

08/08/2026 Daily Current News

1. *Government e Marketplace (GeM):*

Context: The Government e Marketplace (GeM) will complete ten years of operations on 9 August 2026. Marking a decade of transforming public procurement through technology, transparency, efficiency and good governance, the platform has facilitated a cumulative Gross Merchandise Value (GMV) of over ₹20 lakh crore through more than 3.78 crore orders, underscoring its growing role in India's public procurement ecosystem.

About Government e Marketplace (GeM):

- ❖ The Government e Marketplace Special Purpose Vehicle (GeM SPV), a Section 8 non-profit company under the Ministry of Commerce, was incorporated on 17 May 2017 under the Companies Act, 2013 to develop, manage and maintain the GeM platform.
- ❖ Over the years, GeM has emerged as a major digital public procurement platform, promoting ease of doing business and wider market access for sellers across the country.
- ❖ It is an online platform for public procurement.
- ❖ It was launched in 2016 by the Ministry of Commerce and Industry (MoC&I).
- ❖ It was created with the objective to create an open and transparent procurement platform for government buyers to facilitate the online procurement of goods and services.

2. *Asiatic Wild Water Buffalo:*

Context: Chhattisgarh plans to translocate wild buffaloes from Assam to revive its declining wild buffalo population.

About Asiatic Wild Water Buffalo:

- ❖ Largest wild bovine in the world, also known as Wild Water Buffalo, Asiatic Buffalo, or Wild Asian Buffalo; inhabits swamps, flooded grasslands, wetlands, alluvial plains, and river valleys.
- ❖ Distribution: Found in Nepal, India, Bhutan, and Thailand. India holds over 90% of the global population (3,500–3,700 individuals), mainly in Assam, with smaller populations in Meghalaya, Chhattisgarh, and Maharashtra.
- ❖ Behaviour & Diet: Both diurnal and nocturnal; herbivorous, feeding on grasses, aquatic plants, herbs, leaves, bark, and agricultural crops.
- ❖ Reproduction: Males attain sexual maturity at 1.5 years, while females mature at around 3 years.
- ❖ Major Threats: Habitat loss and fragmentation, hunting, diseases and parasites, and hybridization with domestic buffaloes, leading to genetic dilution.
- ❖ Conservation Status: IUCN Red List – Endangered; protected under Schedule I of the Wildlife (Protection) Act, 1972.

3. *mRNA vaccine:*

Context: Recently, the U.S. FDA approved the world's first mRNA vaccine for seasonal influenza. mRNA vaccines use messenger RNA (mRNA) carrying genetic instructions that enable the body's cells to produce a harmless pathogen-specific protein (antigen).

mRNA vaccines vs Traditional vaccine:

Feature	mRNA Vaccines	Traditional Vaccines
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Principle	Deliver messenger RNA (mRNA) encoding a pathogen's antigen, which host cells translate into proteins to trigger an immune response.	Introduce the antigen itself in the form of weakened, killed, protein subunit, or toxoid to stimulate immunity.
Composition	Synthetic mRNA enclosed in lipid nanoparticles (LNPs).	Live-attenuated, inactivated, subunit, conjugate, toxoid, or viral components.
Mechanism of Action	Host cells produce the antigen after receiving mRNA, activating both B-cell and T-cell responses.	The administered antigen directly stimulates the immune system to produce antibodies and memory cells.
Genetic Material	Contains mRNA only; does not enter the nucleus or alter DNA.	Usually contains no genetic material (except some live vaccines containing weakened organisms).
Development Time	Rapid; sequence can be designed quickly after pathogen identification.	Longer; requires culturing or producing the pathogen/antigen.
Manufacturing	Cell-free, laboratory synthesis; easier to modify for new variants.	Requires cultivation of pathogens or purification of antigens, making production more complex.
Immune Response	Strong humoral and cellular immunity.	Immune response varies depending on vaccine type; some mainly induce antibody responses.
Safety	No risk of causing the disease since it contains no live pathogen.	Live-attenuated vaccines carry a small risk in immunocompromised individuals.
Storage	Generally requires ultra-cold or cold-chain storage (though newer formulations are improving).	Most require standard refrigeration (2–8°C); some are more heat-stable.
Booster Requirement	Boosters may be needed as immunity wanes or variants emerge.	Booster needs vary by vaccine type (e.g., tetanus boosters, MMR usually long-lasting).

4. NITI Aayog School Education Index:

Context: Punjab secured the first rank in the NITI Aayog School Education Quality Index 2026, ahead of states such as Kerala. The state government placed the ranking alongside school infrastructure upgrades,

learning outcomes, teacher training, and examination support programmes in the Punjab Vidhan Sabha in Chandigarh on 6 August 2026.

Major highlights of NITI Aayog School Education Index:

- ❖ Punjab ranked 1st among States in the Performance Grading Index (PGI) 2.0, while Chandigarh topped among Union Territories.
- ❖ Punjab recorded the highest learning outcomes in PARAKH Rashtriya Sarvekshan 2024.
- ❖ Kerala achieved the highest Higher Secondary Gross Enrolment Ratio (GER) at around 89.5%, followed by West Bengal.
- ❖ Karnataka registered the highest improvement in Higher Secondary GER between 2014 and 2024.
- ❖ Kerala emerged as one of the leading states in school infrastructure, particularly in electricity and basic facilities.
- ❖ India has 14.71 lakh schools catering to 24.69 crore students, making it the largest school education system in the world.
- ❖ Around 94,000 government schools have closed over the past decade due to school consolidation and declining enrolment.
- ❖ Government school enrolment declined by 2.26 crore students during the last decade.
- ❖ Nearly 1.19 lakh schools in India still do not have electricity.
- ❖ About 1.04 lakh schools function as single-teacher schools, predominantly in rural areas.
- ❖ Teacher vacancies are highest in Bihar, followed by Jharkhand and Madhya Pradesh.
- ❖ The report recommends strengthening Foundational Literacy and Numeracy (FLN), improving teacher availability, expanding digital and physical infrastructure, and adopting data-driven governance through measurable performance indicators.

5. *EVEREST engine:*

Context: Astrobase, a Bengaluru-based space company unveiled India's first privately built 800 kN Full-Flow Staged Combustion (FFSC) LOX-Methane rocket engine on Friday.

About EVEREST engine:

- ❖ Developer: Bengaluru-based space start-up Astrobase Space Technologies unveiled EVEREST, an 800 kN-class Full-Flow Staged Combustion (FFSC) rocket engine, described as India's first privately developed engine of this type.
- ❖ Propellants: EVEREST uses Liquid Oxygen (LOX) as oxidiser and liquid methane as fuel, a combination known as methalox, which is well suited to reusable launch systems.
- ❖ Thrust: The engine is designed to generate 800 kN of vacuum thrust, placing it in the 80-tonne-class propulsion category.
- ❖ FFSC technology: In the Full-Flow Staged Combustion cycle, both the fuel and oxidiser are completely routed through separate preburners/turbines before entering the main combustion chamber, enabling very high efficiency and chamber pressure.
- ❖ Why it matters: FFSC is considered one of the most advanced and technically challenging liquid-rocket engine cycles because it can provide high efficiency, lower turbine temperatures and improved durability—important for reusable rockets.
- ❖ Reusability focus: Astrobase intends to use EVEREST as the propulsion system for reusable medium-lift launch vehicles, with the company targeting lower launch costs and faster turnaround.

- ❖ Indigenous capability: The engine has been designed, manufactured and integrated in India, with core components including 3D-printed parts, supporting India's goal of developing sovereign rocket-propulsion and space-manufacturing capabilities.
- ❖ IN-SPACe support: Astrobase was selected under IN-SPACe's Technology Adoption Fund (TAF) in June 2026 to accelerate development of the indigenous 800 kN LOX–methane FFSC engine.

6. ***Opposition wants FCRA Bill scrapped or referred to JPC:***

- ❖ New Rules: MHA notified the Foreign Contribution (Regulation) Amendment Rules, 2026, introducing stricter compliance for NGOs and associations receiving foreign funds.
- ❖ Activity-Based Registration: NGOs must specify their exact activities and operational States/UTs, with separate fees for each category and jurisdiction.
- ❖ Existing NGOs: FCRA-registered organisations get one year to specify the activities and States/UTs they wish to retain.
- ❖ Religious Activities: Foreign contributions may fund worship, religious education, heritage preservation and community kitchens, but not proselytisation.
- ❖ Religious Conversion: The rules explicitly exclude proselytisation/conversion-oriented activities from permissible religious activities.
- ❖ Article 25: While Article 25 protects the right to profess, practise and propagate religion, the Supreme Court held in *Rev Stanislaus v. State of Madhya Pradesh (1977)* that propagation does not include a fundamental right to convert another person.
- ❖ Foreign Functionaries: Associations having foreign nationals, except PIOs, as key functionaries will ordinarily not be considered for FCRA registration or prior permission.
- ❖ Key Functionaries: The definition is expanded to include directors, partners, trustees and Karta of an HUF, besides office-bearers.
- ❖ Fund Utilisation: NGOs must utilise at least 75% of previously received funds before receiving further instalments.
- ❖ Renewal Condition: Organisations must spend at least ₹10 lakh on approved activities over two years to qualify for renewal.
- ❖ Donor Disclosure: NGOs must disclose the ultimate donor to improve transparency and accountability.
- ❖ Digital Transparency: Organisations are required to disclose their official websites, social-media accounts and publications.
- ❖ FCRA 2010: The FCRA regulates the acceptance and utilisation of foreign contributions and foreign hospitality in India.
- ❖ Origin: The original FCRA was enacted in 1976 during the Emergency and was replaced by the FCRA, 2010.
- ❖ Nodal Ministry: The Ministry of Home Affairs (MHA) administers and monitors the FCRA as part of India's national-security framework.
- ❖ Registration: Organisations need FCRA registration or prior permission from the Central Government to legally receive foreign contributions.
- ❖ SBI Account: Foreign contributions must initially be received through the designated FCRA account at SBI, New Delhi Main Branch.
- ❖ Transfer Restriction: The 2020 amendment prohibited FCRA-registered organisations from transferring or sub-granting foreign contributions to other persons or organisations.

Quick Bites:

- ☐ Myoglobin is an oxygen-binding protein found in the muscle cells of animals, including humans, where it stores oxygen to ensure a continuous supply during muscle activity. It is responsible for the red colour, characteristic taste, and aroma of meat and is a rich source of heme iron, which is more readily absorbed by the human body than non-heme iron. Recently, researchers successfully engineered lettuce and tobacco plants to produce myoglobin, enabling plant-based foods to better replicate the nutritional value and sensory qualities of meat while enhancing their iron content.
- ☐ The Central Council for Research in Ayurvedic Sciences (CCRAS) is an autonomous apex research body under the Ministry of Ayush, responsible for the formulation, coordination, development, and promotion of scientific research in Ayurveda. To strengthen evidence-based Ayurveda, it has launched CCRAS-PARAMPARA, a flagship initiative aimed at the systematic documentation, evaluation, and scientific validation of India's Local Health Traditions (LHTs), ethnomedical practices, and traditional veterinary knowledge, thereby preserving and integrating traditional knowledge with modern scientific research.
- ☐ India observed the 12th National Handloom Day on 7 August 2026. The observance was first declared in 2015 to honour the weaving community and to mark the Swadeshi Movement launched on 7 August 1905.
- ☐ Ladakh approved India's first guided high-altitude wildlife safari on 6 August 2026. The plan covers snow-leopard and bird-watching trails in Hemis National Park, Changthang, Karakoram Wildlife Sanctuary, Nubra, Zaskar, Sham, Kargil and Drass.
- ☐ A 1.5-hectare wildfire broke out on 5 August 2026 near the Sugar Mountain Trail in tæmtæmíxʷtæn/Belcarra Regional Park in the Metro Vancouver region of British Columbia, Canada. The fire led to tactical evacuations for two homes on Fern Drive in the Village of Anmore and evacuation alerts for 35 additional properties.
- ☐ The Agricultural and Processed Food Products Export Development Authority (APEDA), under the Ministry of Commerce and Industry, organised BIOFACH INDIA 2026 with NuernbergMesse India on 6 August 2026. The three-day international trade fair is scheduled from 6 to 8 August 2026 at the India Expo Centre & Mart in Greater Noida, Delhi-NCR.
- ☐ Indian-origin NASA astronaut Anil Menon completed his first extravehicular activity on 6 August 2026 during a spacewalk outside the International Space Station.
- ☐ IIT Guwahati developed "E-Eye", a low-cost portable optical sensing device for rapid detection of toxicants and cancer-causing heavy metals in water and biological samples. The device was announced on 6 August 2026 and was designed for on-site testing with digital output and wireless data transmission.
- ☐ India's forex reserves jumped by \$10.512 billion to \$692.866 billion during the week ended July 31, the RBI said on Friday. The overall kitty had jumped by \$6.118 billion to \$682.354 billion in the previous reporting week. Reserves had expanded to an all-time high of \$728.494 billion during the week ended February 27 this year before the onset of the West Asia conflict, which led to several weeks of drop as the rupee came under pressure and the RBI had to intervene in the forex market through dollar sales.
- ☐ The U.S. has "today" become India's largest supplier of liquefied petroleum gas (LPG), accounting for 67% of its LPG imports.

- ☐ Amid surge in applications for solar, wind and hybrid renewable energy projects in border areas, the Ministry of Home Affairs (MHA) has issued new national security guidelines, introducing a blanket ban on such projects within 1 km of the international border and mandating security clearance for projects located up to 50 km away. Under the guidelines, all solar, wind and hybrid energy projects proposed within 50 km of the Line of Control (LoC), Line of Actual Control (LAC) and the international border will require security clearance from the MHA. Projects located in the first kilometre from these borders have been declared a “restricted area”, where no project activity will be permitted.

Practice questions:

Objective questions:

With reference to myoglobin, which one of the following is correct?

- (a) It is an oxygen-binding protein primarily found in blood plasma
- (b) It stores oxygen in muscle cells and contains heme iron
- (c) It transports carbon dioxide from tissues to lungs
- (d) It is a non-heme protein responsible for oxygen transport in plants

National Handloom Day in India is observed on 7 August primarily to commemorate:

- (a) Establishment of the All India Handloom Board
- (b) Introduction of the Khadi and Village Industries programme
- (c) Formation of the first textile cooperative
- (d) Launch of the Swadeshi Movement

India's first guided high-altitude wildlife safari, recently approved by Ladakh, is particularly associated with which species?

- (a) Himalayan tahr
- (b) Snow leopard
- (c) Tibetan antelope
- (d) Red panda

With reference to mRNA vaccines, consider the following statements:

1. They deliver messenger RNA encoding an antigen into host cells.
2. The host cells produce the antigen using the delivered mRNA.
3. The mRNA normally enters the nucleus and integrates into the host DNA.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two

- (c) Only three
- (d) All four

With reference to the Government e-Marketplace (GeM), consider the following statements:

1. It is an online platform for public procurement by government buyers.
2. It was launched with the objective of creating an open and transparent procurement ecosystem.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Which country has recently emerged as India's largest supplier of LPG recently?

- (a) Qatar
- (b) Saudi Arabia
- (c) United Arab Emirates
- (d) United States

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