

UPSC Daily Current Affairs| One Liners 30-04-2025

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Polity & Governance

Central Consumer Protection Authority (CCPA)

18. *CCPA has suo moto taken action against five Delhi restaurants for failing to refund mandatory service charges, defying a Delhi High Court ruling.*

- **Protecting Consumer Rights** - This move underscores the CCPA's commitment to safeguarding consumer rights and preventing the forced payment of additional service charges.
- **Legality of Service Charges** - According to the law, hotels and restaurants cannot compel consumers to pay service charges, nor can these charges be levied under any other guise.
- **About the CCPA** - Established under the Consumer Protection Act, 2019, the CCPA, operational since July 20, 2020, replaced the 1986 Act. It operates under the Ministry of Consumer Affairs, Food & Public Distribution.
- **Key Functions and Powers** - The CCPA protects consumer rights as a class, prevents unfair trade practices and misleading ads, initiates class-action suits (including recalls and refunds), conducts investigations, and imposes penalties.
- **CCPA Structure** - The CCPA is headed by a Chief Commissioner and includes two other commissioners, one overseeing goods-related issues and the other handling service-related complaints.

Environment

Mahuadanr Sanctuary

Mahuadanr wolf sanctuary in Jharkhand recently garnered attention due to a distinctive practice observed by local tribal communities adhering to the 'Sarna faith'.

- **Winter Forest Avoidance** - These communities traditionally avoid entering the Sal forests during the winter months, a unique cultural observance.
- **Crucial Wolf Breeding Season** - Interestingly, this period of avoidance by the Sarna community perfectly coincides with the critical breeding and denning season of the Indian grey wolf within the sanctuary.
- **India's First Wolf Sanctuary** - Mahuadanr Wolf Sanctuary, situated in Jharkhand's Latehar district, holds the distinction of being India's first and only sanctuary dedicated to the Indian grey wolf (*Canis lupus pallipes*).
- **Established for Wolf Protection** - Declared in 1976, this sanctuary was specifically created to safeguard the vulnerable Indian wolf population.
- **Sanctuary Area** - The protected area spans approximately 63 square kilometers, providing a crucial habitat for the wolves.
- **Part of Palamau Tiger Reserve** - Mahuadanr Wolf Sanctuary forms an integral part of the larger Palamau Tiger Reserve.
- **Key Wildlife Species** - Besides the Indian wolf, the sanctuary is home to other wildlife including spotted deer, wild boar, hyena, and bear.
- **Conservation Significance** - This unique sanctuary plays a vital role in the conservation efforts for the Indian grey wolf within its natural habitat.

Science

Indian National Space Promotion and Authorisation Centre (IN-SPACe) Launches Satellite Bus as a Service (SBaaS)

Recently, IN-SPACe has launched the SBaaS initiative.

- **Empowering Private Space Sector** - SBaaS encourages private Indian companies to design and develop satellite-bus platforms, fostering indigenous capabilities.
- **Reducing Import Dependence** - This initiative aims to decrease India's reliance on imported satellite technology, promoting self-sufficiency in the space sector.
- **What is a Satellite Bus?** - A satellite bus is the central, modular structure of a satellite, housing essential operational systems to which the mission-specific payload is attached.
- **SBaaS Initiative Objectives** - Includes promoting innovation among Indian Non-Governmental Entities (NGEs) and facilitating the development of small satellite-bus platforms for various applications.
- **Global Service Provider Goal** - Ultimately, SBaaS seeks to position India as a global hub for small satellite-bus and hosted-payload services.

Agentic AI Demand Surge

Recently, India faces a critical shortage of agentic AI professionals as demand skyrockets due to the increasing adoption of sophisticated AI agents.

- **Talent Supply Gap** - The current pool of under 100,000 experts struggles to meet the projected need of 200,000 by 2026, creating a significant talent gap.
- **Intense Hiring Competition** - This shortage fuels intense competition among Global Capability Centers (GCCs), IT firms, and startups, leading to rapidly increasing salaries.
- **Defining Agentic AI** - Agentic AI refers to intelligent systems with the capacity for autonomous decision-making, independent action-taking, and continuous learning in complex environments.
- **'Service as Software' Shift** - This technology enables a shift towards a 'service as software' model, allowing tech companies to deliver enhanced value compared to traditional 'software as a service'.
- **Agentic AI Problem-Solving** - Agentic AI systems solve problems by ingesting diverse data, independently analyzing challenges, developing strategic solutions, and autonomously executing tasks.

AI Kiran: Empowering Women in AI

Recently, the AI Kiran, a national movement co-led by the Principal Scientific Adviser (PSA), Verix, and INK Women, aims to boost women's leadership in India's rapidly growing AI sector.

- **Addressing Gender Disparity** - Despite rising STEM enrollment, women hold only 33% of junior and 19% of senior GenAI roles, highlighting the urgent need for diverse leadership to combat algorithmic bias.
- **Goals** - The initiative seeks to empower women innovators, create an inclusive AI ecosystem, develop funding, and provide mentorship, learning, and leadership opportunities.
- **Recognizing Women Leaders** - AI Kiran spotlights over 250 prominent women in AI across sectors like education and healthcare, amplifying their voices and inspiring future generations.
- **Collaborative Multi-Stakeholder Approach** - AI Kiran fosters partnerships between government, corporations, and civil society to create pathways and support for women in AI, hosted on the Manthan Platform

3D Microscope for Glaucoma Surgery

Army Hospital (Research and Referral), New Delhi, has pioneered the use of a 3D microscope in India for minimally invasive glaucoma surgery.

- **Understanding Microscopes** - A microscope magnifies small objects, revealing details invisible to the naked eye, utilizing light or electron manipulation through refraction, diffraction, or digital imaging.
- **Science Behind Magnification**- Microscopes employ lenses or sensors to focus light or electron beams, generating enlarged images of minute structures for detailed observation.
- **Types of Microscopes** - Various types exist, including optical microscopes using light, electron microscopes using electron beams (TEM, SEM), digital microscopes capturing digital images, and 3D microscopes offering spatial visualization.
- **About 3D Microscopes** - 3D digital microscopes capture multiple focal planes to construct high-resolution, three-dimensional images of specimens. They use 3D polarization glasses and a 4K display.
- **Advantages of 3D Microscopy** - Benefits include enhanced surgical precision, lower complication rates, improved surgeon comfort, and eco-friendly operation with reduced light exposure and power usage.

Pregnancy Anaemia and Heart Defects

A recent UK study suggests that anaemia in pregnant women may be linked to a 47 percent increased risk of congenital heart conditions in their newborns.

- **Understanding Anaemia** - Anaemia is characterized by insufficient healthy red blood cells or haemoglobin, hindering oxygen transport to the body's tissues, leading to fatigue and weakness.
- **Haemoglobin's Crucial Role**- Haemoglobin, a protein in red blood cells, is vital for carrying oxygen from the lungs to all organs throughout the body.
- **Global Anaemia Prevalence** - The WHO estimates significant anaemia rates globally: 40% in young children, 37% in pregnant women, and 30% in women of reproductive age.
- **Types and Severity of Anaemia**- Anaemia has various forms, both inherited and acquired, and can range from mild to severe, with severe cases potentially being life-threatening or indicating serious illnesses.
- **Management and Prevention** - Treatment involves supplements or medical procedures. Iron-deficiency anaemia, a common type, is often due to insufficient iron intake or absorption, or blood loss. A healthy diet can help prevent some forms.

Disaster Management

Sachet App: Real-Time Disaster Alerts

National Disaster Management Authority (NDMA) Sachet app enhances disaster preparedness by delivering real-time, geo-tagged alerts for various disasters like floods and cyclones via the Common Alerting Protocol (CAP).

- **Localized and Comprehensive Coverage** - Users can subscribe to alerts for specific states or districts, receiving localized awareness and covering a wide range of disasters.
- **Key Features** - App provides daily weather updates from IMD, critical information from government sources, Dos and Don'ts for disasters, and helpline numbers. Satellite connectivity ensures communication during network failures.
- **Multi-Language Accessibility** - Supporting 12 Indian languages with translation and read-out options, the app promotes inclusivity and is available on Android and iOS.
- **Operation Brahma: India's Humanitarian Aid** - PM Modi highlighted India's aid to Myanmar post-earthquake through Operation Brahma, showcasing commitment to international disaster response.
- **Empowering Individual Alertness** - The Sachet app empowers citizens with timely information, encouraging proactive measures and safeguarding lives during emergencies.
- The Common Alerting Protocol (CAP) is a standardized message format designed for all media, all hazards, and all communication channels.
- That is, a universal format for emergency alerts, ensuring critical information reaches everyone.

Miscellaneous

Shahid Rajaei Port Explosion

An explosion recently occurred at Iran's Shahid Rajaei port, the country's largest and most advanced terminal, within the Bandar Abbas Port Complex.

- **Rocket Fuel Shipment Involved** - The explosion reportedly involved a shipment of "sodium perchlorate rocket fuel," a substance used in missile production.
- **Strategic Location of Bandar Abbas** - Bandar Abbas Port is strategically situated on the Strait of Hormuz in southern Iran, west of the Chabahar port.
- **Global Oil Trade Hub** - Notably, approximately 20 percent of the world's oil trade transits through the Strait of Hormuz, highlighting the port's global significance.
- **Key Persian Gulf Gateway** - The port serves as a crucial maritime link between the Persian Gulf and the Gulf of Oman.
- **Implications of the Incident** - The explosion at this key Iranian port, involving missile fuel, raises concerns about potential disruptions and security in a vital global trade route.

Ramanujan's Life in New Book

Recently, National Archives of India and Vani Prakashan will launch "Ramanujan: Journey of a Great Mathematician" tomorrow, April 30, 2025.

- **Significance of the Launch** - The event celebrates Srinivasa Ramanujan, a globally influential Indian mathematician, highlighting his enduring impact and India's archival wealth.
- **Book's Central Theme** - Authored by Arun Singhal and Devendra Kumar Sharma, the book explores Ramanujan's extraordinary life, genius, and significant mathematical contributions despite limited formal education.
- **Key Research Insights** - Based on rare original documents and personal letters, the book offers a deeper understanding of Ramanujan's thinking and achievements.
- **Focus on Struggles and Context** - It also sheds light on his personal challenges and the historical and cultural backdrop that influenced his groundbreaking work.
- **Collaborative Effort** - The National Archives of India, preserving national heritage, and Vani Prakashan, a noted publisher, have collaborated to bring Ramanujan's inspiring story to a wider audience.

