achievement not only reduces India's dependence on foreign suppliers for critical naval aviation assets but also opens up potential export opportunities. The focus will now be on ramping up production to meet the Navy's requirements and continuing the development of the more powerful TEDBF, which is slated to be the mainstay of India's carrier aviation in the coming decades. This deployment sends a strong strategic signal about India's growing maritime capabilities and its resolve to protect its interests in the IOR.

**UPSC Syllabus Correlation:**

**GS Paper III:** Indigenization of technology and developing new technology; Various Security forces and agencies and their mandate.

**2. Ministry of Housing and Urban Affairs Launches 'Sustainable Cities Index 2025**

**Source:** Hindustan Times, PIB

**Context:** The Ministry of Housing and Urban Affairs (MoHUA) today launched the first-ever 'Sustainable Cities Index'. This index ranks cities based on a comprehensive framework of environmental, social, and economic parameters. The assessment was conducted for 100 cities under the Smart Cities Mission, aiming to foster competitive federalism and encourage sustainable urban development.

**Significance:**

- The index serves as a tool for urban local bodies (ULBs) to assess their performance on sustainability metrics and identify areas for improvement.
- It promotes a holistic approach to urban planning, moving beyond just economic growth to include environmental resilience and social equity.
- The rankings can help cities attract investment in green and sustainable projects.
- It empowers citizens with data to hold their local governments accountable for the quality of life and environmental health of their cities.

**Analysis:** The Sustainable Cities Index is a logical next step from the 'Ease of Living Index' and 'Swachh Survekshan', focusing specifically on the long-term sustainability of urban centers. The framework evaluates cities on indicators like air and water quality, green cover, public transport, energy efficiency, and waste management. While the initiative is commendable, the key lies in how cities use this data. The challenge for many ULBs is the lack of financial resources and technical capacity to implement large-scale sustainability projects. The central and state governments will need to provide not just a framework for competition but also a roadmap for capacity building and financial support to help the lower-ranked cities improve their performance. The index should become a dynamic tool for policy formulation and not just an annual ranking exercise.

**UPSC Syllabus Correlation:**

**GS Paper I:** Urbanization, their problems and their remedies; **GS Paper II:** Government policies and interventions for development in various sectors.

### **3. ASER 2025 Report Reveals Persistent Learning Gaps in Foundational Literacy and Numeracy**

**Source: Indian Express**

**Context:** The Annual Status of Education Report (ASER) 2025, facilitated by the Pratham NGO, was released today. The comprehensive household survey, which assesses the basic reading and arithmetic skills of children in rural India, has highlighted that despite improvements in school enrollment, significant learning gaps in foundational skills persist, particularly in the post-pandemic era.

#### **Significance:**

- ASER provides a crucial reality check on the state of learning outcomes in the country, complementing the government's official data on enrollment and infrastructure.
- The report's findings are critical for evaluating the effectiveness of national initiatives like the NIPUN Bharat Mission, which aims to achieve foundational literacy and numeracy for all children by Grade 3.
- It highlights disparities in learning levels across different states and between government and private school students.
- The data serves as an important feedback mechanism for teachers, education administrators, and policymakers to design targeted remedial learning programs.

**Analysis:** The ASER 2025 report underscores that simply getting children back to school is not enough; the focus must be on 'learning recovery'. The pandemic-induced school closures have had a long-term impact, which requires sustained and focused intervention. The report calls for urgent action on multiple fronts: increasing investment in teacher training for remedial education, implementing 'teaching-at-the-right-level' methodologies, and strengthening the role of School Management Committees (SMCs) and parents in

monitoring learning outcomes. The National Education Policy (NEP) 2020 rightly prioritizes foundational learning, and the ASER findings should galvanize states to implement the NEP's recommendations with greater urgency and rigor.

**UPSC Syllabus Correlation:**

**GS Paper II:** Issues relating to development and management of Social Sector/Services relating to Education, Human Resources.

**4. Phase-III of the National Cyclone Risk Mitigation Project Launched for East Coast States**

**Source:** PIB, The Hindu

**Context:** The National Disaster Management Authority (NDMA), in collaboration with the Ministry of Home Affairs, today launched the third phase of the National Cyclone Risk Mitigation Project (NCRMP). This phase will focus on the states of West Bengal, Odisha, Andhra Pradesh, and Tamil Nadu, with an aim to further enhance their infrastructure and capacity to manage cyclone-related disasters.

**Significance:**

- The project builds on the successes of the previous phases, which have significantly improved cyclone forecasting, warning dissemination, and evacuation systems, leading to a drastic reduction in casualties.



- Phase-III will concentrate on building critical disaster-resilient infrastructure, such as multi-purpose cyclone shelters, underground cabling, and saline embankments.
- It emphasizes a 'last-mile connectivity' approach for warning systems, ensuring that alerts reach every vulnerable coastal community.
- The project also includes capacity-building components for local communities, disaster response forces, and government officials.

**Analysis:** India has become a global leader in managing cyclone-related disasters, and the NCRMP has been instrumental in this success. The launch of Phase-III indicates a shift from a purely reactive to a proactive and holistic risk mitigation approach. The focus on disaster-resilient infrastructure is crucial as climate change is predicted to increase the frequency and intensity of cyclones. The key challenges will be ensuring the quality and timely completion of infrastructure projects and maintaining them effectively. Integrating local communities and traditional knowledge in the planning and implementation process will be vital for the project's long-term success and sustainability. The project exemplifies the principles of the Sendai Framework for Disaster Risk Reduction, to which India is a signatory.

**UPSC Syllabus Correlation:**

**GS Paper III:** Disaster and disaster management.

**09 Oct 2025**

## **5. E-Courts Project Phase IV to Focus on AI-Based Case Management and Vernacular Language Translation**

**Source: Economic Times, Ministry of Law and Justice**

**Context:** The E-Committee of the Supreme Court of India today unveiled the roadmap for Phase IV of the E-Courts Mission Mode Project. The next phase will heavily leverage emerging technologies like Artificial Intelligence (AI) and Machine Learning (ML) to improve judicial efficiency. Key focus areas include AI-powered tools for case summation, legal research, and real-time translation of court proceedings into multiple Indian languages.

### **Significance:**

- This initiative aims to tackle the massive pendency of cases in the Indian judicial system by automating repetitive administrative tasks.
- The real-time translation feature is a revolutionary step towards making the justice system more accessible to citizens who are not proficient in English, breaking down language barriers.
- AI-based legal research tools can significantly reduce the time taken by judges and lawyers to prepare for cases, leading to faster disposal.
- It will enhance the transparency and efficiency of the judiciary, contributing to the 'Ease of Doing Business' and 'Ease of Living'.

**Analysis:** Phase IV of the E-Courts project marks a paradigm shift from simple digitization to the intelligent automation of judicial processes. While the potential benefits are immense, the adoption of AI in the judiciary also raises critical questions and challenges. Ensuring the accuracy and impartiality of AI algorithms is paramount to preventing any bias in judicial decision-making. Data privacy and the security of sensitive judicial data will be major concerns. A robust legal and ethical framework must be

developed to govern the use of AI in the justice system. Furthermore, extensive training will be required for judges, court staff, and lawyers to effectively use these new technologies. The success of this ambitious project will depend on a cautious, phased implementation with continuous monitoring and stakeholder consultation.

**UPSC Syllabus Correlation:**

**GS Paper II:** Structure, organization, and functioning of the Executive and the Judiciary; E-governance- applications, models, successes, limitations, and potential.

**6. Ancient Harappan-Era Site of Dholavira Expansion in Gujarat Declared UNESCO World Heritage Site**

**Source:** The Hindu, Ministry of Culture

**Context:** The United Nations Educational, Scientific, and Cultural Organization (UNESCO) today inscribed the recently excavated expansion of the Dholavira archaeological site in Gujarat's Rann of Kutch on its prestigious list of World Heritage Sites. This recognition comes after years of excavation revealed a new sector of the ancient city with unique urban planning features.

**Significance:**

- This recognition further elevates the global profile of the Indus Valley Civilization and India's ancient heritage. Dholavira is renowned for its sophisticated water management system.

- The UNESCO tag will boost tourism to the region, creating economic opportunities for the local communities.
- It will attract increased international and national funding for the conservation, preservation, and research of the site.
- The inclusion serves as an acknowledgment of India's efforts in archaeological research and heritage conservation.

**Analysis:** The inscription of the Dholavira expansion is a major cultural victory for India. Unlike other Harappan sites, Dholavira showcases a unique three-tiered urban settlement and an advanced water conservation system with multiple reservoirs, which is highly relevant in today's context of water scarcity. The challenge now is to manage the expected increase in tourist footfall sustainably. The Archaeological Survey of India (ASI) and the Gujarat state government will need to develop a comprehensive site management plan. This plan must focus on preserving the site's authenticity and integrity while providing a world-class visitor experience. It is also an opportunity to develop the entire Kutch region as a major cultural and eco-tourism hub, benefiting the local economy and preserving its unique cultural landscape.

**UPSC Syllabus Correlation:**

**GS Paper I:** Indian culture will cover the salient aspects of Art Forms, literature, and Architecture from ancient to modern times.

## **7. 16th Finance Commission Submits Interim Report; Recommendations on Tax Devolution Spark Debate**

**Source: Economic Times, Indian Express**

**Context:** The 16th Finance Commission, chaired by Dr. Arvind Panagariya, submitted its interim report to the President of India today. While the full report is awaited, preliminary details suggest the commission has recommended maintaining the vertical devolution of taxes to states at 41% but has proposed significant changes to the criteria for horizontal distribution among states.

### **Significance:**

- The Finance Commission's recommendations are constitutionally mandated and will determine the financial resource allocation between the Centre and states, and among the states themselves, for the next five-year period.
- Changes in the horizontal distribution formula, which considers factors like population, area, forest cover, and fiscal discipline, can significantly alter the financial fortunes of individual states.
- The report's recommendations on grants-in-aid and financing of disaster management and local bodies will have a major impact on state finances and governance.
- The report is expected to spark a major debate among states, particularly between the southern states with stable populations and the northern states with higher populations.

**Analysis:** The Finance Commission's task is always a delicate balancing act, aiming to ensure equity and efficiency in resource allocation. The reported proposal to give greater weightage to demographic performance and fiscal efficiency is likely to be welcomed by states that have managed their populations and finances well. However, it may be opposed

**09 Oct 2025**

by states with larger populations and greater developmental needs, who might see their share of the divisible pool of taxes decrease. The commission also has to address the growing issue of central cesses and surcharges, which are not part of the divisible pool and have been a point of contention for states. The interim report sets the stage for intense negotiations and political debate before the final recommendations are accepted and implemented by the Union Government.

**UPSC Syllabus Correlation:**

**GS Paper II:** Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels, and challenges therein.

**8. Government Proposes New Social Security Framework for Gig and Platform Workers**

**Source:** Hindustan Times, Ministry of Labour and Employment

**Context:** The Ministry of Labour and Employment has released a draft framework for providing social security benefits to India's burgeoning gig and platform workforce. The proposal, based on the Code on Social Security, 2020, suggests a corpus fund be created with contributions from workers, aggregators (like ride-hailing and food delivery companies), and the government.

**Significance:**

- This is a significant step towards recognizing the rights and providing a social safety net for millions of workers in the informal gig economy who currently lack benefits like health insurance, accident cover, and pensions.



- The framework attempts to define the responsibility of platform aggregators towards their workers, a contentious issue globally.
- It aims to create a portable benefits system that is not tied to a single employer, which is suitable for the flexible nature of gig work.
- This policy could set a precedent for regulating the platform economy in other developing countries.

**Analysis:** The proposed framework addresses a critical gap in India's labor laws. The gig economy has grown exponentially, but its workers often fall outside the ambit of traditional employer-employee relationships, leaving them vulnerable. The contributory model is a practical approach, but its implementation will face challenges. Determining the contribution rates for aggregators without making their business models unviable will be a key balancing act. Ensuring easy registration and access to benefits for a highly mobile and diverse workforce will require a robust, technology-driven platform. There will also be debates on whether this framework goes far enough, with some unions demanding that gig workers be classified as 'employees' to receive full benefits. The consultation process on this draft will be crucial to creating a sustainable and equitable social security system for this new class of workers.

**UPSC Syllabus Correlation:**

**GS Paper II:** Welfare schemes for vulnerable sections of the population.

**GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and employment.

**09 Oct 2025**

## **9. First Large-Scale Commercial Green Hydrogen Plant Inaugurated in Paradip, Odisha**

**Source: Economic Times, PIB**

**Context:** As a major milestone for the National Green Hydrogen Mission, India's first large-scale commercial green hydrogen production facility was inaugurated today at the Paradip Port in Odisha. The plant, a joint venture between a public sector undertaking and a private energy firm, will use renewable energy from a dedicated solar park to produce green hydrogen through electrolysis.

### **Significance:**

- This marks the transition of green hydrogen in India from pilot projects to commercial-scale production, a crucial step in the country's energy transition journey.
- The plant will help decarbonize hard-to-abate sectors like shipping and steel, as the hydrogen produced will be used to power port machinery and for a nearby steel plant.
- It positions India as a potential global hub for the production and export of green hydrogen, leveraging its abundant renewable energy resources.
- The project will provide valuable data and operational experience for scaling up green hydrogen production across the country, helping to drive down costs.

**Analysis:** The inauguration of the Paradip plant is a tangible outcome of the government's ambitious National Green Hydrogen Mission. Green hydrogen is seen as a critical fuel for achieving India's net-zero emissions target by 2070. The biggest challenge for the green hydrogen economy remains its cost, which is currently higher than hydrogen produced from fossil fuels (grey hydrogen). This project, by operating at scale, is expected to contribute to cost reduction through economies of scale and technological learning. For the

**09 Oct 2025**

mission to succeed, the government needs to focus on creating demand by setting green hydrogen consumption obligations for certain industries, investing in infrastructure for storage and transportation, and fostering international partnerships for technology and finance.

**UPSC Syllabus Correlation:**

**GS Paper III:** Infrastructure: Energy; Science and Technology- developments and their applications and effects in everyday life.

**10. India Launches Phase-I Trials for Indigenous CRISPR-based Gene Therapy for Sickle Cell Anemia**

**Source:** The Hindu, Ministry of Science and Technology

**Context:** The Department of Biotechnology announced today the launch of the first phase of clinical trials for an indigenous gene therapy to treat Sickle Cell Anemia. The therapy, developed by a collaboration of Indian research institutes, is based on the cutting-edge CRISPR-Cas9 gene-editing technology and represents a significant leap for Indian biotechnology.

**Significance:**

- This is a landmark moment for Indian medical research, as it marks the country's entry into the advanced field of gene therapy development, which has so far been dominated by Western countries.
- The therapy offers a potential one-time cure for Sickle Cell Anemia, a debilitating genetic blood disorder that disproportionately affects India's tribal population.
- Developing this therapy indigenously is crucial for making it affordable and accessible to the large number of patients in India who cannot afford the exorbitant cost of similar treatments available abroad.
- The successful development of this platform technology could be adapted to treat other genetic disorders in the future.

**Analysis:** The launch of this clinical trial is a testament to India's growing capabilities in biotechnology and genomic research. The CRISPR-Cas9 technology, for which the Nobel Prize was awarded in 2020, allows for precise editing of genes to correct defects. While the potential is enormous, the path ahead is long and requires rigorous testing to ensure the therapy's safety and efficacy. Ethical considerations surrounding gene editing are also paramount, and the trials will be conducted under strict regulatory oversight. If successful, this 'Made in India' gene therapy could be a game-changer for public health in the country, providing an affordable cure for a disease that affects millions and showcasing India's potential to be a leader in frugal and high-impact biomedical innovation.

**UPSC Syllabus Correlation:**

**GS Paper III:** Science and Technology- developments and their applications and effects in everyday life; Awareness in the fields of Bio-technology.