

# Factly Monthly

**Compilation**

2026

**For UPSC CSE Prelims  
Exam**

**June 2026**

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## Famous Megalithic Site of Chokahatu

**News:** Researchers and local groups renewed efforts to secure UNESCO World Heritage status for the megalithic site of Chokahatu in Jharkhand.

### About Famous Megalithic Site of Chokahatu



Source – DTE

- **Chokahatu is a famous megalithic burial site associated with the Munda tribe, where stones were erected in honour of the deceased as part of a long-standing cultural tradition.**
- **Location:** It is located in Bundu–Sonahatu area of Ranchi district in Jharkhand.
- **Naming:** The name Chokahatu is of Austric Mundari origin and means “a place of mourning.”
- **Time Period:** According to a Munda folktale, the community settled in the area over 2,800 years ago and brought their megalithic traditions with them.
- **Archaeological Discovery:** Col E.T. Dalton visited the site in 1872 after receiving information from T.F. Peppe and documented it in an article published in 1873.
- **Key Features:**
  - **Living Megalithism:** Communities continue to add new memorial stones for ancestors, making it a rare example of an uninterrupted living tradition.
  - **Large Megalithic Complex:** The site contains thousands of megalithic structures, including dolmens, cromlechs, standing stones, burial slabs, cairns, and stone circles.
  - **Multiple Functions:** The stones were used for burials, ancestor remembrance, rituals, boundary marking, and in some cases astronomical observations.

- Adivasi Heritage: The site is closely associated with the traditions of Munda and other Adivasi communities and reflects their social and cultural practices.
- Significance: Chokahatu is significant because its unique combination of living tradition, large-scale megalithic landscape, and cultural continuity strengthens its case for UNESCO World Heritage Site status.

### AI-enabled Voice Chatbot 'Samadhan Didi'

News: Dr Jitendra Singh launched the CPGRAMS AI-enabled Voice Chatbot "Samadhan Didi" at Kartavya Bhawan, New Delhi.

#### About AI-enabled Voice Chatbot 'Samadhan Didi'



Source - CNBC

- 'Samadhan Didi' is an AI-enabled voice chatbot that makes public grievance redressal simpler, more accessible, and multilingual.
- Developed by: The Department of Administrative Reforms and Public Grievances (DARPG) developed it in collaboration with [Bhashini](#).
- Platform Integrated: It is fully integrated into the [Centralised Public Grievance Redress and Monitoring System](#) (CPGRAMS).
- Key Features:
  - Voice-Based Grievance Filing: Citizens can lodge grievances by simply speaking in their own language and describing their concerns in plain words.

- **Automatic Grievance Classification:** The chatbot understands the concern, asks relevant clarifying questions, identifies the appropriate Ministry, Department, category, and sub-category, and files the grievance with the correct authority.
- **Multilingual Accessibility:** The system supports the 22 languages of the Eighth Schedule of the Constitution, and additional languages such as Bhojpuri, Garo, Khasi, Mijo, and Bodhi are being added in phases.
- **AI and Language Integration:** The chatbot combines Bhashini's language capabilities with grievance-classification models trained on CPGRAMS data to provide a seamless experience across Indian languages.

### Babesia Infection

**News: Eight Asiatic lions died and 17 others were infected during a recent outbreak of Babesia disease in Gujarat's Gir forest.**

#### About Babesia Infection

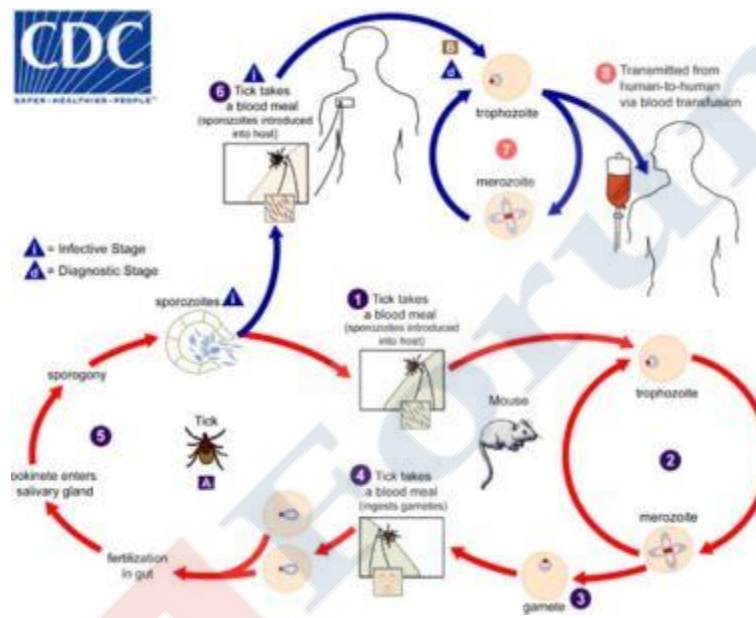


Figure 1. Source – CDC

- **Babesia is a genus of microscopic protozoan parasites that infect the red blood cells of animals and humans, causing the disease known as babesiosis.**
- **Causative Organism:** The disease is caused by eukaryotic intraerythrocytic parasitic protozoa belonging to the genus Babesia.
- **Mechanism:** The parasites invade, multiply, and survive inside the red blood cells (erythrocytes) of the host.
- **Primary Vectors:** The disease is mainly transmitted through the bites of infected hard-bodied ticks (such as Rhipicephalus, Ixodes, Dermacentor, and Haemaphysalis species).
- **Zoonotic Nature:** The disease naturally circulates in animals (cattle, rodents, and wildlife reservoirs) but can spill over into humans.
- **Alternative Transmission:** It can also spread via contaminated blood transfusions, organ transplantation, or vertically from mother to fetus (congenital)
- **Health Impacts :** The disease can cause severe destruction of red blood cells and may lead to anemia, jaundice, inflammation, blood coagulation disturbances, and capillary blockage.

- In severe cases, it can result in life-threatening complications.
- **Symptoms:** Symptoms include weakness, fever, coughing, nasal discharge, respiratory distress, anemia, jaundice, hemoglobinuria, and severe illness in some cases.
- **Treatment:** Treatment includes anti-protozoal medicines such as imidocarb dipropionate and diminazene aceturate, while tick control measures help reduce transmission.
- **Distribution:** The disease is distributed globally and is highly prevalent in tropical, subtropical, and temperate regions where tick vectors thrive.
- Wildlife strains are also found in biodiversity-rich areas such as the Gir landscape in Gujarat.

### Blue Micromoon

**News:** A rare astronomical phenomenon will appear in the night sky, featuring a micromoon that will also be a blue moon.

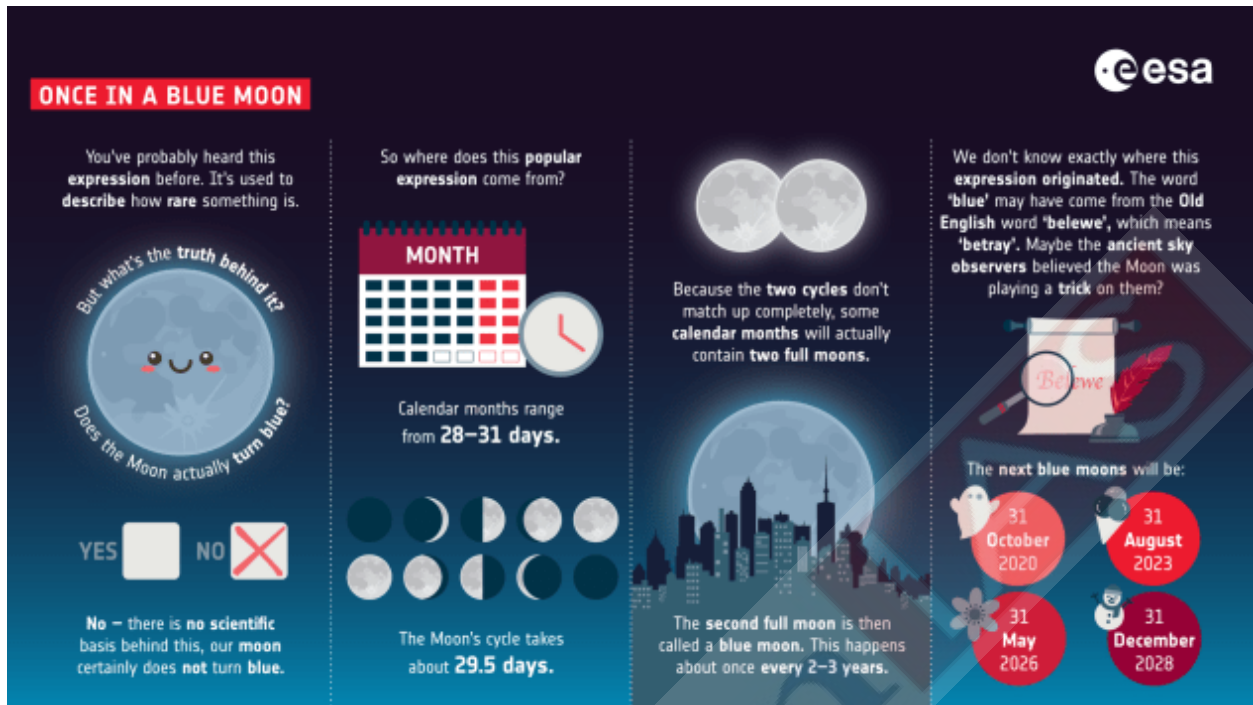
#### About Blue Micromoon



Figure 2. Source – NASA

- A micromoon is a full or new moon that occurs when the moon is roughly at its farthest from Earth in its orbit.
- **Why does it happen:** The moon's orbit around Earth isn't a perfect circle. It takes about a month to orbit Earth once.
- So the moon has a nearest point (perigee) and a farthest point (apogee) each month.
- When the moon reaches a fully illuminated phase within a short time of apogee, it appears smaller-than-usual. This is why it is called a full micromoon.
- **Note:** The moon is about 363,711 km away at its closest to Earth, known as perigee.
- A supermoon occurs when the moon passes through or is close to its perigee.
- At apogee, or the furthest point, the moon is about 403,945 km away.
- There's no strict definition of how close to apogee the moon should be to be called a micromoon.
- **Rare event:** A blue micromoon occurs about once every couple of decades.

#### About Blue Moon



Source: esa

- A Blue Moon refers to a situation in which two full moons occur within the same calendar month.
- Since the lunar cycle from one new moon to the next lasts about 29.5 days, a full moon that appears on the 1st or 2nd day of a month can be followed by another full moon on the 30th or 31st.
- This phenomenon occurs roughly every two to three years.
- The moons not really turn blue rather, in some cases, smoke or dust particles in the atmosphere can scatter red wavelengths of light, causing the Moon to appear slightly bluer than usual in certain locations.

### Operation Chakravyuh

News: Directorate of Revenue Intelligence (DRI) carried out Operation Chakravyuh in Kerala and seized substantial quantities of narcotic drugs and psychotropic substances.

### About Operation Chakravyuh



Source: PIB

- **Conducted by:** Operation Chakravyuh refers to an anti-narcotics operations carried out by the Directorate of Revenue Intelligence (DRI).
- **Seizures Made:** 24 kilograms of narcotic drugs and psychotropic substances have been seized in these operations from Kochi, Malappuram and Thiruvananthapuram.
  - The seized substances included methaqualone, methamphetamine and hashish oil, intended for illicit distribution and trafficking.
  - Five individuals, including key operatives involved in the trafficking networks, have been apprehended under the provisions of the [Narcotic Drugs and Psychotropic Substances \(NDPS\) Act, 1985](#).

### About Directorate of Revenue Intelligence (DRI)



Source: DRI

- The Directorate of Revenue Intelligence (DRI) serves as India's apex anti-smuggling agency, functioning under the Central Board of Indirect Taxes and Customs (CBIC), Ministry of Finance.
- It is primarily responsible for detecting and preventing smuggling activities, including drug trafficking, illicit international trade in wildlife, and environmentally sensitive goods.
- The DRI also plays a crucial role in combating commercial frauds related to international trade and preventing evasion of customs duties, thereby safeguarding the nation's economic and environmental interests.

### 22nd Asian U20 Athletics Championships

**News: India finished second at the 2026 Asian U20 Athletics Championships in Hong Kong China with a historic tally of 19 medals.**

### About 22nd Asian U20 Athletics Championships



Source - Asian Athletics

- **The 2026 Asian U20 Athletics Championships** was the 22nd edition of the international athletics competition for Asian under-20 athletes.
- **Host Venue:** The championships were held at the Kai Tak Youth Sports Ground in Hong Kong, China.
- **Governing Body:** The event was organized by the Asian Athletics Association.
- **Duration:** The competition was conducted over four days from May 28 to May 31, 2026.
- **Event Featured:** Athletes born between 2007 and 2009 competed in 45 events.
- **Global Pathway:** The championships served as a qualifying tournament for the World Athletics U20 Championships 2026, scheduled to be held at Hayward Field in Eugene, Oregon, USA, from August 5 to 9.
- **Key Indian Performers :**
  - **Historic Achievement:** India finished second (China secured 1st) with 19 medals, including 10 gold, five silver and four bronze, matching its highest-ever placing in the competition's history.
  - **Opening Medals:** Nipam won bronze in the women's 100m, while Nitin Gupta secured India's first gold in the men's 5000m race walk.
  - **National Record:** Pooja Singh won gold in the women's high jump with a 1.93m effort, setting a new senior national record.

- Decathlon Success: Rahul Jakhar won gold with a new U20 national record of 7185 points, while India secured one-two finish (first and second positions) in the event.
- Junior National Records: Nischay won silver in the men's discus throw,
  - while India's Men's 4x400m Relay Team won Bronze.
- Meet Record: The women's 4x400m relay team (quartet of Neeru Pathak, Bhumika Sanjay Nehate, Tahura Khatua, and Sehnoor) won gold with a new meet record.
- Significance: The performance reflected the determination and excellence of India's young athletes and marked the country's best-ever result at the championships outside home soil.

### MAHA (Missions for Advancement in High-impact Areas) Water Mission

News: The ₹200-crore MAHA Water Mission was launched to support startups and multidisciplinary consortia in developing high-impact water solutions.

#### About MAHA Water Mission



Figure 3. Source – PIB

- MAHA (Missions for Advancement in High-impact Areas) Water Mission is a national programme that accelerates innovation in the water sector by linking research, technology development, validation, and field deployment.
- Nodal Ministry: The Ministry of Jal Shakti is the nodal ministry for the mission.
- Organisations involved:
  - Anusandhan National Research Foundation (ANRF): It expands research funding opportunities and supports mission-oriented innovation.
  - Department of Space/ISRO: It contributes satellite technologies and geospatial applications for water resource mapping and assessment.
- Objectives: The mission aims to support innovations from laboratory research to field deployment and generate scalable and localised solutions for long-term water security.
- Funding: The mission has a projected outlay of ₹200 crore over five years, jointly contributed by ANRF and the Ministry of Jal Shakti.
- Target beneficiaries: The programme supports universities, national laboratories, research organisations, startups, MSMEs, and industry partners.

- **Support:** Selected multidisciplinary consortia can receive up to ₹20 crore for technology development, field assessment, validation, and deployment.
- **Focus Areas:**
  - **Water Resource Assessment and Sustainable Management:** It promotes sustainable management of water resources.
  - **Drinking Water:** It supports solutions related to drinking water.
  - **Water Quality and Ecological Health:** It focuses on improving water quality and ecological health.
  - **Water Use Efficiency and Circular Economy:** It encourages efficient water use and circular economy practices.
  - **Climate Resilience and Adaptation:** It supports solutions for climate resilience and adaptation.

### On-Screen Marking (OSM) System

**News:** CBSE's new digital On-Screen Marking (OSM) system for Class 12 examinations faced criticism over blurred scans, missing pages, and portal glitches.

#### About On-Screen Marking (OSM) System



monitoring of evaluators.

- **OSM Process:**
  - **Answer Book Collection and Coding:** All answer books are marked with a secret code and moved from examination centres to regional offices.
  - **Scanning and Uploading:** The answer books are scanned and uploaded onto a secure digital portal for evaluation.
  - **Anonymisation:** Student roll numbers and barcode identifiers are digitally masked before evaluators access the answer books.

- **Digital Evaluation:** Teachers evaluate answers directly on computer screens according to a predefined marking scheme.
- **Automated Tabulation:** The system calculates the total marks automatically, eliminating manual addition errors.

### Zero Coupon Zero Principal (ZCZP) Instrument

**News:** The Ministry of Corporate Affairs (MCA) has enhanced India's nascent Social Stock Exchange (SSE) ecosystem by allowing companies to use a portion of their Corporate Social Responsibility (CSR) spending through Zero Coupon Zero Principal (ZCZP) instruments.

#### About Zero Coupon Zero Principal (ZCZP) Instrument



Integrating Zero Coupon Zero Principal (ZCZP) Instruments



Source - UN

- **Definition:** They are financial instruments or securities issued by not-for-profit organisations (NPOs) registered on the Social Stock Exchange segment of a recognised stock exchange in accordance with regulations framed by the [Securities and Exchange Board of India \(SEBI\)](#).
- **Features:**
  - Such organisations registered on the Social Stock Exchange segment of a recognised stock exchange will be permitted to undertake projects with a duration of not more than three succeeding financial years from the date of issuance.
  - The NPOs registered on a Social Stock Exchange may also make private issuance of Zero-Coupon Zero-Principal Instruments.
  - In the event of delisting or termination of the instrument, any unspent amount will have to be transferred to funds specified under the approved list of [Corporate social responsibility](#) (CSR) activities.

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- It carries neither interest payments nor repayment of principal, effectively making it a philanthropic funding mechanism routed through a market framework.
- Form of issuance: It shall be issued in dematerialised form only.
- **Limitations:**
  - **No Independent Impact Assessment Requirement:** ZCZP instruments are exempt from independent impact assessments. The exemption is based on the assumption that SSE disclosure requirements provide adequate transparency.
    - However, listing on the SSE does not necessarily guarantee independent verification of social impact, which may concern company boards seeking greater assurance.
  - **Limited Supply of Credible Listed Non-Profits:** The number of reputable non-profit organisations currently listed on the Social Stock Exchange is relatively small.
    - This raises concerns about whether there will be enough high-quality ZCZP issuances to meet the increased demand generated by the new CSR framework.
- **About the Amendment:**
  - Ministry of Corporate Affairs (MCA) has facilitated Corporate Social Responsibility (CSR) through Zero Coupon Zero Principal Instrument by expanding the scope of Schedule VII of the Companies Act, 2013.
    - Also, to facilitate the implementation Corporate Social Responsibility (CSR) through Zero Coupon Zero Principal Instrument, amendments to the CSR Policy Rules, 2014 have been made.
  - **Aim:** This amendment is aimed at providing significant ease of compliance to the companies and will also help Not-for-Profit Organisations (NPOs) to raise funding for public welfare projects in a transparent and regulated manner.
  - **Limits:** Expenditure incurred by the CSR-mandated companies for such instruments shall not exceed ten per cent of the total Corporate Social Responsibility expenditure for that financial year

## About Social Stock Exchange (SSE)

WELFARE SET FOR A MARKET MAKEOVER		
<b>Concept Of Social Stock Exchange</b> <p>Union Finance Minister Nirmala Sitharaman, as part of the Budget Speech for FY 2019-20, had proposed the idea of an electronic fund-raising platform "Social Stock Exchange", under the regulatory ambit of SEBI for listing social enterprises and voluntary organisations working for the realisation of a social welfare objective so that they can raise capital as equity, debt or as units like a mutual fund</p>	<b>Objectives of social stock exchange</b> <ul style="list-style-type: none"><li>▶ Regulated platform that brings together social enterprises and donors</li><li>▶ Facilitate funding and growth of social enterprises</li><li>▶ Enabling mechanism to ensure robust standards of social impact and financial reporting</li></ul>	<b>Social stock exchange segment on NSE</b> <ul style="list-style-type: none"><li>▶ The Social Stock Exchange segment (SSE) on the National Stock Exchange provides social enterprises non-profit organisations (NPOs) and for-profit enterprises (FPES) engaged in eligible activities the opportunity to register themselves, and raise funds on a recognised exchange platform</li><li>▶ Social enterprise shall target underserved or less privileged population segments or regions recording lower performance in the development priorities of central or state govts</li></ul>

- Social Stock Exchange (SSE) is a separate segment of the existing Stock Exchange that helps Social Enterprises to raise funds from the public through the stock exchange mechanism.
- SSE identifies the two forms of social enterprises that are engaging in the activity of creating positive social impact and that meet the primacy of their social intent.
  - Not-for-profit organization
  - For-profit social enterprise
- SSE acts as a medium between Social Enterprises and fund providers, and that can help them to select those entities that are creating measurable social impact and reporting such impact.

## All About Elections for State Legislative Councils

**News:** The Election Commission of India announced elections to 27 Rajya Sabha seats and State Legislative Council seats in three states.

### About State Legislative Council



Source - HT

- **The State Legislative Council, also known as the Vidhan Parishad, is the upper house in the bicameral legislature of some states.**
- **6 Bicameral States: Currently, six states have a Legislative Council.**
  - **These states are Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana, and Uttar Pradesh.**
- **Permanent Body: The Legislative Council is a permanent house and cannot be dissolved.**
- **Duration: Members serve for six years, and one-third retire every two years.**
- **Constitutional Provisions:**
  - **Article 169: It empowers Parliament to create or abolish a State Legislative Council by a simple majority after a special majority resolution of the State Legislative Assembly.**
  - **However, the resolution passed by the Legislative Assembly is not binding on Parliament.**
  - **Article 171: It lays down the composition of the State Legislative Council.**
  - **Article 172: It provides that members serve for six years, with one-third retiring every two years.**
- **Composition:**
  - **Nature: The Legislative Council consists of nominated and indirectly elected members.**

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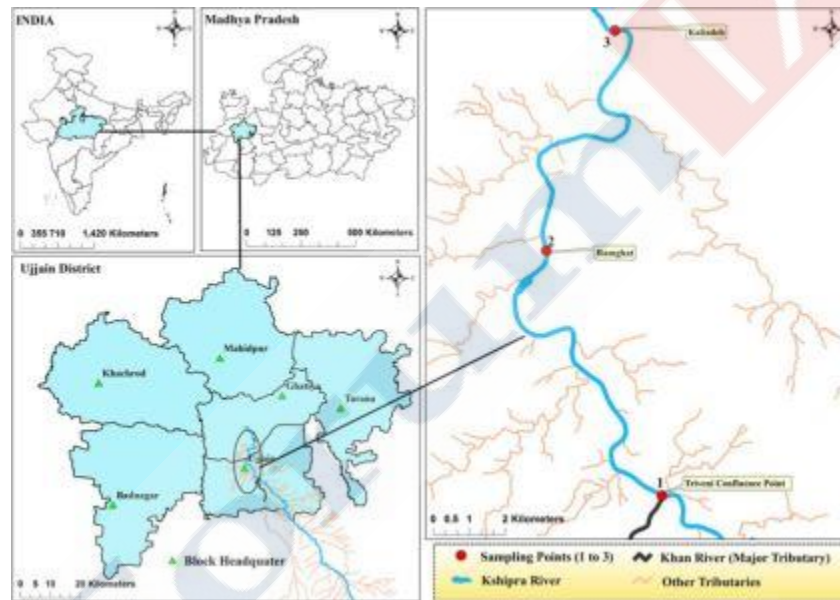
- **Strength:** The total membership cannot exceed one-third of the strength of the Legislative Assembly and must have a minimum of 40 members.
- **Presiding Officers:** The Council elects a Chairman and a Deputy Chairman from among its members.
- **Electorate Breakdown:**
  - **Legislative Assembly:** One-third of the members are elected by the Legislative Assembly.
  - **Local Authorities:** One-third of the members are elected by municipalities and other local authorities.
  - **Graduates:** One-twelfth of the members are elected by graduates.
  - **Teachers:** One-twelfth of the members are elected by teachers.
  - **Governor:** About one-sixth of the members are nominated by the Governor.
- **Voting System :** Elections are conducted through proportional representation by means of the single transferable vote under Article 171.
- **Eligibility Criteria:**
  - **Must be a citizen of India.**
  - **Must be 30 years of age or above.**
  - **Must make an oath or affirmation of allegiance to the Constitution.**
  - **Must be an elector in an Assembly constituency of the concerned state.**
- **Disqualifications:**
  - **Office of Profit:** A person holding a paid office under the Union or State Government is disqualified, except in cases exempted by law.
  - **Unsound Mind:** A person declared to be of unsound mind by a competent court is disqualified.
  - **Insolvency:** An undischarged insolvent is disqualified.
  - **Foreign Citizenship:** A person who acquires foreign citizenship or acknowledges allegiance to a foreign State is disqualified.
  - **Anti-Defection:** A person who defects to another party or violates the party whip under the Tenth Schedule is disqualified.

- **Statutory Violations:** A person disqualified under laws made by Parliament is disqualified (e.g., if they are convicted of a serious crime and sentenced to 2 or more years of imprisonment, fail to lodge election expenses, or commit corrupt electoral practices).
- **Prolonged Absence:** A member absent from all House meetings for sixty days without permission is disqualified (Article 190(4)).

### Kshipra River

**News:** The Kshipra riverine system in Madhya Pradesh is facing a major crisis due to the drying up of its tributaries.

#### About Kshipra River



Source – ResearchGate

- The Kshipra, also known as the Shipra, is a sacred river in Madhya Pradesh and is often called the “Ganga of Malwa”.
- **Origin:** It originates from Kakri-Tekdi hill in the Vindhya Range, which is located north of Dhar and near Ujjain.
- **Length :** The river is 195 km long.
- **Course:** It flows north across the Malwa Plateau through the holy city of Ujjain before merging with the Chambal River.
- **Major Tributaries:** It’s major tributaries are Khan and Gambhir.

- **Key Aspect of Kshipra River:**
  - **River System Under Stress:** The Kshipra riverine system includes 22 tributaries such as Chandrabhaga, Swat, Gandaki, Kaliadaha, Lakheri and Pipaliya, many of which have disappeared or become seasonal drains.
  - **Importance of Tributaries:** These tributaries support thousands of villagers, help irrigation, and recharge groundwater levels.
  - **Narmada-Kshipra Link Project:** To maintain its perennial flow, a massive river-linking project was completed to pump water from the Narmada River into the Kshipra during dry spells.
  - **Growing Environmental Concerns:** Encroachment, pollution, degradation of water sources, erratic rainfall and intense heat have led to the drying up of tributaries, causing drinking water shortages and environmental imbalances.
- **Religious Significance:** According to Hindu texts, the Kshipra River originated from heart of Varaha, an incarnation of Lord Vishnu, and Krishna studied at Sage Sandipani's ashram on its banks.
  - The river is also mentioned in Buddhist and Jain scriptures and hosts the famous Kumbh Mela at Ujjain every 12 years.

### Project UDAYAK

**News: Border Roads Organisation celebrated the 37th Raising Day of Project UDAYAK on June 01, 2026, at Doomdooma in Assam.**

#### About Project UDAYAK



Figure 4. Source – PIB

- Project UDAYAK is a specialized territorial wing of the Border Roads Organisation (BRO) for developing and maintaining strategic road infrastructure in Northeast India.
  - **Nodal Ministry:** Ministry of Defence
  - **Launched in:** The project was established in 1989 and was raised on 01 June 1990 at Doomdooma, Assam.
  - **Naming:** The project was named 'Udayak', meaning the Rising Sun.
- **Key Aspects of Project UDAYAK:**

- **Area of Responsibility (AOR):** The project manages more than 1,457 km of strategic roads in the easternmost regions of Arunachal Pradesh and parts of Assam, covering Anjaw, Lohit, Dibang Valley, Longding, Tirap, and Changlang districts.
- **Border Connectivity and Security:** The project enhances connectivity along the Line of Actual Control (LAC) and the Indo-Myanmar border, improving accessibility in strategically important regions.
- **Road and Border Fencing Construction:** The project is undertaking road construction and border fencing works along the Indo-Myanmar border.
- **Community Outreach Activities:** The project conducts medical camps, Swachhata Abhiyan, road safety awareness campaigns, and other community welfare activities for local populations.

### VYOMA Innovation Challenge

**News:** The Digital India BHASHINI Division, in collaboration with Current AI and Kalpa Impact, has launched the VYOMA Innovation Challenge.

#### About VYOMA Innovation Challenge



Figure 5. Source – NewsX

- **VYOMA Innovation Challenge** is an innovation initiative that promotes the development of open-source, multilingual, voice-first AI solutions for offline and low-connectivity environments.
- **Launched by:** The challenge has been launched by the Digital India BHASHINI Division (DIBD) under the Digital India Corporation (DIC), Ministry of Electronics and Information Technology (MeitY), in collaboration with Current AI and Kalpa Impact.
- **Aim:** The challenge aims to encourage the development of practical AI solutions that address language accessibility, digital literacy, and connectivity challenges through multilingual AI technologies.
- **Key Features of VYOMA Innovation Challenge:**
  - **Built on:** The challenge is built on Sunno Sutra, a multilingual, voice-first, open-source handheld AI reference device jointly developed by BHASHINI and Current AI.

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- **Target Sectors:** Potential applications cover education, agriculture, healthcare, governance, and public service delivery, with a focus on expanding AI access across India's linguistic and geographic diversity.
- **Eligibility:** The challenge invites startups, researchers, students, academic institutions, MSMEs, industry partners, and independent innovators to participate and develop new solutions on the Sunno Sutra platform.
- **Process:** The challenge will be conducted in multiple stages, and 20 shortlisted teams will receive developer kits, access to the Sunno Sutra platform, and technical mentorship.
- **Awards:** Winning teams will be eligible for prizes worth up to ₹80 lakh and may receive opportunities for deployment with central and state government departments.

### 2026 Food Planet Prize

**News: Andhra Pradesh's community-led natural farming programme has won the 2026 Food Planet Prize.**

#### About 2026 Food Planet Prize

**FOOD  
PLANET  
PRIZE**



**WINNER  
2026**

Figure 6. Source – PBS

- About Food Planet Prize is the world's largest environmental award.
  - **Presented by:** It is presented annually by the Curt Bergfors Foundation in Sweden.
  - It rewards innovative initiatives that will improve the global food system within ten years while supporting a resilient biosphere and feeding a growing world population.
  - The prize is given for two categories, namely:
    - Existing scalable solution for sustainable foods and
    - Innovative initiatives that could transform the global food sector.
  - **About nominations:** Nominations are submitted through the website's nomination form, which remains open throughout the year.
- The nominations team evaluates each submission using publicly available information, considering factors such as impact, evidence, and relevance to the food system.
  - Nominations may remain under consideration for multiple years if they continue to show potential.

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### About 2026 Food Planet Prize

- **Winner:** The Andhra Pradesh Community Managed Natural Farming (APCNF) programme won the 2026 Food Planet Prize.
- **Finalists:** The other finalists, Conscious Kitchen of the United States, NoPalm Ingredients of the Netherlands and the Savanna Institute of the U.S.A.
- **Prize 2026:** The prize carries an award of 1.5 million USD to the winner and 150,000 USD to each finalist.
- APCNF was recognised by the Curt Bergfors Foundation for promoting farming practices that:
  - Reduce dependence on synthetic inputs.
  - Support climate-resilient agriculture.
- The competition received more than 1,000 nominations from around the world.
- APCNF was selected as one of four finalists from a longlist of 35 initiatives representing 19 countries and six continents.

### About Andhra Pradesh Community Managed Natural Farming (APCNF)

- **Launched by:** It was launched in 2016 by Rythu Sadhikara Samstha, under Andhra Pradesh's agriculture department.
- **Objective:** Its objective was to help farmers transition from conventional agriculture to natural farming practices.
- **Features:** It has grown into one of the world's largest community-led agroecology movements.
  - It currently supports approximately 1.8 million farming families across Andhra Pradesh.
  - It also works with around 340,000 women's self-help groups.
  - It also works with around 340,000 women's self-help groups.
  - APCNF's natural farming model is now being shared across 22 Indian states and internationally in Sri Lanka and Zambia.

## Mission Senehjori and Assam's Muga silk

**News:** The Ministry of Development of North Eastern Region (DoNER) has launched Mission Senehjori to transform Assam's renowned Muga silk sector into a globally competitive luxury textile ecosystem.

### About Mission Senehjori



Figure 7. Source: North East India 24

- It is a comprehensive cluster-based initiative designed to strengthen the entire Muga silk value chain.
- Launched by: It has been launched by the Ministry of Development of North Eastern Region (DoNER).
  - It has been launched in collaboration with the Government of Assam, the Central Silk Board, the Ministry of Textiles and other central agencies.
- Aim: It aims at transforming Assam's renowned Muga silk sector into a globally competitive luxury textile ecosystem.
  - It seeks to strengthen the entire Muga silk value chain, from host-plant cultivation and silkworm seed production to weaving, branding, exports, digital traceability and tourism promotion.
  - It also seeks to expand Muga silk exports and promote silk heritage tourism through initiatives such as a Muga Silk Trail, a Silk Tourism Park and annual Muga Utsav festivals.
- Outlay and timeline: It has an estimated investment of ₹396-411 crore over three years.
- Key Features
  - The mission will adopt a cluster-based approach across key Muga-producing districts, including Jorhat, Sivasagar, Lakhimpur, Dhemaji, Dibrugarh, Tinsukia, Majuli and Sualkuchi.
  - It envisages strengthening host-plant ecology, modernising reeling infrastructure, promoting Farmer Producer Organisations (FPOs), establishing Common Facility Centres and enforcing GI authentication under the unified "Senehjori" brand.
  - It will establish five modernised Muga reeling units and a Muga Spun Mill, create 30 FPOs and over 1,180 Farmer Interest Groups, regenerate 5,000 hectares of host plants and digitally connect more than 8,000 households.

- A key component of the mission is the introduction of digital traceability and QR-enabled GI authentication, ensuring consumers can verify the authenticity of Muga products and helping curb illegal imitation.

#### About Assam's Muga silk

- Muga silk is one of the most exquisite and rarest silks in the world.
- It is often referred to as the “golden silk” of India.
- Cultivation region: It is cultivated mostly in the Garo hills of Assam.
- How it is cultivated
  - It contains fibroin, a core protein, and sericin, a protective waxy layer.
  - It is extracted from the cocoons of *Antheraea assamensis*. It is wild in variety and fed on *som, sualu, mejankari, pan-chapa* tree leaves.
  - Depending on the season, it acquires a rich golden yellow or light brown colour.
- Production: Typically, it takes about 1000 cocoons to produce 125 grams of silk and about 1000 grams of silk for one saree.
- Properties: It is known for its unique properties like natural golden brilliance, a super fine texture which is resilient, has humidity absorption quality, thus having a long shelf life.
- Use: Recently, there has been a lot of product innovation in muga silk, and it is currently seen as a potential raw material for aircraft tyres, bulletproof jackets and parachute ropes.
- G.I. Tag: Muga Silk of Assam was officially awarded its Geographical Indication (GI) status in 2007.
- Cultural significance: Traditional garments made from Muga silk include:
  - Mekhela Sador – The traditional Assamese attire worn by women, often adorned with intricate motifs and golden embroidery.
  - Gamosa – A woven rectangular cloth used in religious ceremonies and as a mark of respect.
  - Sherwanis and Kurtas – Muga silk is also used for elegant men's wear, including traditional outfits for weddings and festivals.
  - It is considered a symbol of purity and is often worn during auspicious occasions like weddings, Bihu (the Assamese New Year festival), and religious ceremonies.
- Production: The average production per acre of land is 400 grams of silk.

- A notable cluster in weaving in Assam is the Sualkuchi Textile Park.

### Potato Patch

News: Researchers have documented the “Potato Patch” near Kadmat Island, which could be the world’s largest known living coral colony.

#### About Potato Patch



Source – DTE

- **Potato Patch** is a continuous meadow-like coral colony of the species *Pavona clavus* (potato coral).
- **Location:** The colony is located in the south-eastern waters of Kadmat Island in the Lakshadweep archipelago.
- **Formation Process:**
  - **Continuous Coral Growth:** The coral colony formed through centuries of calcium carbonate deposition by coral polyps and is preliminarily estimated to be 700–1,800 years old, although its age is yet to be scientifically confirmed.
  - **Adaptation to Wave Action:** The colony developed thick calcareous columns on a steep reef slope, which helped it withstand strong wave action, ocean currents, and tropical cyclones over time.
- **Features:**
  - **Depth Range:** The coral formation begins on a reef flat at a depth of 5.2 m and extends down a steep slope to about 20 metres.

- **Area:** The coral colony covers about 4,250 sq. m and appears to be the largest known living *Pavona clavus* colony documented so far.
- **Relatively Healthy Condition:** Surveys found that 58.47% of the coral tissue remains alive, indicating a relatively healthy state while continuing to support diverse fish assemblages.
- **Scientific and Ecological Value:** The colony functions as a natural time capsule for studying coral longevity, reef resilience, climate adaptation, and past ocean conditions, while highlighting Lakshadweep as a possible refuge for long-lived coral colonies.
- **Threats:** The colony faces risks from repeated tropical cyclones, major El Niño events, prolonged bleaching episodes, and marine heatwaves, which can increase coral mortality and reduce live coral cover.

### Yellow-Throated Marten

**News:** A yellow-throated marten was photographed for the first time in Kaziranga National Park and Tiger Reserve during routine camera trapping.

#### About Yellow-Throated Marten



- The yellow-throated marten (*Martes flavigula*) is a marten species found in forested regions across Southern and Eastern Asia.
- It is also known as 'the kharza'.
- **Habitat:** It lives in diverse habitats, including coniferous and broad-leaved forests, mountain forests, tropical forests, shrublands, lowland swamps, and treeless mountainous areas.

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- **Distribution:** The species is found across the Himalayan region and extends from Indonesia in the south to the Korean Peninsula and the China–Russia border in the north.
  - In India, it occurs mainly in the Himalayas and Northeast.
- **Characteristics**
  - **Physical Features:** It is the largest species among the Old World martens and is known for its golden-yellow throat, long tail, and scent glands used for defence.
  - **Appearance:** The head is black or dark brown, while the chest and throat are bright yellow or golden.
  - **Size:** Adult males measure between 50 and 71.9 cm in length, while the tail makes up nearly two-thirds of the total body length.
  - **Behaviour:** It is a fearless, highly social, diurnal, and arboreal animal that often hunts in pairs or small groups.
- **Ecological Role:** It functions as a mesopredator, controls rodent populations, and aids seed dispersal.
- **Threats**
  - Habitat fragmentation
  - Deforestation
  - Human encroachment
- **Conservation Status**
  - IUCN Red List: Least Concern
  - Schedule II of the Wildlife (Protection) Act, 1972

### Dark Patterns

**News:** The Central Consumer Protection Authority (CCPA) has imposed penalties on PhysicsWallah Limited and McAfee Software India Private Limited for using dark pattern practices that misled consumers and influenced their choices on digital platforms.

### About Dark Patterns



Source: Guidelines for the Department of Consumer Affairs

- [Dark patterns](#), also known as **deceptive patterns**, involve using **design and choice architecture** to deceive, coerce, or influence consumers into making choices that are not in their best interest.
- It encompasses a **wide range of manipulative practices**.
- **Legal remedies:** Such practices fall under the category of “**unfair trade practices**” as defined in **Sub-section 47 under Section 2 of the Consumer Protection Act, 2019**.
- **Guidelines:** **Central Consumer Protection Authority**, in exercise of the powers conferred by **Section 18 of the Consumer Protection Act, 2019**, issued “**Guidelines for Prevention and Regulation of Dark Patterns, 2023**” for **prevention and regulation** of dark patterns, **listing 13 specified dark patterns identified in the e-commerce sector**.
- These dark patterns include:
  - **False Urgency:** This involves creating a fake sense of scarcity, popularity, or time pressure to push users into making quick purchases or decisions that they might not otherwise make.
  - **Basket Sneaking:** This includes **automatic addition of a donation during checkout**.
  - **Confirm Shaming:** This involves **emotional messaging that discouraged users from removing the donation**.

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- **Forced Action:** This involves **requiring users to share personal information before accessing courses** advertised as free.
- **Nagging:** This includes **repeatedly interrupting or pressuring users** with requests, prompts, or offers to make a purchase or complete a transaction, causing annoyance or disruption.
- **Subscription Traps:** Under this, parties **make it easy to sign up for a service but difficult to cancel**, such as by **hiding cancellation options**, requiring unnecessary steps, or **automatically charging** users after a “free” trial without clear consent.
- **Bait & switch:** This includes **advertising a service but delivering another**, often of lower quality.
- **Rogue Malware:** This involves **malicious software that falsely claims a device is infected and pressures users to pay for fake security tools**, which may actually install malware or cause further harm.
- **Disguised ads:** It is **designed to look like content**, such as news articles or user-generated content.
- **Interface Interference:** It involves **designing the interface to emphasize certain options** while hiding or obscuring important information, influencing users to make unintended choices.
- **Drip Pricing:** It involves **revealing additional charges, fees, or costs only later in the purchase process** instead of showing the full price upfront.
- **Trick Question:** It includes **using confusing wording, double negatives, or ambiguous language to mislead users** into taking actions they did not intend.
- **SaaS Billing:** It involves **using recurring subscription charges in a way that makes payments continue automatically** and unobtrusively, making it difficult for users to notice, manage, or cancel them.

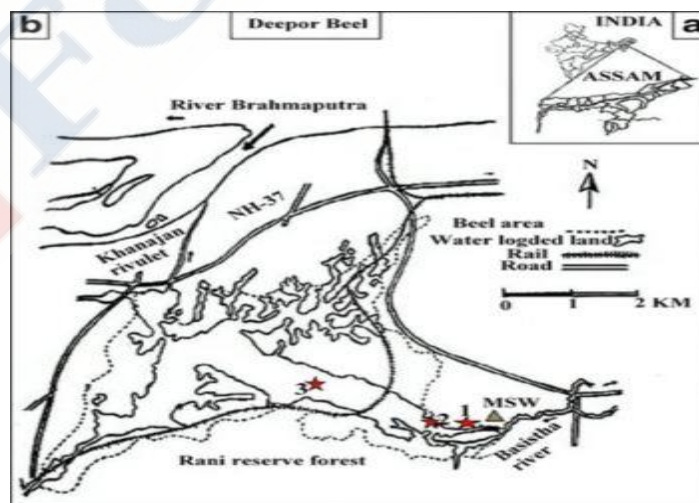
### About Central Consumer Protection Authority

- It has been **constituted under Section 10(1) of the Consumer Protection Act, 2019.**
- **Composition:** It consists of a **Chief Commissioner and such number of other Commissioners** as may be prescribed, to be appointed by the Central Government to exercise the powers and discharge the functions under this Act.
- It has the **power to inquire or investigate matters relating to violations of consumer rights or unfair trade practices suo motu, or on a complaint received, or on a direction from the central government.**
- The **power to make rules to provide for the qualifications for appointment, term of office, salaries and allowances, resignation, removal, and other terms and conditions of the service of the Chief Commissioner and Commissioners of the Central Authority is bestowed upon the Central government.**
- It also has an **Investigation Wing that is headed by a Director General.**
- **District Collectors, too, have the power to investigate complaints of violations of consumer rights, unfair trade practices, and false or misleading advertisements.**

### Deepar Beel Wildlife Sanctuary

**News: NGT directed authorities to respond to complaints of unauthorized tree felling in Deepar Beel Wildlife Sanctuary and its eco-sensitive zone.**

#### About Deepar Beel Wildlife Sanctuary



Source - ResearchGate

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- **Location:** It is located on the western boundary of Guwahati city in Assam.
- **Established:** The sanctuary was notified in 1989 to protect the unique wetland ecosystem of Deepor Beel.
- **Area:** It is spread in an area of 4.14 km<sup>2</sup>.
- **River System:** It receives water from the Basistha and Kalmani rivers and local monsoon runoff.
  - The Khonajan channel drains the wetland into the Brahmaputra River.
- **Designation:** It is the only Ramsar Site in Assam and an important bird sanctuary.
- **Flora:** The wetland supports hydrophytic vegetation such as Giant Water Lily, Water Lily, Water Hyacinth and aquatic grasses.
  - The surrounding forests contain species such as Teak (*Tectona grandis*), Banyan (*Ficus benghalensis*), Sal (*Shorea robusta*) and Bombax malabaricum.
- **Fauna:** Deepor Beel supports a rich diversity of birds, including the Greater Adjutant Stork, Lesser Adjutant Stork, Spot-billed Pelican, Pallas's Sea Eagle, Siberian Crane and Pheasant-tailed Jacana.
- **Ecological Significance:** The wetland functions as a critical elephant corridor, a biodiversity hotspot and a natural flood buffer for Guwahati city.
  - It also supports local livelihoods and hydrological stability.
- **Major Concerns:** The sanctuary faces threats from garbage dumping, encroachment, railway track doubling and electrification, and the deterioration of water quality and aquatic vegetation.

### Price Stabilization Fund for Scheduled Indian Airlines

**News:** The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved Price Stabilization Fund for Scheduled Indian Airlines to provide ATF price stabilisation support to Scheduled Indian Airlines for their domestic and international operations.

#### About Price Stabilization Fund for Scheduled Indian Airlines



Source: PIB

- It is a **one-time budgetary support of ten thousand crore rupees for Oil Marketing Companies to provide ATF price stabilisation support** to Indian Airlines for their domestic and international operations.
- **Objective:** The budgetary support shall be **in the form of interest-free advances to OMCs** through the Demands for Grants of the Ministry of Petroleum and Natural Gas.
  - The support **will be provided to companies to facilitate stable ATF pricing for airlines** during the ongoing period of exceptional fuel price volatility arising from the West Asia crisis.
- **Key component of Price Stabilisation Fund:**
  - **Interest-Free advance to OMCs:** It provides **for a one-time budgetary support of up to Rs.10,000 crore, which** shall be provided as an **interest-free advance to OMCs to support ATF price stabilisation for Scheduled Indian Airlines.**
  - The **corpus shall compensate OMCs for losses arising from elevated international ATF prices** whenever the prevailing Import Parity Price exceeds the benchmark price determined under the approved mechanism.
  - **Recovery and True-Up Mechanism:** When international ATF prices moderate, the differential amount shall be recovered from OMCs and returned to the Consolidated Fund of India.
    - The arrangement **shall continue until the entire support amount is fully recovered and settled.**

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- **Coverage of Domestic and International Operations:** The scheme shall be available to all willing Scheduled Indian carriers for both domestic and international operations.
- **Fixed ATF Price Arrangement:** The mechanism provides **greater predictability in fuel costs by adopting a fixed-price arrangement for domestic and international operations**, thereby reducing the airline's exposure to sudden fuel price spikes
- **Exclusive rights of ATF supply to OMCs:** The arrangement will be **implemented through an MoU between participating Indian airlines and OMCs**, with the **Ministry of Civil Aviation and the Ministry of Petroleum & Natural Gas as signatories**.
  - Under this arrangement, **participating airlines will procure ATF only from OMCs for up to three years**, subject to annual review or until the advance amount is fully recovered, whichever is earlier.
- **Implementation, Monitoring and Audit:** A **Monitoring Committee comprising representatives of the Ministry of Civil Aviation, the Ministry of Petroleum & Natural Gas and the Department of Expenditure** shall **oversee implementation, claim verification, reconciliation and settlement**. All claims and recoveries shall be subject to audit.
- **Duration of Price Stabilisation support:** ATF price stabilisation support will be in force for a **period of thirty-six months**, with provision for annual review or until the advance amount is fully recovered/settled, whichever is earlier.
  - The proposal **may be extended beyond thirty-six months with the approval of the Competent Authority** in case the corpus is not fully trued up within this period.
- **Key Benefits:** It will **support employment across the aviation ecosystem while maintaining passenger and cargo connectivity to sustain economic activity**.
  - It will also **strengthen tourism, trade, regional development, and global market integration through efficient utilisation of airport infrastructure**.

### Key Facts About Zimbabwe

**News: India and Zimbabwe held the first meeting of their Joint Defence Committee in New Delhi on June 04, 2026 and discussed expanding defence cooperation.**

### Key Facts About Zimbabwe



Source - Britannica

- **Location:** Zimbabwe is a landlocked nation in Southern Africa, located between the Limpopo River to the south and the Zambezi River to the north.
- **Bordered by:** Zimbabwe shares boundaries with 4 countries –
  - South Africa in the south, Zambia in the north, Botswana in the west, and Mozambique in the east and north-east.
- **Capital:** Harare serves as the capital city of Zimbabwe.
- **Climate:** Despite being located within the tropical zone, Zimbabwe experiences subtropical weather because of its relatively high elevation.
- **Physical Landscape:** Much of the country consists of an elevated plateau region known as the Highveld, which forms an important grassland area.
- **Distinct Geographic Regions:** Parts of the country extend into the Kalahari Desert, while the Great Dyke contains valuable deposits of platinum, chromium, and other minerals.
- **Highest Elevation:** Mount Nyangani (2,592 metres) is the highest point in the country.
- **Water Bodies:** Important rivers include the Zambezi, Limpopo, Sabi, and Runde.

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- It also includes Lake Kariba along the Zambia border.
- **Mineral Wealth:** It has rich reserves of coal, chromium ore, vanadium, lithium, tin, and platinum.
- **Currency:** Zimbabwe uses a multi-currency framework, and since April 2024 the Zimbabwe Gold (ZiG) currency has been used along with the US Dollar (USD).

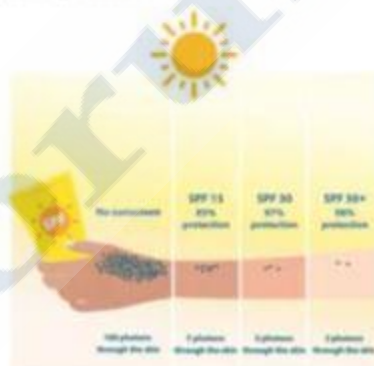
### Sun Protection Factor (SPF)

**News:** Sun Protection Factor (SPF) is being discussed due to concerns about its actual protection, correct application, and the limits of higher SPF values.

#### About Sun Protection Factor (SPF)

#### What is SPF in Sunscreen?

SPF stands for Sun Protection Factor and it measures the level of protection a sunscreen product offers against UVB radiation. Sunscreens come in various SPF levels, such as SPF 15, SPF 30, and SPF 50. Each SPF level provides a different degree of protection



SPF 15 sunscreen filters out approximately 93% of UVB radiation

SPF 30 sunscreen blocks around 97% of UVB radiation

SPF 50 sunscreen keeps out nearly 98% of UVB radiation.

Source – Nourish Mantra

- **Sun Protection Factor (SPF)** is a relative measure that indicates how much Ultraviolet B (UVB) radiation is needed to cause sunburn on sunscreen-protected skin compared to unprotected skin.
- **Key Ingredients:**
  - **Chemical Filters:** Ingredients such as avobenzone, octocrylene, and homosalate absorb UV radiation and convert it into heat.
  - **Physical Filters:** Ingredients such as zinc oxide and titanium dioxide reflect and scatter UV rays away from the skin.
- **Efficiency Curve of SPF**
  - SPF 30 blocks about 95–97% of UVB rays, SPF 50 blocks about 97–98%, and SPF 80 blocks close to 99%, showing that protection gains become smaller at higher SPF levels.
- **Advantages:**
  - **Sunburn Protection:** SPF helps measure and compare the level of sunburn protection provided by different sunscreens.
  - **Adequate Coverage:** SPF 30 provides adequate protection for most people when applied correctly.
  - **Higher-Risk Use:** SPF 50 or higher is recommended for outdoor sports, extended sun exposure, or photosensitive skin conditions.
- **Limitations:**
  - **Limited Protection Measure:** SPF measures UVB protection only and does not indicate protection against Ultraviolet A (UVA) radiation.
  - **Consumer and Formulation Challenges:** Higher SPF values provide diminishing returns and may create a false sense of security, while high-SPF formulations can face stability, spreadability, and texture issues.
  - **Environmental Concerns:** Some chemical UV filters, such as oxybenzone and octinoxate, can harm marine ecosystems and contribute to coral bleaching.

### **Neglected Displacement Crises Report**

**News:** The Norwegian Refugee Council released the tenth edition of the Neglected Displacement Crises Report, highlighting worsening neglect of major displacement crises.

#### **About Neglected Displacement Crises Report**

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Source – NRC

- **Neglected Displacement Crises Report tracks the gap between the scale of displacement crises and the adequacy of international response.**
- **Published by:** It is published by the Norwegian Refugee Council (NRC).
- **2025 Edition:** The 2025 report is the tenth edition.
- **Assessment Criteria:** The report evaluates crises using funding, media attention, political and diplomatic engagement, and scale of displacement.
- **Key Findings of 2025 Report**
  - **Geopolitical Bias:** The report finds that international attention and funding often follow political, commercial, and strategic interests rather than the scale of human suffering.
  - **Protracted Displacement:** The report highlights that many neglected crises involve prolonged or repeated displacement, with some countries appearing on the list for several years.

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- **Top:** Sudan ranked as the most neglected crisis in 2025, with more than 9 million internally displaced people, up to 4 million refugees, and nearly 19.5 million people facing hunger.
- **DR Congo's Long-Term Neglect:** The Democratic Republic of Congo has appeared in all ten editions of the report.
- **Global Funding Gap:** Humanitarian funding coverage fell to its lowest level in the last decade, leading to reduced or discontinued support programmes.
- **The ten most neglected crises in 2025** are Sudan, Democratic Republic of Congo, Colombia, Yemen, Afghanistan, Honduras, Ecuador, Cameroon, Nigeria, and Mozambique.

### Viksit Vibrant Village Program 2026

**News:** The Department of Youth Affairs, Ministry of Youth Affairs & Sports, through Mera Yuva Bharat (MY Bharat), commenced the first phase of the Viksit Vibrant Village Program (VVVP) 2026.

#### About Viksit Vibrant Village Program 2026



Source: PIB

- **It is a pioneering youth-led initiative** aimed at strengthening grassroots engagement, fostering national integration, and promoting sustainable development in India's border villages.
- **Launched by:** It has been launched by the Department of Youth Affairs, Ministry of Youth Affairs & Sports, through [Mera Yuva Bharat \(MY Bharat\)](#).
- **Implemented by:** The programme is being implemented in collaboration with the Ministry of Home Affairs (MoHA) and the Indo-Tibetan Border Police (ITBP).
  - **Coordination mechanisms** involving MY Bharat, ITBP, State Governments, District Administrations, and local stakeholders have been established.

- **Implementation mechanism:** Volunteers representing all States and Union Territories are being deployed in two phases across identified border villages in Ladakh, Himachal Pradesh, and Uttarakhand.
  - During Phase-I, 250 volunteers are participating in immersive engagements across 43 villages.
  - The remaining 250 volunteers will join Phase-II activities in 50 villages.
- **Participation:** A total of 500 MY Bharat volunteers, selected through a nationwide online quiz competition have been chosen to take part in the programme.
- **Key Features**
  - It provides a unique opportunity for young citizens to reside in border villages and engage directly with local communities.
  - Participants will gain firsthand exposure to the socio-economic realities, cultural heritage, developmental aspirations, and strategic significance of India's frontier regions.
  - **Thematic coverage:** It is a seven-day immersion programme that has been structured around thematic areas including border awareness, cultural exchange, community living, governance, socio-economic assessment, village development planning, volunteerism, and national integration.
  - **Nation First Challenge:** A significant component of the programme is the promotion of the Nation First Challenge.
    - It is a nationwide campaign encouraging responsible citizenship and sustainable lifestyle practices.
  - **Key themes:** MY Bharat volunteers will actively advocate five key themes of the campaign – adoption of Swadeshi products, healthy cooking practices, public transport usage and fuel conservation, promotion of natural farming, and vocal support for local tourism.

### **Navachar Mantra Initiative**

**News:** The Ministry of Skill Development and Entrepreneurship (MSDE) launched the Navachar Mantra initiative to strengthen grassroots entrepreneurship and expand opportunities for innovators across emerging India.

#### **About Navachar Mantra Initiative**



Source – PIB

- It is a national initiative focused on strengthening grassroots entrepreneurship and expanding opportunities for innovators across emerging India.
- Nodal Ministry: Ministry of Skill Development and Entrepreneurship (MSDE)
- Implemented by: It is being implemented by the National Institute for Entrepreneurship and Small Business Development (NIESBUD), with Foundation for Innovation and Technology Transfer (FITT).
  - IIT Delhi serving as the Technical Knowledge Partner.
- Aim: It aims at identifying, nurturing, and amplifying India's most promising grassroots innovators and early-stage entrepreneurs.
  - It also aims to strengthen India's innovation ecosystem and contribute to the vision of a self-reliant, entrepreneurial, and innovation-driven Viksit Bharat by building a robust pipeline of grassroots innovators and connecting them with the country's leading institutions and networks.
- It seeks to create pathways for innovators from Tier-2 and Tier-3 towns, aspirational districts, and underserved geographies to access mentorship, visibility, and growth opportunities.
- It is designed to provide a structured ecosystem of support for innovators working across priority sectors such as Agritech, HealthTech, EdTech and Skilling, Climate and Sustainability, Rural Commerce, and MSME Enablement.
- Features:

- Through Navachar Mantra, innovators will gain direct access to policymakers, industry leaders, investors, and domain experts, enabling them to refine their ideas, strengthen business models, and accelerate their journey from innovation to enterprise.
- Registrations are open for applications from innovators and entrepreneurs across the country through a dedicated digital platform.
- Selected innovators will be inducted into a year-long engagement programme.
- It will also facilitate opportunities for pilot projects, partnerships, and market linkages to help promising innovations translate into sustainable enterprises.

### Biomimicry

**News:** Biomimicry has gained attention following renewed discussions on the Sagrada Familia, a notable example of nature-inspired architecture.

#### About Biomimicry



Figure 8. Source – ET

- Biomimicry is the intersection of biology and engineering that learns from nature to solve complex problems and create sustainable solutions.
- Levels of Biomimicry
  - Form (Organism) Level: This level involves imitating the physical structure of living organisms.
    - For example, the Shinkansen bullet train's nose was inspired by the kingfisher bird, while shark skin inspired surfaces that repel superbugs without chemicals.
  - Process (Behaviour) Level: This level involves learning from the way natural systems function.
    - For example, Antoni Gaudi borrowed the structural intelligence of trees while designing the Sagrada Familia, where the columns branch and distribute weight in a manner similar to natural tree structures.
  - System (Ecosystem) Level: This level involves applying ecosystem principles to organisations and larger systems.
    - For example, The Habitats Trust viewed its organisation as a natural ecosystem and reassessed projects based on sustainability, shifting its focus from expansion to depth and stewardship.
- Key Features of Biomimicry:

- Nature as a Teacher: Biomimicry focuses on learning from nature rather than merely learning about nature.
- Innovation Through Natural Principles: It draws upon solutions refined through 3.8 billion years of planetary research and development.
- Interdisciplinary Approach: It combines biology and engineering and can also be applied in management, human resources, administration, social sciences, and the arts.
- Sustainable Problem Solving: It encourages the development of solutions that support a sustainable way of life.

### Azov Sea

News: Five Azerbaijanis were killed and three were wounded in a drone attack on two foreign cargo ships in the Sea of Azov.

#### About Azov Sea



Source – World Atlas

- Location: The Sea of Azov is an inland sea in Eastern Europe and is often regarded as a northern extension of the Black Sea.
- It is situated off the southern shores of Ukraine and Russia in Eastern Europe.
- Boundary: The sea is bounded by Ukraine in the north and west and by Russia in the east.

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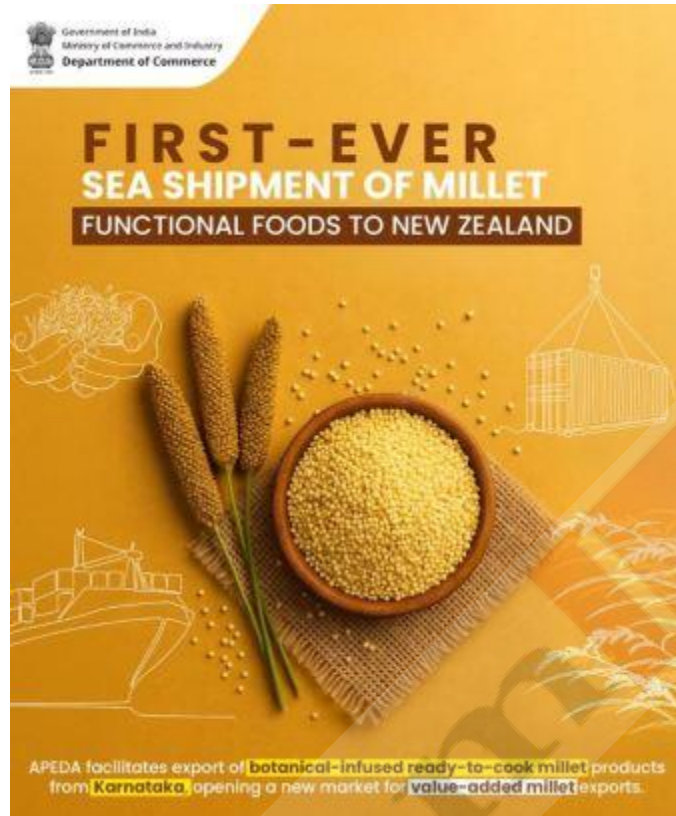
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- **Depth:** It is the shallowest sea in the world, with depth varying between 0.9 and 14 m and a maximum depth of about 14 m.
- **Connectivity:** It is connected to the Black Sea through the narrow Strait of Kerch, which is about 4 km wide at its narrowest point.
- **River Inflows:** The Don and Kuban rivers are the major rivers flowing into the sea and contribute more than 90% of the water inflow.
- **Climate:** The sea has a continental climate with cold winters, warm summers, frequent fogs, and seasonal ice formation.
- **Salinity:** The sea has low salinity (10–12 Practical Salinity Scale (PSS)) and is almost fresh in some areas because of large river inflows.
- **Coastal Features:** The coastline has low shores, lagoons, shallow gulfs, sandbanks, and long sand spits such as the Arabat Spit.
- **Shipping Routes:** The sea serves as an important access route linking Central Asia through the Volga–Don Canal and supports freight and passenger traffic.
- **Key Ports:** Important ports include Taganrog, Mariupol, Yeysk, and Berdyansk.
- **Conflict Zone:** The sea is shared by Russia and Ukraine and has witnessed modern geopolitical developments.
- **Biodiversity:** It contains more than 300 species of invertebrates and about 80 species of fish, including sturgeon, perch, bream, herring, sea-roach, gray mullet, minnow, shemaja, and bullheads.
- **High Biological Productivity:** The sea has rich marine biodiversity because of its shallow waters, effective mixing and warming of water, and the large supply of nutrients brought by rivers and the abundance of plankton and algae that support marine life.

### **The First Sea Shipment of Botanical-Infused Millets**

**News:** India achieved a milestone in millet exports with the first sea-based export of botanical-infused millet functional foods to New Zealand on June 3, 2026.

#### **About First Sea Shipment of Botanical-Infused Millets**



Source – Ministry of Commerce

- It marks the first overseas sea shipment of botanical-infused, ready-to-cook millet functional foods produced in India.
- **Facilitated by:** The export was supported by the Agricultural and Processed Food Products Export Development Authority (APEDA) under the Ministry of Commerce and Industry.
- **Exporter:** The consignment was exported by M/s Infini Agrotek LLP, an agri-technology company based in Bengaluru, Karnataka.
- **Destination:** The products were shipped to New Zealand.
- **Key Features:**
  - **Value-Added Functional Foods:** These products combine traditional Indian millets with plant-based botanical extracts to create foods that offer nutritional and wellness benefits.
  - **Consumer-Friendly Product Design:** The products are available in ready-to-cook forms, making them convenient for consumers in international markets.
  - **Market Linkages Through Trade Events:** APEDA-supported global exhibitions helped the exporter connect with foreign buyers and secure the export order.

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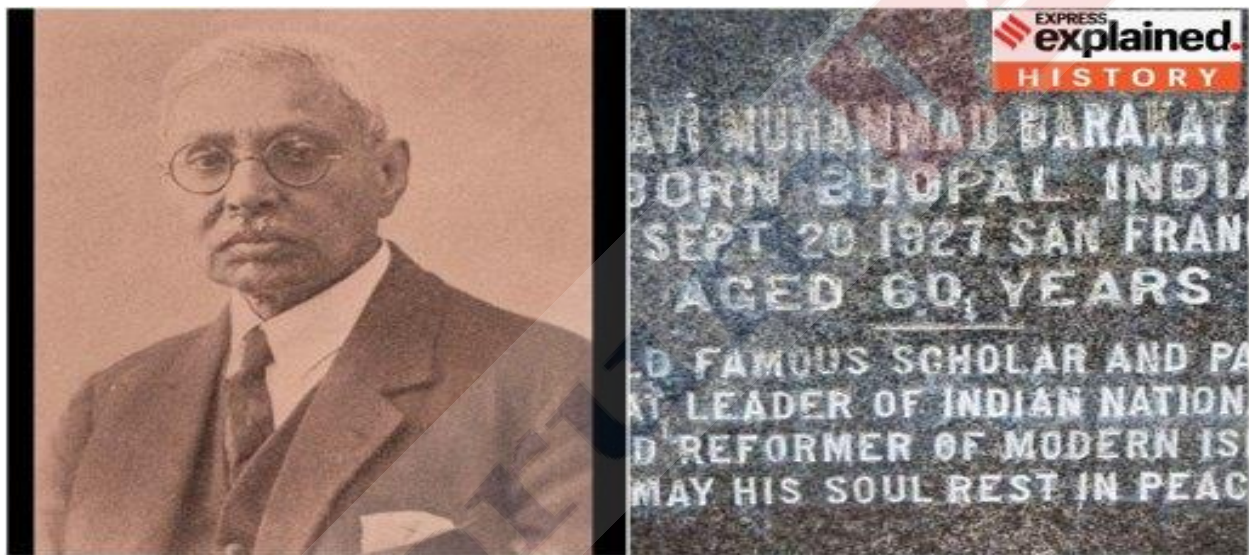
## Factly Compilation June 2026

- **Compliance with Export Requirements:** The products satisfy the biosecurity, food safety, and quality requirements needed for entry into markets such as New Zealand.
- **Significance:** The initiative promotes value-added agricultural exports, strengthens the global presence of millet-based products, and supports the expansion of India's agri-food export basket.

### Maulana Barkatullah Bhopali

**News:** The executive council of Bhopal's Barkatullah University has passed a proposal to change its name to Vagdevi Bhojpal University. It was named after Maulana Barkatullah Bhopali.

#### About Maulana Barkatullah Bhopali



Source: IE

- Maulana Barkatullah Bhopali was a nationalist, renowned scholar, and the first Prime Minister of India's first provisional government-in-exile.
- **Birth:** He was born in Bhopal in 1854.
- **Life:** He was a meritorious student and went to Bombay and London for studies.
  - He then started teaching in Liverpool, where he came into contact with Indian revolutionaries.
  - His articles and speeches attracted the negative attention of the British government, after which he left for the U.S.A in 1899.
  - In U.S.A, he corresponded with the freedom fighter [Maulana Hasrat Mohani](#) (who coined the slogan *Inquilab Zindabad*).

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- He devoted his life to working for India's freedom abroad.
- **Ideology:** He believed that India could only be free if all its communities stood together.
  - He worked closely with Hindus, Muslims, Sikhs, and people from every region.
- **Activities:** He travelled to various countries such as Japan, England, U.S.A, Germany, Russia and Afghanistan, creating awareness for and building alliances to usher in India's independence.
  - During World War I, Barkatullah and his associates travelled to Germany and tried to convince Indian soldiers captured by the Germans to form an army to fight the British.
  - He also worked prominently for the Ghadar Party, founded by Lala Har Dayal in 1913, which wanted to win India's independence through armed struggle.
  - He, along with some associates, most notably Raja Mahendra Pratap, set up India's first 'government in exile' in Kabul in 1915.
  - Four years later, the leaders of this 'government' travelled to Moscow to meet Vladimir Lenin, the head of government of Soviet Russia.
  - After the British victory in the First World War, the Indian revolutionaries' plans suffered major reverses. However, Barkatullah kept travelling to Brussels, Switzerland, France, etc., working for his cause.
- He spent most of his life in exile. He connected with anti-colonial movements around the world and became one of the most well-known Indian revolutionaries of his time.
- **Death:** He died in 1927 in the U.S.A.
- **Legacy:** In his recognition, Barkatullah University in Bhopal was named after him in 1988.

### Marbled Cat (*Pardofelis marmorata*)

**News:** Conservationists and several communities in Arunachal Pradesh and Nagaland gathered on March 1 to mark the first-ever International Marbled Cat Day, drawing attention to one of Asia's most elusive and least understood wild felids.

### About Marbled Cat (*Pardofelis marmorata*)



Source: Round Glass Sustain

- The Marbled cat is a **small wild cat** that lives in the mountainous areas of Asia.
- **Scientific name:** Its scientific name is **Pardofelis marmorata**.
- It is closely **related to the Asian golden cat and the Bay cat**.
- **Habitat:** It is primarily found in **moist, tropical evergreen forests and have** also been recorded in **mixed deciduous forests and secondary growth areas**.
- **Distribution:** Its range extends from the **Himalayan foothills in Nepal across southwestern China and throughout mainland Southeast Asia to the islands of Borneo and Sumatra**.
  - In India, it is found in **West Bengal, Assam, Sikkim, Arunachal Pradesh, Nagaland, Meghalaya, Manipur, and Tripura**.
- **Characteristics:**
  - **Appearance:**
    - The marbled cat is **about the same size as a domestic cat**.
    - It has **rounded ears and a very long tail**, which is nearly equal to the combined length of its head and body.
    - The **tail is marked with black spots near its base and black rings** toward the tip.
    - Its **long, dense fur varies in colour from brownish-grey to ochreous brown on the upper body** and from greyish to buff on the underparts.

## Factly Compilation June 2026

- The **coat is thick, soft, and well adapted to its habitat.**
- The **short, rounded head is marked with distinct black stripes.** Black stripes also extend along the neck and back.
- The **flanks display irregular dark-edged blotches** that merge into larger dark patches, **creating a characteristic marbled appearance**
- The **limbs, underbelly, and tail bear solid black spots.**
- Spots on the **forehead and crown merge into narrow longitudinal stripes** on the neck and irregular stripes along the back.
- It has **unusually large feet and prominent canine teeth.**
- Its paws are **webbed between the toes, and the claws remain completely sheathed when not in use.**
- **Diet:** Its diet is largely composed of **tree-dwelling prey, including squirrels, rats, and birds.** On the forest floor, it may also **hunt reptiles, frogs, and various insects.**
- **Behaviour:** It is **primarily diurnal**, or active during the day.
  - It is **very good climbers and are semi-arboreal.**
  - **It maintains its territory by marking boundaries with urine and scent signals**
- **Threat: Habitat loss and fragmentation due to logging and agricultural expansion**, especially oil palm plantations, are the greatest threats to the Marbled Cat.
  - It is also **affected by illegal hunting and trade for its skin, meat, and bones.**
- **Conservation measures:** In October 2025, the Hii:ung Hii:eng community forest in Siang district, Arunachal Pradesh, was formally declared India's first community-conserved area dedicated to the marbled cat by the Lokpeng Welfare Society.
- **Conservation status:**
  - **CITES:** Appendix I
  - **IUCN Red List:** Near Threatened
  - **Wildlife (Protection) Act, 1972:** Schedule I

### About Pyroprocessing

**News: Pyroprocessing is in focus as an advanced technique used for reprocessing spent nuclear fuel in fast reactor programmes.**

## About Pyroprocessing



Source – TH

- **Pyroprocessing is an umbrella term for high-temperature, dry, and energy-intensive industrial process (usually above 800°C) that physically or chemically alter materials.**
- **Uses:** It is primarily used in metallurgy (extracting metals from ores), cement manufacturing, and as an advanced technique for recycling used nuclear
- **Applications Across Sectors:**
  - **Cement Industry:**
    - **Process:** Finely ground limestone, clay, and iron are fed into a rotary kiln.
      - As the temperature reaches 900°C, limestone loses carbon dioxide, and at around 1,450°C, the mixture partly melts to form marble-sized nodules called clinker.
      - The clinker is then ground to produce cement.
    - **Importance:** Cement manufacturing is the largest user of pyroprocessing among the three major sectors.
  - **Metallurgy & Extractive Industries**
    - **Process:** Sulphide ores are roasted to convert them into metal oxides.
      - Smelting melts an ore to separate the metal from waste impurities called slag.
      - Heating limestone to produce lime is known as calcining.
    - **Importance:** These processes are used to extract metals from ores and separate metals from waste impurities.

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- **Nuclear Industry**
  - **Process:** Used nuclear fuel is processed in a salt bath containing lithium and potassium chlorides at 500°C or more.
    - An electric current separates different elements based on their electrochemical properties.
  - **Importance:** This method is used to reprocess spent nuclear fuel and forms part of programmes involving advanced fast reactors
    - Countries actively researching and coupling pyroprocessing to fast breeder reactors include India, the USA, Japan, Russia, and South Korea.

### **UN Military Gender Advocate of the Year Award**

**News:** Major Abhilasha Barak became the first Indian woman peacekeeper to receive the 2025 UN Military Gender Advocate of the Year Award.

#### **About UN Military Gender Advocate of the Year Award**



Source – NOA

- It is an annual United Nations award that recognizes military peacekeepers who advance gender inclusion in peacekeeping operations.
- **Instituted:** The award has been presented annually since 2016.

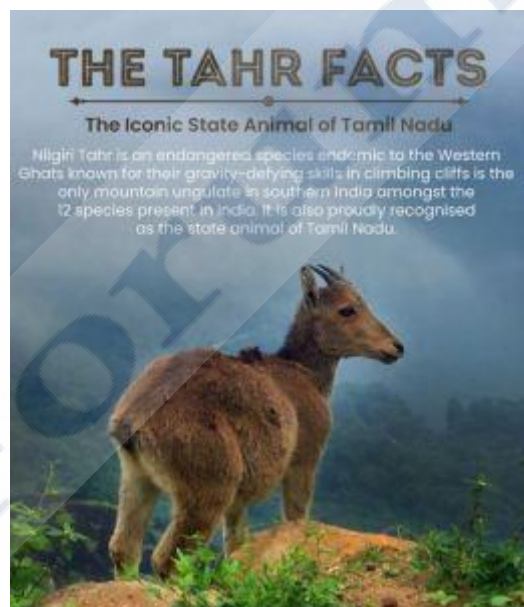
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- **Objective:** The award recognizes military peacekeepers who advance the goals of UN Security Council Resolution 1325, which promotes women’s participation in peace and security efforts.
- **Key Aspects:**
  - **Gender Equality Promotion:** The award honours peacekeepers who promote gender equality in conflict-affected areas.
  - **Community Engagement:** The award recognises efforts that strengthen trust between peacekeepers and local communities and improve support systems for women.

### Nilgiri Thar and ‘Varudai’ App

**News:** Tamil Nadu Forest Department developed the Varudai mobile application for the synchronized Nilgiri Tahr survey conducted from April 24 to 27.

#### About Nilgiri Tahr



Source – TN Government

About	<ul style="list-style-type: none"><li>● It is a mountain ungulate endemic to the southern part of the Western Ghats.</li><li>● It is also known as the Nilgiri Ibex or Varayaadu.</li><li>● It is the state animal of Tamil Nadu.</li></ul>
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## Factly Compilation June 2026

<b>Scientific Name</b>	<ul style="list-style-type: none"><li>● It's scientific name is Nilgiritragus hylocrius.</li></ul>
<b>Habitat</b>	<ul style="list-style-type: none"><li>● The species inhabits open montane grasslands and shola forests at elevations ranging from 1,200 to 2,600 m.</li><li>● It thrives on grassy slopes and rocky cliffs in the Western Ghats.</li></ul>
<b>Distribution</b>	<ul style="list-style-type: none"><li>● It is distributed across a roughly 400 km stretch of the Western Ghats in Kerala and Tamil Nadu.</li><li>● Eravikulam National Park in Kerala supports the highest density and the largest surviving population of the species.</li></ul>
<b>Physical Characteristics</b>	<ul style="list-style-type: none"><li>● The Nilgiri Tahr is a stocky goat with short, coarse fur and a bristly mane.</li><li>● Males are larger and darker than females, and both sexes possess curved horns that are larger in males.</li></ul>
<b>Ecological Significance</b>	<ul style="list-style-type: none"><li>● The Nilgiri Tahr serves as an important prey species for tigers and leopards.</li><li>● It is also an indicator of montane grassland health and coexists with endemic species such as the Nilgiri langur and lion-tailed macaque.</li></ul>
<b>Threats</b>	<ul style="list-style-type: none"><li>● The species faces threats from habitat loss caused by deforestation, hydroelectric projects, and monoculture plantations.</li><li>● Livestock competition, poaching, and forest fires also affect its survival.</li></ul>
<b>Conservation Status</b>	<ul style="list-style-type: none"><li>● It is classified as Endangered on the IUCN Red List.</li></ul>

	<ul style="list-style-type: none"><li>● It is protected under Schedule I of the Wildlife (Protection) Act, 1972.</li></ul>
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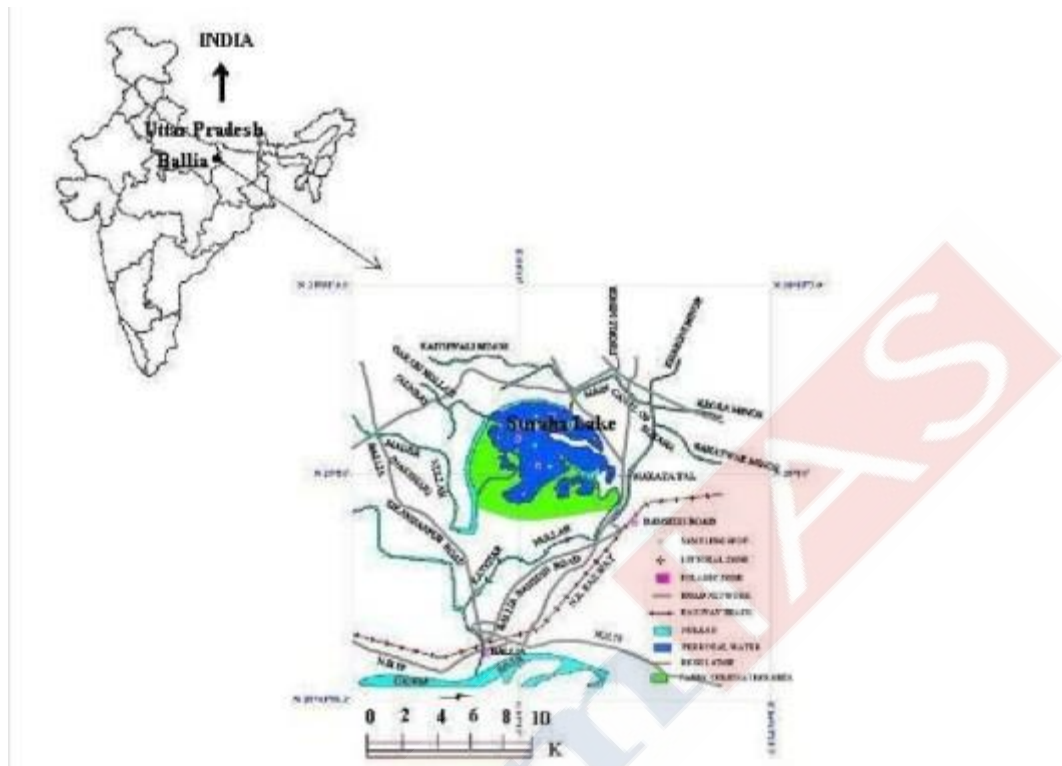
#### About Varudai App

- **Developed by:** The application has been developed by the Tamil Nadu Forest Department under Project Nilgiri Tahr.
- **Aim:** The app aims to improve the accuracy of Nilgiri Tahr surveys through digital data collection and GPS-based monitoring.
- **Key Aspects:**
  - **Scientific Data Collection:** Forest staff can digitally mark GPS locations and record the distance covered during the survey, which helps in obtaining accurate data.
  - **Reduction of Manual Work:** The application removes the need to manually record sightings and indirect signs of the Nilgiri Tahr during the census.
  - **Important Achievement:** This is the first mobile application developed for the survey of any mammalian species in Tamil Nadu.

#### Surha Tal

News: Jai Prakash Narayan Bird Sanctuary (Surha Tal) has been designated as India's 100th [Ramsar site](#).

#### About Surha Tal



Source: Research Gate

- **Location:** It is the largest floodplain lake located in the Ballia District of eastern Uttar Pradesh.
- **Official name:** It is officially known as the Jai Prakash Narayan Bird Sanctuary.
- **Type of lake:** It is an open-type oval 'U'-shaped ox-bow lake.
- **River associated:** It is a perennial and natural lake fed by the river Ganga.
- **Flora and Fauna:** It supports a rich diversity of species such as 221 plant species, 66 fish species and a few reptile and amphibian species.
  - Notable fish found here include the vulnerable Wallago attu and Bagarius bagarius.
  - It is also a feeding ground for the [fishing cat \(Prionailurus viverrinus\)](#)
- It attracts several migratory and resident bird species due to its rich avifaunal biodiversity.
- **Avifauna:** It provides habitat for over 310 bird species (including 125 waterbirds) and hosts up to 200,000 individual migratory birds during the winter.
  - It falls on the Central Asian Flyway, through which migratory birds travel from Central Asia to the Indian subcontinent.

### **NZP Saathi App**

**News:** The National Zoological Park (NZP), New Delhi, has introduced the new 'NZP Saathi App' along with self-ticketing kiosks to improve the visitor experience by providing smart navigation features and simplifying the online ticket booking process

#### **About NZP Saathi App**

- 'NZP Saathi' is a mobile application aimed at transforming the zoo-going experience by helping visitors navigate the premises, learn about animals and access facilities without depending on human guides
- **Launched by:** It has been launched by the Ministry of Environment, Forest and Climate Change.
- **Features:**
  - **Interactive digital map and smart navigation system:** It features an interactive digital map and smart navigation system that enables visitors to locate animal enclosures, washrooms, buggy points, exits and other facilities.
  - **Thematic tour options:** It also offers thematic tours, including Express Tour, Family Tour, Grand Zoo Tour and personalised "My Tour" options.
  - **AI Guide Box:** It has an AI Guide Box feature that responds to visitor queries in real time.
  - **Digital mapping:** It also includes a 2D digital map displaying the location of animals and birds across the zoo, along with their distance from the visitor's current point.
  - **Compatibility:** It is available on both Android and iOS platforms.
  - **Digital booking:** The app also allows users to purchase zoo tickets online through a login-based booking system.

### **Island of Mindanao**

**News:** A 7.8-magnitude earthquake off the southern coast of Mindanao triggered tsunami warnings and caused deaths and injuries.

#### **About Island of Mindanao**



Source – Nikkei Asia

- **Location:** Island of Mindanao is located in the southern region of the Philippine archipelago.
- It is the second-largest island in the Philippines after Luzon and is the seventh-most populous island in the world.
- **Surrounding Water Bodies:** It is surrounded by the Sulu Sea in the west, the Philippine Sea in the east, the Celebes Sea in the south, and the Mindanao Sea in the north.
- **Plateaus:** It contains extensive upland plateaus in the Bukidnon and Lanao del Sur provinces.
  - These plateaus are formed by basaltic lava flows inter-bedded with volcanic ash and tuff, and their edges are cut by deep canyons and waterfalls.
- **Mountain Systems:** The mountains of Mindanao can be grouped into ten ranges, which include both complex structural mountains and volcanic mountain ranges.
- **Highest Peak:** Mount Apo, is the highest peak in Mindanao and the highest point in the Philippines.
- **Major Rivers:** The major rivers include the Agusan River and the Rio Grande de Mindanao.
- **Seismic Activity:** Located along the Pacific Ring of Fire, Island of Mindanao experiences frequent tectonic action.

## Stockholm International Peace Research Institute (SIPRI) Yearbook 2026

News: The Stockholm International Peace Research Institute (SIPRI) has released Stockholm International Peace Research Institute (SIPRI) Yearbook 2026 on the state of armaments, disarmament and international security.

### About Stockholm International Peace Research Institute (SIPRI) Yearbook 2026



Source: Stockholm International Peace Research Institute

- Released by: It is an annual assessment released by Stockholm International Peace Research Institute (SIPRI).
- It provides an overview of developments in international security, weapons and technology, military expenditure, arms production and the arms trade, and armed conflicts and conflict management, along with efforts to control conventional, nuclear, chemical and biological weapons.
- First edition: SIPRI has been publishing its flagship SIPRI Yearbook since 1969.
- Key findings related to India:
  - Expansion of nuclear arsenals: India is estimated to have moderately expanded its nuclear arsenal in 2025 while continuing the development of new nuclear delivery systems.
  - According to estimates, India's nuclear stockpile grew to approximately 190 warheads by early 2026, up from around 180 warheads in 2025.

## Factly Compilation June 2026

- **Nuclear modernisation:** India's ongoing nuclear modernisation efforts are increasingly directed toward developing longer-range capabilities that can reach targets throughout China, while also addressing security challenges stemming from its long-standing rivalry with Pakistan.
- It describes Operation Sindoor as an "unusually severe military crisis" between the two nuclear-armed neighbours.
  - SIPRI reported that during the conflict, India conducted strikes on Pakistani air and missile bases that were likely associated with nuclear-related functions.
  - It also noted that both nations took steps to avoid further escalation despite the heightened tensions.
  - It also observed that India and Pakistan incorporated cyber operations into active military conflict for the first time during the crisis, highlighting the changing character of modern warfare in South Asia.
- **Increased military expenditure:** India maintained its position as the world's fourth-largest military spender in 2025. SIPRI estimated the country's military expenditure at \$92.1 billion, representing an 8.9% increase compared with the previous year.
  - In terms of defence spending, India ranked behind only the United States, China, Russia, and Germany.
- **Major importer:** India also remained the world's second-largest importer of major arms during the 2021–25 period, accounting for 8.2% of total global arms imports.
  - SIPRI identified Ukraine, India, Saudi Arabia, Qatar, and Pakistan as the five largest arms importers, together accounting for 35% of global arms imports during the period.
- **Finding related to other countries:**
  - All nine nuclear-armed states, U.S.A, Russia, United Kingdom, France, China, India, Pakistan, North Korea and Israel continued to modernise their arsenals and increasingly relied on nuclear weapons as instruments of national power.
  - Globally, the nine countries possessed an estimated 12,187 nuclear warheads at the start of 2026, of which around 9,745 were held in military stockpiles for potential use.

## About Stockholm International Peace Research Institute



### **STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE**

Source: SIPRI

- **SIPRI is an independent international institute that conducts research on conflict, armaments, arms control, and disarmament, and provides data and analysis.**
- **Establishment: SIPRI was established in 1966 based on a decision by the Swedish Parliament and is based in Stockholm.**
- **Vision and mission: Its vision is a peaceful world with reduced insecurity, while its mission includes research, policy analysis, dialogue, transparency, and providing authoritative information.**
- **Funding: SIPRI receives a substantial annual grant from the Swedish Government and also seeks support from other organizations for research activities.**
- **Structure: Its structure includes a Governing Board, Director, Deputy Director, Research Staff Collegium, and support staff, totaling around 100 people.**
- **Key Publications:**
  - **SIPRI Yearbook: It provides a definitive account of armaments and international security.**
  - **Arms Transfers Database: It tracks all international transfers of major conventional arms since 1950.**
  - **Military Expenditure Database: It reports annual military spending for most countries.**
  - **Arms Industry Database: It tracks the world's 100 largest arms-producing and military services companies.**

## E85 Fuel

**News: Union Petroleum and Natural Gas Minister recently launched the “E85 fuel” at a retail fuel outlet in New Delhi.**

### About E85 Fuel

- E85 is a high-ethanol blended fuel comprising 80-85% ethanol and 14-19% petrol.
- Difference between standard E20 petrol and E85:
  - **Composition:** The standard E20 petrol contains up to 20% ethanol mixed with 80% conventional petrol. E85 fuel contains a mix of 80%-85% ethanol blended with 14% to 19% petrol.
  - **Price:** E85 is nearly Rs 20 per litre cheaper than conventional petrol to ensure that the economic benefits of domestically produced ethanol are passed on to consumers.
- **Use:** E85 is engineered exclusively for specialised [flex-fuel vehicles](#), or FFVs.
  - **Note:** Regular petrol vehicles cannot use E85 fuel.
- **Advantages:**
  - **Environmental impact:** FFVs operating on E85 can reduce lifecycle greenhouse gas emissions by around 61% compared with conventional petrol vehicles.
    - Ethanol-based FFVs, including vehicles running on high ethanol blends such as E85, have been classified as zero-emission vehicles by Niti Aayog.
    - E85 fuel also produces near-zero particulate matter emissions, making FFVs a promising solution for addressing the country's growing air pollution challenge.
  - Its use will also boost farmers' income, reduce dependence on crude oil imports, and strengthen the country's energy security.

### About Ethanol

- Ethanol is an anhydrous ethyl alcohol having chemical formula of  $C_2H_5OH$ .
- Source: It can be produced from sugarcane, maize, wheat, etc. which are having high starch content.
- In India, ethanol is mainly produced from sugarcane molasses by fermentation process.
- Ethanol can be mixed with gasoline to form different blends.
- As the ethanol molecule contains oxygen, it allows the engine to more completely combust the fuel, resulting in fewer emissions and thereby reducing the occurrence of environmental pollution.
- Since ethanol is produced from plants that harness the power of the sun, ethanol is also considered as renewable fuel.

### Key Facts about Armenia

News: Armenia's ruling Civil Contract party won just under half of the votes in a parliamentary election seen as a test of its handling of a peace deal with Azerbaijan.

### Key Facts about Armenia



Source: World Atlas

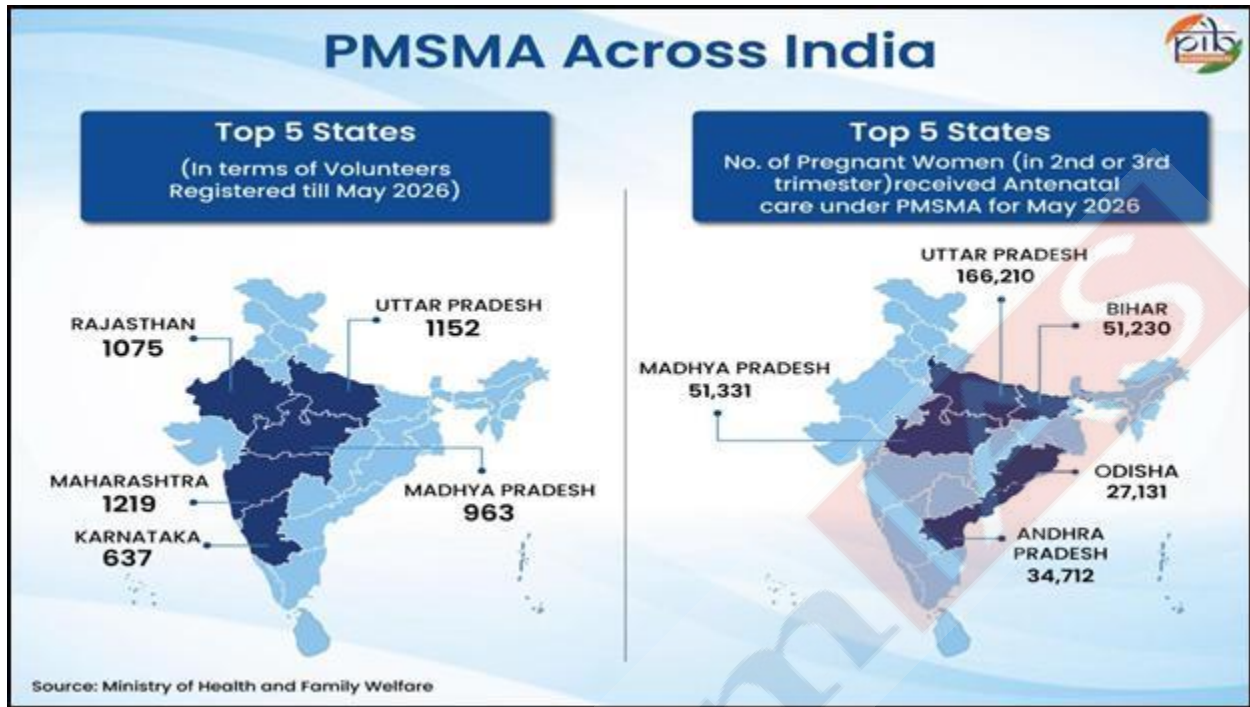
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Aspects	Description
Location	Armenia is a landlocked country in the <a href="#">South Caucasus region</a> between Europe and Asia.
Bordering nations	It is bounded by Georgia in the north, Azerbaijan in the east, Iran in the southeast and Turkey in the west.
Capital	The capital of Armenia is Yerevan.
Climate	<ul style="list-style-type: none"><li>• Its climate is dry and continental.</li><li>• It has hot, dry summers and cold winters, with sharp climatic variation by altitude.</li></ul>
Terrain	It has a highly rugged and mountainous terrain.
Soil formation	A significant portion of its soil has been formed in part from volcanic lava deposits and is abundant in nitrogen, potash, and phosphates.
Mountain	Its larger area is dominated by the Lesser (or Little) Caucasus Mountains.
Highest Point	The highest point is Mt. Aragats at 13,418 ft. (4,090m). It is an extinct volcanic peak.
Major River	<ul style="list-style-type: none"><li>• The Araks and Debed Rivers are the two most important rivers.</li><li>• The Araks act as a natural border between Iran and Turkey to the south.</li><li>• Armenia is rich in springs and wells, some of which possess medicinal properties.</li></ul>
Major Lake	Lake Sevan is the largest lake, and it is 6,000 ft. (2,000 m) above sea level.
Natural Resources	It has mineral resources such as small quantities of gold, copper, molybdenum, zinc, and alumina ores.

### Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

**News:** The Ministry of Health and Family Welfare launched nationwide celebrations to commemorate “10 Years of Pradhan Mantri Surakshit Matritva Abhiyan – A Decade of Care”.

About Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)



Source: PIB

Aspect	Details
About	<ul style="list-style-type: none"> <li>It is a flagship initiative to provide free, comprehensive antenatal care to pregnant women, particularly those in their second and third trimesters, at designated government health facilities on the 9th of every month.</li> <li>It is a vital pillar of the Government’s Continuum of Care approach under the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) Strategy.</li> </ul>
Launched by	It was launched by the Ministry of Health and Family Welfare in 2016.
Aim	It aims to reduce maternal and neonatal mortality by facilitating early detection and prompt management of high-risk pregnancies.

## Factly Compilation June 2026

<b>Objective</b>	<ul style="list-style-type: none"><li>● It is to ensure that every pregnant woman receives at least one check-up by a physician/specialist during the second or third trimester.</li><li>● It is to improve the quality of care during antenatal visits.</li><li>● It is to identify and manage high-risk pregnancies (HRP) at an early stage.</li><li>● It is to ensure appropriate birth planning and complication readiness for each pregnant woman.</li><li>● It also ensures appropriate management of women with malnutrition.</li><li>● It provides special focus on adolescent and early pregnancies.</li></ul>
<b>Components of service</b>	<ul style="list-style-type: none"><li>● The PMSMA service package includes<ul style="list-style-type: none"><li>○ Clinical examinations</li><li>○ Laboratory investigations (blood and urine tests)</li><li>○ Ultrasonography</li><li>○ Medicines, and</li><li>○ Counselling on nutrition, birth planning, and safe pregnancy practices.</li></ul></li></ul>
<b>Key Features of PMSMA</b>	<ul style="list-style-type: none"><li>● <b>Comprehensive Antenatal Care:</b> Minimum one comprehensive and quality antenatal checkup by an Obstetrician &amp; Gynaecologist or <b>Comprehensive Emergency Obstetric and Newborn Care (CEmONC).</b><ul style="list-style-type: none"><li>○ Providing <b>Comprehensive Emergency Obstetric and Newborn Care (CEmONC) / Basic Emergency Obstetric and Newborn Care (BEmONC)</b> trained doctor during the second or third trimester.</li></ul></li></ul>

	<ul style="list-style-type: none"><li>○ Mobilising the pregnant women for specialist Antenatal care services at Pradhan Mantri Surakshit Matritva Abhiyan clinics/ designated government health facility centre.</li><li>● <b>High-Risk Pregnancy (HRP):</b> HRP identification by screening for 25 high-risk factors and management at an early stage.<ul style="list-style-type: none"><li>○ A sticker indicating the condition and risk factor of pregnant women is added to Mother and Child Protection cards for each visit:</li><li>○ Linking of HRPs to the nearest first referral unit (FRU) for a safe delivery.</li></ul></li><li>● <b>Minimum Package of Services:</b> A minimum package of investigations and medicines, such as Iron Folic Acid and calcium supplements, is provided to all pregnant women at Pradhan Mantri Surakshit Matritva Abhiyan clinics.</li><li>● <b>Doctor Volunteer System:</b> The initiative actively welcomes OB-GYN specialists, radiologists, and physicians from the private sector to volunteer their time on the 9th of every month.</li><li>● <b>Nutrition focus:</b> Counselling on nutrition along with appropriate birth planning and complication readiness for each pregnant woman.</li><li>● <b>Note:</b> The E-PMSMA strategy was rolled out in January 2022 to ensure tracing and tracking of High-Risk Pregnant (HRP) women till a safe delivery is achieved by provisioning financial incentivization for the identified HRP women and accompanying Accredited Social Health Activists (ASHA) for extra 3 visits over and above the PMSMA visit.</li></ul>
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Performance	More than 7.50 crore pregnant women have received antenatal services under PMSMA in addition to routine ANC checkup services.
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### Land Port Management System (VINIMAY)

News: Union Home Minister launched the Land Port Management System (LPMS) 'Vinimay,' to modernise operations across India's land ports.

#### About Land Port Management System (VINIMAY)



Figure 9. Source: Land Ports Authority

vision of Smart Borders.

- **Aim:** It aimed at modernising operations across India's land ports and improving coordination between border agencies.
- It has been designed to streamline cargo and passenger movement and strengthen border security and trade management.
- **Features:**
  - **Secure and Real-Time Information Sharing:** It allows secure and real-time sharing of logistics and regulatory information.
  - **End-to-End Digital Workflows:** It introduces end-to-end digital workflows for cargo and passenger processing, including slot booking, online payments, shipment tracking and single-window clearances.
    - It will enhance coordination among various agencies and make the exchange of information seamless.

- Integration with National Digital Platforms: It has also been integrated with key national platforms such as ICEGATE, ULIP and the motor vehicle ecosystem to improve interoperability and reduce delays.
- Benefits: It will significantly reduce paperwork and enhance ease of doing business and ensure seamless movement of goods and passengers across India's international land borders.
  - Also, the Single Electronic Window and Automatic Number Plate Recognition-based gate operations will significantly reduce processing time.

#### About Land Ports Authority of India



- Nodal ministry: Land Ports Authority of India (LPAI) is a statutory body under the Department of Border Management, Ministry of Home Affairs.
- Establishment: It was formally established in 2012.
- Objective: Its objective is to reduce dwell time and trade transaction costs, promote regional trade and people-to-people connectivity, and adopt global best practices in border infrastructure and operations.
- Responsibilities: It is responsible for developing and managing modern land ports along India's international borders to ensure seamless and efficient movement of cargo and passengers.

- Currently, LPAI operates 15 land ports across India's international borders. These are:
  - Attari (Punjab) and Dera Baba Nanak (Punjab) along the India-Pakistan border
  - Rupaidiha (Uttar Pradesh), Raxaul (Bihar) and Jogbani (Bihar) along the India-Nepal border
  - Darranga (Assam) along the India-Bhutan border

- Petrapole (West Bengal), Dawki (Meghalaya), Sutarkandi, Golakganj and Mankachar (Assam), Agartala, Srimantapur and Sabroom (Tripura) along the India-Bangladesh border; and
- Moreh (Manipur) along the India-Myanmar border.

### Tezpur Litchi

News: APEDA facilitated the first export consignment of GI-tagged Tezpur litchi from Assam to Dubai on 7 June 2026.

#### About Tezpur Litchi



#### Source – Open Mag

<b>Location</b>	<ul style="list-style-type: none"><li>● Tezpur litchi is mainly grown in the Sonitpur district of Assam.</li><li>● Other major varieties cultivated in the region include Bombaya, Bilati, Elaichi, Piyaji, and Sahi.</li></ul>
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## Factly Compilation June 2026

<b>Key Characteristics</b>	<ul style="list-style-type: none"><li>● <b>Appearance:</b> It is known for its bright-red appearance, and the fruit colour varies from dull brick red to attractive red.</li><li>● <b>Pulp Quality:</b> The fruit has white to greyish-white juicy pulp with superior eating quality.</li><li>● <b>Size:</b> It weighs around 70–80 g and is the largest among the litchi varieties grown in Assam.</li><li>● <b>Nutritional Value:</b> It is a rich source of Vitamin C and contains a fair amount of potassium, phosphorus, calcium, magnesium, iron, and Vitamin B.</li></ul>
<b>Climate Conditions</b>	<ul style="list-style-type: none"><li>● <b>Climate Type:</b> Tezpur litchi thrives best under a humid sub-tropical climate.</li><li>● <b>Temperature:</b> It grows well where temperatures are around 30°C in June and 21°C in February, and it is sensitive to frost and dry heat.</li><li>● <b>Rainfall &amp; Humidity:</b> It flourishes under moist conditions with abundant rainfall and humidity.</li><li>● <b>Altitude:</b> It generally prefers low elevations and can be grown up to 800 m.</li></ul>
<b>Soil Type</b>	<ul style="list-style-type: none"><li>● The crop is well suited to loamy soil enriched with organic matter and having good drainage properties.</li></ul>
<b>Status</b>	<ul style="list-style-type: none"><li>● Tezpur litchi received the Geographical Indication (GI) tag in 2013.</li></ul>

### **Berobenatide – New Obesity Drug**

**News:** Pharmaceutical company Pfizer announced mid-stage trial results of berobenatide, an experimental once-monthly anti-obesity and diabetes drug.

### About Berobanatide – New Obesity Drug



Figure 10. Source – IE

- Berobanatide is an experimental anti-obesity and diabetes drug that is designed to be administered as a once-monthly injection.
- Developed by: It has been developed by Pfizer.
- Working Mechanism:
  - GLP-1 Receptor: Berobanatide is a GLP-1 (glucagon-like peptide-1) weight-loss therapy that mimics the gut hormone GLP-1 to regulate blood sugar, slow stomach emptying, and reduce appetite.
  - Appetite & Digestion: The drug helps reduce appetite and slows stomach emptying, which supports weight management and blood sugar regulation.
  - Extended Circulation Design: The drug has been engineered to remain in circulation much longer than conventional GLP-1 therapies, allowing sustained activation of GLP-1 receptors throughout the month.
- Dosing: Patients would initially receive weekly doses before transitioning to a single injection every month, reducing the number of injections from 52 per year to 12 per year.
- Efficacy: Patients without diabetes lost up to 12.3% of their body weight, and weight loss continued after the shift to monthly dosing.
- Limitation: Experts have stated that long-term data, particularly on cardiovascular outcomes, are still needed.
- Significance: Less frequent dosing may reduce treatment fatigue, improve treatment persistence, and help patients remain on therapy for longer periods.
- Other Obesity Drug:
  - Semaglutide (branded as *Ozempic/Wegovy*) – developed by Novo Nordisk
  - Tirzepatide (branded as *Mounjaro/Zepbound*) – developed by Eli Lilly

### SAPLING Dialogue and Initiative

**News: The Ministry of Food Processing Industries (MoFPI), in collaboration with the World Bank Group-led SAPLING initiative, inaugurated the SAPLING Dialogue.**

About SAPLING Dialogue



**Why this matters**

- Up to 40% of food is lost post-harvest - need for stronger processing and market linkages.
- Smallholders and SMEs dominate, but lack access to finance, technology, and markets.
- Strengthening farms-firms-finance connections can turn these challenges into jobs and growth.

**Focus**

- Stronger farm-to-market value chains
- Improving food safety & market access
- Advancing regional collaboration
- Scaling innovation
- Mobilizing public & private investment
- Support for SMEs & agribusiness growth

**What this means for countries**

- More jobs, especially for youth and women.
- Stronger connections between producers, firms, and markets.
- Increased private sector participation and investment.
- Opportunities for SMEs to scale and formalize.

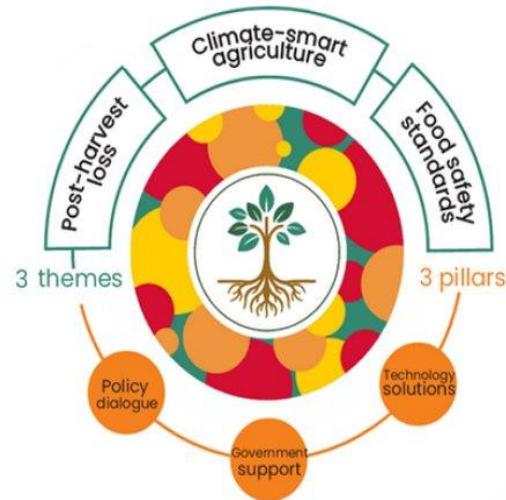
Source: World Bank

Aspects	Details
About	<ul style="list-style-type: none"> <li>● <b>Held at:</b> The SAPLING Regional High-Level Policy Dialogue was held in Ahmedabad, Gujarat.</li> <li>● <b>Title:</b> “Unlocking Value: Advancing Food Processing for Employment Generation and Sustainable Growth in South Asia”.</li> <li>● <b>Objective:</b> It is a two-day regional dialogue that brings together around 200 participants to discuss strengthening food processing ecosystems and building resilient, inclusive, and sustainable food systems.</li> <li>● <b>Aligned with:</b> It is aligned with the World Bank Group’s AgriConnect initiative and SAPLING platform.                         <ul style="list-style-type: none"> <li>○ These initiatives aim to accelerate resilient and nutrition-focused food systems across South Asia through policy reform, investment mobilization, and technology-driven solutions.</li> </ul> </li> </ul>

## Factly Compilation June 2026

Inaugurated by	<ul style="list-style-type: none"><li>● It has been inaugurated by the Ministry of Food Processing Industries (MoFPI) in collaboration with the World Bank Group-led SAPLING initiative.</li></ul>
Participants	<ul style="list-style-type: none"><li>● Participants include policymakers, industry leaders, development partners, innovators, researchers, startups, and representatives from South Asian countries.</li></ul>
Thematic sessions	<ul style="list-style-type: none"><li>● The dialogue includes thematic sessions on:<ul style="list-style-type: none"><li>○ Think Big, Act Local: Unlocking South Asia's Food Processing Opportunity.</li><li>○ From Farm to Factory: Strengthening Agricultural Supply Chains for Food Processing.</li><li>○ From Shadow to Spotlight: Formalizing informal food processors (<i>Bringing small processors into regulate value chains</i>).</li><li>○ Smart Tech, Bold Innovations: Transforming Food Processing Through Technology.</li><li>○ Safe food, strong markets: Health, Quality and Standards for competitive Trade.</li><li>○ Farm, Firm and Finance: Mobilizing Investment for Food Processing Growth.</li><li>○ Shaping a Shared Food Future: Regional Collaboration and Policy Action in South Asia</li></ul></li></ul>
Key Highlights	<ul style="list-style-type: none"><li>● Food Systems Transformation</li><li>● Infrastructure and Market Linkages</li><li>● Collaborative Investment Agenda</li></ul>

### About SAPLING Initiative



Source: World Bank

Aspects	Descriptions
<b>About</b>	<ul style="list-style-type: none"> <li>● <b>SAPLING stands for 'South Asian Policy Leadership for Improved Nutrition and Growth'.</b></li> <li>● <b>It is a regional engagement and partnership platform to accelerate the transformation of resilient, nutrition-focused food systems across South Asia.</b></li> <li>● <b>It is aligned with the World Bank Group's AgriConnect initiative.</b> <ul style="list-style-type: none"> <li>○ <b>AgriConnect is a global platform that aims to connect 300 million farmers to markets by 2030 through investments in infrastructure, policy reforms, and private capital mobilisation.</b></li> </ul> </li> </ul>
<b>Led by</b>	<b>It is led by the World Bank Group.</b>
<b>Themes</b>	<b>It functions on three themes: Post-harvest loss, climate-smart agriculture and Food safety standards.</b>

<b>Pillars</b>	<ul style="list-style-type: none"><li>● It has three thematic pillars: Policy Dialogue, government support and technology solution</li><li>● SAPLING fosters dialogue, collaboration, and knowledge exchange through these thematic pillars.</li><li>● This enables countries to identify and advance scalable, investment-ready, and innovation-driven solutions for the future of food systems in South Asia.</li></ul>
<b>Features</b>	<ul style="list-style-type: none"><li>● It convenes governments, private sector actors, innovators, researchers, and development partners to advance policy reform, mobilize investment, and scale technology and innovation that strengthen food systems, improve nutrition outcomes, and enhance climate resilience.</li><li>● It also supports greater private sector participation in food system value chains and helps unlock investment for sustainable growth.</li></ul>

### Skagerrak Strait

**News:** Archaeologists have recovered large quantities of blue-and-white Chinese porcelain, along with fragments of chandeliers, goblets, textiles and grain, from a depth of about 600 meters in the Skagerrak Strait.

#### About Skagerrak Strait



Source: Britannica

- **Location:** Skagerrak Strait is located between Norway, Sweden, and Denmark and connects the North Sea with the Kattegat sea.
- **Size:** It is about 240 km long and 130–145 km wide.
  - It narrows between Cape Skagen (the Skaw) in Denmark and the Swedish coast.
  - From there, it turns south into the Kattegat, leading toward the Danish Sounds and the Baltic Sea.
- It is shallow along the Danish shore and deepens toward the Norwegian coast.
- **Importance:** It is an important and busy shipping route.
  - Major ports on the Skagerrak include Oslo and Kristiansand in Norway, and Uddevalla and Strömstad in Sweden.
- **Historical significance:** The Battle of Jutland which was a major naval battle during World War I, was fought near the Skagerrak in 1916.

### **Limnonectes motijheel**

**News:** Recently, researchers discovered *Limnonectes motijheel*, a new species of fanged frog, in Namdapha Tiger Reserve, Arunachal Pradesh.

#### **About *Limnonectes motijheel***

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Aspects	Details
About	<ul style="list-style-type: none"><li>● <b>Limnonectes motijheel</b> is a newly discovered species of fanged frog belonging to the genus <b>Limnonectes</b>.</li></ul>
Discovered In	<ul style="list-style-type: none"><li>● The species was discovered in <b>Namdapha Tiger Reserve, Arunachal Pradesh</b>.</li></ul>
Naming	<ul style="list-style-type: none"><li>● It is named after the <b>Motijheel Lake</b>, a wetland within the <b>Namdapha Reserve</b>.</li></ul>
Physical Features	<ul style="list-style-type: none"><li>● <b>The “Fangs”</b>: Male frogs possess small fang-like projections on the lower jaw, a feature that gives fanged frogs their name and may aid feeding or territorial behaviour.</li><li>● <b>Body Markings</b>: The frog has a dark-brown line between its eyes, an inverted “V”-shaped ridge on its back, and broken folds running along both sides of its body.</li><li>● <b>Size</b>: It generally measure 2.3 to 3.5 cm as adults.</li></ul>
Unique Nesting	<ul style="list-style-type: none"><li>● Unlike most frogs that lay eggs in water or on leaves, this species builds a mud nest beneath leaf litter on the forest floor.</li><li>● This behaviour has not previously been recorded in this group from India.</li></ul>
Unique Behavior	<ul style="list-style-type: none"><li>● <b>Vocalizations</b>: Males produce distinctive calls while remaining hidden beneath leaf litter in their nests.</li><li>● <b>Offspring Protection</b>: Eggs and tadpoles remain protected inside the nest under leaf litter, and researchers suggest parental care may exist in this species.</li></ul>

## **Sangeet Natak Akademi Fellowship (Akademi Ratna) and Sangeet Natak Akademi Awards (Akademi Puraskar)**

**News: The General Council of Sangeet Natak Akademi selected seven Akademi Fellows and 108 Akademi Award recipients for 2024 and 2025.**

### **About Sangeet Natak Akademi Fellowship (Akademi Ratna)**



Source – SNA

- **Sangeet Natak Akademi Fellowship (Akademi Ratna) is the highest, most prestigious and rare honour conferred by the Sangeet Natak Akademi for sustained contribution in performing arts.**
- **Origin: The first Fellow of the Akademi was elected in 1954.**
- **Categories: The Fellowship may be conferred on artistes of outstanding merit in the fields of music, dance and drama, and on persons who have rendered outstanding service to the cause of music, dance and drama through scholarship, research, or original contributions.**
- **Eligibility:**
  - **The honour is open to all regardless of nationality, race, caste, religion, creed, or sex.**
  - **Persons below 50 years of age are ordinarily not considered.**
  - **An association institution or organization is not eligible for Akademi Ratna or Akademi Puraskar (Akademi Award.)**
  - **If a person dies after the General Council has taken the decision, the honour may be conferred posthumously.**
  - **A recipient of Akademi Ratna will not be eligible for an Akademi Puraskar (Akademi Award) at any stage.**

## Factly Compilation June 2026

- **Seat Limit:** The Fellowship is restricted to 40 living Fellows at any given time.
  - Earlier, the limit was 30.
- **Prize Details:** Each Fellow receives ₹3 lakh, a Tamrapatra, an Angavastram, a citation, and annual medical insurance coverage up to ₹1.5 lakh.
- **Ceremony:** The President of India/Vice-President of India/Prime Minister of India or any eminent personality in the field will be invited to confer the honours.
- **Recent Honorees:** In March 2026, the General Council unanimously elected seven eminent personalities as Akademi Fellows:
  - Ramlal Bareth – Kathak Dance
  - Rita Ganguly – Vocal Music and Dance
  - A. V. Anand – Carnatic Music
  - Puru Dadheech – Kathak Dance
  - Chittaranjan Jyotishi – Vocal Music
  - Pasumarthi Rattaiah Sarma – Kuchipudi Dance
  - Sudharani Raghupathy – Bharatanatyam Dance

### About Sangeet Natak Akademi Awards (Akademi Puraskar)

- **Parent Body:** The Awards are conferred by the Sangeet Natak Akademi.
- **Origin:** The Awards were instituted in 1951 as Presidential Awards and later became Sangeet Natak Akademi Awards after the formation of the Akademi.
- **Categories:** The Awards may be given in five Field of activity:
  - Music
  - Dance
  - Theatre
  - Other Traditional/Folk/Tribal/Dance/Music/Theatre and Puppetry
  - Over all contribution/ Scholarship to Performing Arts.
- **Eligibility:**
  - Akademi Puraskar are open to all regardless of nationality, race, caste, religion, creed, or sex.
  - A person considered for the Award should ordinarily be at least 35 years of age.

## Factly Compilation June 2026

- An association institution or organization is not eligible for Akademi Ratna or Akademi Puraskar (Akademi Award.)
- If a person dies after the General Council has taken the decision, the honour may be conferred posthumously.
- **Nature of Honor:** The Awards recognize sustained individual achievement of a high professional order in performing arts.
- **Seat Limit:** The total number of Awards in a year shall not exceed 46.
- **Prize Details:** Each awardee receives ₹1 lakh, a Tamrapatra, an Angavastram, a citation, and medical insurance coverage up to ₹1 lakh per annum.
- **Ceremony:** The President of India/Vice-President of India/Prime Minister of India or any eminent personality in the field will be invited to confer the honours.
- **Recent Honorees:** The General Council selected 108 artists for the Awards for the years 2024 and 2025.

### About Sangeet Natak Akademi (SNA)

- **Establishment:** The Sangeet Natak Akademi was established in 1953 as the apex body dedicated to preserving and promoting India's intangible heritage in music, dance, and drama.
- **Creation:** It was created through a resolution of the Ministry of Education, Government of India, in 1952, with P. V. Rajamannar as its first Chairman.
- **Administration:** The Akademi is managed by its General Council, and its Chairman is appointed by the President of India for a five-year term.
- **Institutional Status:** It functions as an autonomous body under the Ministry of Culture.
- **Promotion of Performing Arts:** The Akademi presents the Ustad Bismillah Khan Yuva Puraskar, introduced in 2006, and is reviving more than 100 rare art forms through the 'Kala Deeksha' training programmes.

### Tapanuli Orangutan

**News:** As per a new report, deadly floods and landslides in Indonesia's Sumatra last year wiped out at least 7% of the total population of the critically endangered Tapanuli Orangutan.

## About Tapanuli Orangutan



Source: DTE

Aspect	Details
About	<ul style="list-style-type: none"><li>● The Tapanuli Orangutan is a species of orangutan found on the island of Sumatra in Indonesia.</li><li>● They are one of three known species of orangutan, alongside the Sumatran orangutan and the Bornean orangutan.</li></ul>
Scientific name	<ul style="list-style-type: none"><li>● Their scientific name is <i>Pongo tapanuliensis</i>.</li></ul>
Habitat	<ul style="list-style-type: none"><li>● They live in tropical and subtropical moist broadleaf forests.</li></ul>
Distribution	They are endemic to North Sumatra, Indonesia and are only found in the Batang Toru Ecosystem within North Sumatra.
Appearance	<ul style="list-style-type: none"><li>● They resemble Sumatran orangutans in body build and fur colour.</li><li>● Their hair is frizzier than that of other orangutans, with smaller heads, and flatter and wider faces.</li><li>● Dominant males have prominent moustaches and large flat cheek pads, known as flanges, covered in downy hair.</li><li>● Both male and female Tapanuli orangutans have beards.</li></ul>

	<ul style="list-style-type: none"><li>● Males are larger than females.</li></ul>
Diet	<ul style="list-style-type: none"><li>● They are omnivores and have a unique diet that contains unusual items like caterpillars and conifer cones.</li><li>● They also consume fruits such as figs, mangoes, lychees, durian, and other plants.</li></ul>
Behaviour	<ul style="list-style-type: none"><li>● They are exclusively arboreal species and spend most of their time high up in the trees.</li><li>● They lead a solitary life and can be seen in pairs only when a mother is raising her young.</li><li>● They are active during the day, moving slowly in search of food through the trees.</li><li>● At night, they build a nest for sleeping up high in the canopy out of folded branches.</li><li>● They communicate with various sounds.</li></ul>
Threats	<ul style="list-style-type: none"><li>● They face severe survival threats due to rapid habitat fragmentation, flooding, and human development.</li></ul>
Conservation status	<ul style="list-style-type: none"><li>● They were described as a distinct species in 2017.</li><li>● IUCN: Critically endangered</li></ul>

### Blue Valley Cluster Initiative

News: The Assam Government and the European Union recently launched the Blue Valley Cluster initiative.

#### About Blue Valley Cluster Initiative



Figure 11. Source: Assam CMO

- **Launched by:** It is an initiative launched by the Assam Government and the European Union.
- **Aim:** It aimed to expand cooperation in bioeconomy sectors such as natural flavours, fragrances, and AYUSH, and to create new avenues for investment, innovation, and industrial partnerships between Europe and Northeast India.
- **Features**
  - It aligns with the priorities outlined in the EU-India Comprehensive Strategic Agenda agreed at the January 2026 EU-India Summit, and in particular with the Blue Valleys initiative.
  - It is designed to serve as a platform connecting European and Indian enterprises, research institutions, entrepreneurs and communities to promote sustainable industrial growth and value-chain development.
- **Significance:** It is expected to demonstrate a new model of sustainable industrial cooperation by connecting local biodiversity, innovation and enterprise with international value chains and market opportunities.
  - It will also strengthen cooperation among Europe, Assam, and the wider North-East region of India by developing ecosystems and value chains in sectors of mutual interest.

### Key Facts about Tajikistan

News: India and Tajikistan discussed strengthening trade, investment, market access, regulatory cooperation, and business engagement at the 12th Joint Commission meeting.

### Key Facts about Tajikistan



Source - Britannica

Aspects	Details
Location	<ul style="list-style-type: none"> <li>It is a landlocked country located in the heart of Central Asia.</li> </ul>
Bordered By	<ul style="list-style-type: none"> <li>It is bordered by Kyrgyzstan in the north, China in the east, Afghanistan in the south, and Uzbekistan in the west and northwest.</li> </ul>
Capital	<ul style="list-style-type: none"> <li>The capital city of Tajikistan is Dushanbe.</li> </ul>
Climate	<ul style="list-style-type: none"> <li>Tajikistan has a sharply continental, semi-arid, and subtropical climate that varies drastically depending on altitude.</li> <li>The country features hot summers and cold winters in the lowlands, while the high-altitude Pamir Mountains experience alpine, near-arctic conditions year-round.</li> </ul>
Soil Type	<ul style="list-style-type: none"> <li>The soil is generally poor in humus but rich in mineral nutrients.</li> </ul>

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<b>Terrain</b>	<ul style="list-style-type: none"><li>● More than nine-tenths of the country's territory is mountainous, and about half of the land lies above 3,000 m.</li></ul>
<b>Mountains</b>	<ul style="list-style-type: none"><li>● <b>Roof of the World:</b> The Pamir Mountains are known as the "Roof of the World" and form a major mountain system in the country.</li><li>● <b>Highest Peak:</b> The Ismoil Somoni Peak is the country's highest mountain.</li></ul>
<b>Glaciers</b>	<ul style="list-style-type: none"><li>● Fedchenko Glacier is the longest glacier in the world outside the polar regions.</li><li>● It is a defining feature of Tajik National Park, a UNESCO World Heritage Site located in the heart of the Pamir Mountains.</li></ul>
<b>Major Rivers</b>	<ul style="list-style-type: none"><li>● The major rivers of Tajikistan include the Amu Darya, Syr Darya, Vakhsh, and Kofarnihon rivers.</li></ul>
<b>Lake</b>	<ul style="list-style-type: none"><li>● Important lakes include Lake Karakul, Lake Sarez, and Lake Iskanderkul, which are mainly located in mountainous regions.</li></ul>
<b>Vegetation</b>	<ul style="list-style-type: none"><li>● Grasses, bushes, and shrubs form the dominant natural vegetation of the country.</li></ul>
<b>Flora</b>	<ul style="list-style-type: none"><li>● Wild tulips, almond trees, and several unique mountain plants are found in the Pamir, Zeravshan, and Hissar ranges.</li><li>● Nearly 30% of the flora is endemic or sub-endemic.</li></ul>
<b>Fauna</b>	<ul style="list-style-type: none"><li>● Notable animals include the snow leopard, markhor, Himalayan brown bear, Pamir argali, bearded vulture, deer, jackal, and wild goat.</li></ul>
<b>Communication</b>	<ul style="list-style-type: none"><li>● The 1,250-km Pamir Highway (M41) follows the ancient Silk Route and is the second-highest international road on Earth.</li></ul>

## NITI Aayog Governing Council

**News:** Prime Minister Narendra Modi chaired the 11th Governing Council Meeting of NITI Aayog on the theme “Inclusive Human Development for Viksit Bharat@2047.”

### About NITI Aayog Governing Council



Source – DD India

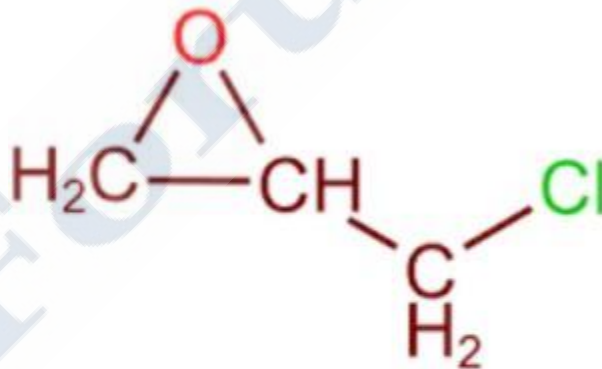
- **NITI Aayog Governing Council:** It is the apex body of NITI Aayog that provides a platform for cooperative federalism and national development discussions.
- **Legal Basis:** NITI Aayog was formed through a resolution of the Union Cabinet in January 2015.
  - The Governing Council came into effect in February 2015 through a notification of the Cabinet Secretariat .
  - It was reconstituted in February 2021 through another Cabinet Secretariat notification.
- **Objectives:** The Governing Council aims to evolve a shared vision of national priorities and strategies with the active involvement of States.
- **Structure & Composition**
  - **Chairperson:** The Prime Minister of India serves as the Chairperson of the Governing Council.
  - **Members:** The Council comprises Chief Ministers of all States, Chief Ministers of Union Territories with legislatures, and Lt. Governors of other Union Territories.

- **Additional Members:** The Council includes Ex-Officio Members, the Vice-Chairperson of NITI Aayog, Full-time Members of NITI Aayog, and Special Invitees.
- **Functions:**
  - **Policy Direction:** The Council sets national priorities, facilitates policy dialogue between the Centre and States, and reviews major policy initiatives.
  - **Cooperative Federalism:** The Council provides a structured platform for Centre-State engagement, resolves federal issues, and promotes innovation and best practices.
  - **Monitoring and Strategic Planning:** The Council reviews development performance, assesses programme implementation, discusses long-term goals such as Viksit Bharat@2047, and aligns State plans with national priorities.

### Epichlorohydrin

News: India has banned epichlorohydrin and chlorine in tea bags, while BIS has issued safety, quality, and traceability norms for tea bags.

#### About Epichlorohydrin



**Epichlorohydrin**  
2-(chloromethyl) oxirane

Source – India Mart

- **Epichlorohydrin (ECH)** is an organochlorine compound and an epoxide in which one of the methyl hydrogens is substituted by chlorine, and it is used in the manufacture of various industrial chemicals and materials.
- **Nature:** It is a volatile and flammable, clear, colorless, liquid chlorinated cyclic ether with an irritating, chloroform-like odor.
- **Physical Traits:** It releases toxic fumes of hydrochloric acid and other chlorinated compounds when heated to decomposition.
- **Solubility:** It is soluble in water.
- **Reactivity:** It emits hazardous chlorinated compounds during decomposition.
- **Applications:**
  - **Epoxy Resins:** It serves as a primary precursor for manufacturing epoxy resins used in coatings, adhesives, and composites.
  - **Synthetic Glycerin:** It acts as an industrial intermediate for the production of synthetic glycerol.
  - **Water Treatment:** It is used in manufacturing ion-exchange resins and chemicals required for water purification systems.
  - **Paper Reinforcement:** It is used to provide structural strength to specialized paper and filter products.
  - **Health Impacts:** Epichlorohydrin is classified as a potential carcinogen.
    - Exposure to it irritates the eyes, skin, and respiratory tract and can cause chemical pneumonitis, pulmonary edema, and renal lesions.

### About Bureau of Indian Standards (BIS)

- The Bureau of Indian Standards is the national standards body of India.
- **Legality:** It was established under the Bureau of Indian Standards Act, 2016, and succeeded the Indian Standards Institution created in 1947.
- **Nodal Ministry:** It functions under the administrative control of the Ministry of Consumer Affairs, Food and Public Distribution.
- **Objective:** It was established for the harmonious development of standardization, marking, and quality certification of goods and related matters.
- **Key Functions and Responsibilities:**
  - **Standardization:** It promotes the development of standards for goods.
  - **Quality Certification:** It undertakes quality certification activities for products.
  - **Marking:** It supports marking activities related to standards and quality.
  - **International Representation:** It represents India in the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).
  - **Regulatory Oversight:** It has set safety, quality, and traceability requirements for tea bags sold in India.

### Oilseeds Kisaan Mitra

**News:** India's First Nationwide WhatsApp AI Advisory, 'Oilseeds Kisaan Mitra,' has been launched for Oilseed Farmers.

### About Oilseeds Kisaan Mitra



Source: PIB

- Oilseeds Kisaan Mitra is India's first nationwide WhatsApp AI advisory for oilseed farmers.
- Developed by: It has been developed by ICAR-Indian Institute of Oilseeds Research (ICAR-IIOR), Hyderabad.
  - Its knowledge base has been built collaboratively with ICAR-Indian Institute of Groundnut Research, Junagadh (ICAR-IIGR), ICAR-Indian Institute of Rapeseed and Mustard Research, Bharatpur (ICAR-IIRMR) and PC-Unit (Sesame & Niger).
- Features:
  - **Comprehensive Crop Coverage:** It covers end-to-end guidance for all 9 major annual oilseed crops from sowing to harvest, including groundnut, sunflower, soybean, mustard, sesame, etc.
  - **24×7 Accessibility:** The AI-powered chatbot responds instantly with research-based guidance on variety selection, crop management, pest and disease control, irrigation, and post-harvest practices, 24 hours a day, 7 days a week, free of cost.

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- **Regional Language Support:** It is functional in regional languages & replies in Hindi, Telugu, Tamil, Kannada, and English, breaking language barriers for every farmer.
- **Trusted Scientific Knowledge:** It offers reliable and research-based guidance backed by ICAR-IIOR, ICAR-NSRI, IIGR, DRMR, AICRPs & knowledge partners.
- **No App Installation:** It enables any oilseed farmer in India to access free, trusted, and instant crop advisory simply through WhatsApp, without needing to download any additional application.
- **Instant Solutions:** It offers immediate troubleshooting for crop cultivation, pest & disease management, boosting farm productivity.
- **Crop cycle Coverage:** The chatbot covers the entire crop cycle, including variety selection, agronomic practices, pest and disease management, irrigation scheduling, and post-harvest guidance and seed availability.

### Sukhnag River

**News:** According to the joint panel's report to the NGT, the extraction of an estimated 10.6 lakh to 15.3 lakh tonnes of riverbed material in the Sukhnag River area has led to irreversible damage to the area's hydrogeological systems.

#### About the Sukhnag River

## Dried up

Illegal riverbed mining has wreaked havoc across south and central Kashmir, with tributaries originating in the Pir Panjal range bearing the brunt. These streams are crucial for feeding local springs and sustaining the Jhelum river

- Waterbodies impacted by riverbed mining and
- Major locations where riverbed mining takes place



Source: Based on interactions with experts; map not to scale

Source: DTE

- It is a **glacial river** that flows through the **Budgam district of central Kashmir**.
- **Naming:** Sukhnag comprises **two Kashmiri Sanskrit words** – ‘Sukh’ means calm and ‘Naag’ means spring.
- **Origin:** It rises in the **Tosa Maidan area of the Pir Panjal Range**, fed by the **Ashtar spring and the Shin Mahnew glacier**, before descending through forested valleys onto the **Karewa plains**.
- **Course:** From there, it passes through **Arizal, Zanigam, Sail, Beerwah, Rathsun, Makhama, Kawoosa and Narbal**.
  - It finally joins **Jhelum in the lower valley** after skirting the marshy lowlands west of the **[Hokersar Wetland](#)**.
- **Tributary of:** It is a **54-km-long tributary of the Jhelum River**.

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- **Water system:** Ahji and Lar canals in Budgam district are located on this river.

### National e-Governance Awards (NAeG) 2026

**News:** Four Panchayati Raj-related initiatives out of 17 projects across seven award categories have been selected for the National Awards for e-Governance (NAeG) 2026.

#### About National e-Governance Awards (NAeG) 2026

- **Conferred at:** It will be conferred at the 29th National Conference on e-Governance, scheduled to be held on 1-2 July 2026 in Rajasthan.
- **Award Categories 2026:** There are a total of 16 awards under 7 categories of the Award Scheme.
  - Categories include 10 Gold Awards, 6 Silver Awards, and 1 Jury Award.
  - Prizes: It consists of:
    - a Trophy
    - a Certificate and
    - Gold awardee receives Rs. 10 lakh, and Silver Awardees get Rs. 5 lakh which is to be utilized for the implementation of the project of public welfare.
- **Notable Awardees**

Awards	Award Category	Awardee	State / Level
Gold Award	Digital Transformation by Use of Data Analytics in Digital Platforms by Central Ministries/States/UTs	<a href="#">Panchayat Advancement Index (PAI)</a> - Data Driven Governance for Viksit Bharat, Ministry of Panchayati Raj	National Level
Gold Award	Grassroots Level Initiatives by Gram Panchayats for Deepening/Widening of Service Delivery	Kadepur Gram Panchayat, Sangli District, Maharashtra	Maharashtra
Silver Award	Grassroots Level Initiatives by Gram Panchayats for Deepening/Widening of Service Delivery	Bijoy Nagar Gram Panchayat, West Tripura District, Tripura	Tripura
Gold Award	District Level Initiatives in e-Governance	e-Aarogya Dhamni - Transforming Healthcare	Maharashtra

		through e-Governance, Health Department, Zilla Parishad Nandurbar, Maharashtra	
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#### About National Awards for e-Governance

- National Awards for e-Governance are to recognise and promote excellence in the implementation of e-Governance initiatives.
- Purpose of Award:
  - Disseminate knowledge on effective methods of designing and implementing sustainable e-Governance initiatives.
  - Encourage incremental innovations in successful e-Governance solutions.
  - Promote and exchange experiences in solving problems, mitigating risks, resolving issues and planning for success.
- Frequency: The Department of Administrative Reforms and Public Grievances (DARPG) presents these awards every year.
- First conferred: These Awards have been given since 2003.
- Eligibility: All Central Ministries/Departments, State/UT Governments, Districts, Local Bodies, Central & State Government Public Sector Undertakings (PSUs), and Academic/Research Institutions (Government and Non -Government) are eligible to apply for these awards.
- Categories of award: There will be a total of 16 awards under 7 categories of the Award Scheme.

#### Bundel Kesari Maharaja Chhatrasal

**News:** The Mahua Festival at the Madhya Pradesh Tribal Museum featured a special dance-drama on Maharaja Chhatrasal's life and legacy.

#### About Bundel Kesari Maharaja Chhatrasal



Source - Wikipedia

- **Maharaja Chhatrasal (4 May 1649 - 19 December 1731)** was a medieval Indian warrior who fought against the Mughal Empire and established an independent kingdom in Bundelkhand.
- **Birth:** He was born on 4 May 1649 to Champat Rai and Lal Kunwar in the Bundela Rajput clan.
- **Lineage:** He was a descendant of Rudra Pratap Singh of Orchha, and his ancestors were vassals of the Mughal emperor.
- **Disillusionment with Mughals:**
  - **Father's Sacrifice:** His father had raised the banner of freedom against the Mughals but was killed in battle.
  - **Struggle Against Mughal Rule:** Chhatrasal started his struggle against Mughal dominance in 1671 and continued it for about 50 years.
- **Relation with Baji Rao I:**
  - **Military Assistance:** Baji Rao I helped Chhatrasal against Muhammad Khan Bangash and enabled him to retain his kingdom.

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- **Family Alliance:** Mastani, Chhatrasal's daughter, became the second wife of Baji Rao I.
- **Influence by Chhatrapati Shivaji Maharaj:**
  - **Meeting with Shivaji:** Chhatrasal met Chhatrapati Shivaji Maharaj in Deogarh in 1671.
  - **Inspiration for Swarajya:** Shivaji inspired him to fight for self-rule and adopt guerrilla warfare tactics against the Mughal armies.
- **Rise of the Bundela Kingdom:**
  - **Modest Beginning:** He started his rebellion at the age of 22 with only 5 horsemen and 25 swordsmen.
  - **Formation of Kingdom:** He established his own kingdom at the age of 26 against Mughal dominance.
  - **Territorial Expansion:** He expanded his control from Chitrakoot and Panna in the east to Gwalior in the west.
- **Spiritual Guru:** Mahamati Prannathji was his spiritual guru.
  - He guided Chhatrasal in political, social, and economic matters and informed him about the diamond mines of Panna.
- **Title:**
  - **Maharaja:** Sant Prannathji bestowed the title of 'Maharaja' upon Chhatrasal.
  - **Raja:** Aurangzeb conferred the title of 'Raja' upon him before his rebellion against Mughal rule.
- **Patron of Literature:** His court supported noted poets such as Kavi Bhushan, Lal Kavi, and Bakhshi Hansaraj, whose writings brought him lasting fame.
- **Legacy:** The town and district of Chhatarpur in Madhya Pradesh are named after him. The Maharaja Chhatrasal Museum in Madhya Pradesh and the Chhatrasal Stadium in Delhi also commemorate his legacy.

### Venus flytrap

**News:** Scientists have now found the physical mechanism behind the snapping action of the Venus flytrap.

#### About Venus flytrap



Source: Britannica

- The Venus flytrap is a **small carnivorous plant** of the **sundew family (Droseraceae)**.
- **Scientific name:** Its scientific name is **Dionaea muscipula**.
- **Native to:** It is **native to a limited region** of North Carolina and South Carolina in U.S.A.
- It **grows in nutrient-poor environments** and **supplements its nutrition by capturing and digesting insects** using **snap trap mechanism**.
- **How the snapping mechanism works:**
  - The plant **uses specialised trigger hairs located on the inner surface of the trap**.
  - When an insect touches **these hairs twice within a short period of time, the trap closes**.
  - Closure can occur in as little **as one-tenth of a second**.
  - When **the trap snaps shut, the insect is sealed inside for digestion**.
  - After **the plant absorbs the nutrient-rich liquid produced by the digestive processes, the trap reopens**, with the insect's empty exoskeleton left behind.
- **Findings of the new study**
  - The researchers found that **the trap closes because the cell walls on the outer surface of the trap suddenly become softer and more flexible (about 30–40% softer)**.
  - The trap is **already under tension, like a compressed spring**.

- When an insect touches the trigger hairs twice, the cell walls soften, releasing the stored tension and causing the trap to snap shut in as little as 0.1 seconds.

### **ANCHOR (Atlas of Neurochemical Characterisation of the Human Brainstem with 3D Reconstruction)**

News: IIT Madras released ANCHOR, the world's most detailed three-dimensional atlas of the human brainstem, at the 3rd BRICS Neuroscience Symposium.

About ANCHOR (Atlas of Neurochemical Characterisation of the Human Brainstem with 3D Reconstruction)



Source – The Print

- ANCHOR stands for 'Atlas of Neurochemical Characterisation of the Human Brainstem with 3D Reconstruction'.
- It is the world's most detailed three-dimensional atlas of the human brainstem.
- Developer: ANCHOR was developed by the Sudha Gopalakrishnan Brain Centre (SGBC), IIT Madras.
- Technology Used:
  - Magnetic Resonance Imaging (MRI): MRI was integrated into the atlas to support detailed brain mapping.
  - Cellular Histology (Nissl Staining): Histological techniques were used to study cellular structures in the brainstem.

- Chemo-architecture (Immunohistochemistry): Immunohistochemistry was used to identify and map different cellular components.
- Key Features:
  - Comprehensive Coverage: The atlas includes more than 200 brainstem nuclei and fibre tracts, making it one of the most detailed brainstem maps available.
  - Advanced Reconstruction: It was reconstructed from hundreds of serial sections and more than 500 sections with 08 complementary immunostains for detailed mapping.
  - Life-Span Mapping: The atlas covers human brain development from the prenatal stage to childhood and adulthood.
  - Micron-Level Mapping: The atlas maps the brainstem at a micron-level resolution, allowing users to zoom nearly 1,000 times closer than standard MRI scans.
  - Google Earth for the Brainstem: ANCHOR functions like a “Google Earth” for the brainstem, allowing users to navigate from a complete structural view to the level of individual cells.
  - Public Accessibility: The atlas has been made publicly available through a website so that researchers, clinicians, and patients worldwide can benefit from this research.

### About Solomon Islands

News: The Solomon Islands stated that the contents of its security agreement with China will remain undisclosed due to legal restrictions.

### About Solomon Islands



Source – Geologydotcom

<b>About</b>	<ul style="list-style-type: none"><li>● The Solomon Islands is a country in the south-western Pacific Ocean that consists of volcanic islands and coral atolls.</li></ul>
<b>Location</b>	<ul style="list-style-type: none"><li>● It is located in the south-western Pacific Ocean, southeast of Papua New Guinea and northwest of Vanuatu.</li></ul>
<b>Archipelago Composition</b>	<ul style="list-style-type: none"><li>● The country consists of nearly 1,000 islands, including 6 large main islands and over 900 smaller islands, of which 147 are inhabited.</li><li>● The islands lie in two parallel chains running from northwest to southeast.</li></ul>
<b>Topography</b>	<ul style="list-style-type: none"><li>● The country is mainly mountainous and covered with forests, although it also has some extensive plains.</li></ul>
<b>Climate</b>	<ul style="list-style-type: none"><li>● The Solomon Islands has a tropical oceanic climate that is hot and humid, with cool winds and abundant rainfall throughout the year.</li></ul>
<b>Vegetation</b>	<ul style="list-style-type: none"><li>● The Solomon Islands are covered by dense lowland and hill rainforests, along with extensive mangrove forests, coastal vegetation and freshwater swamp forests.</li></ul>
<b>Highest Peak</b>	<ul style="list-style-type: none"><li>● Mount Popomanaseu on Guadalcanal is the highest peak, rising to 7,644 feet (2,330 m).</li></ul>
<b>Flora</b>	<ul style="list-style-type: none"><li>● The islands contain 4,500–5,000 vascular plant species, including highly endemic palms, orchids, climbing Pandanus species, and ancient plant groups such as the Winteraceae family.</li></ul>

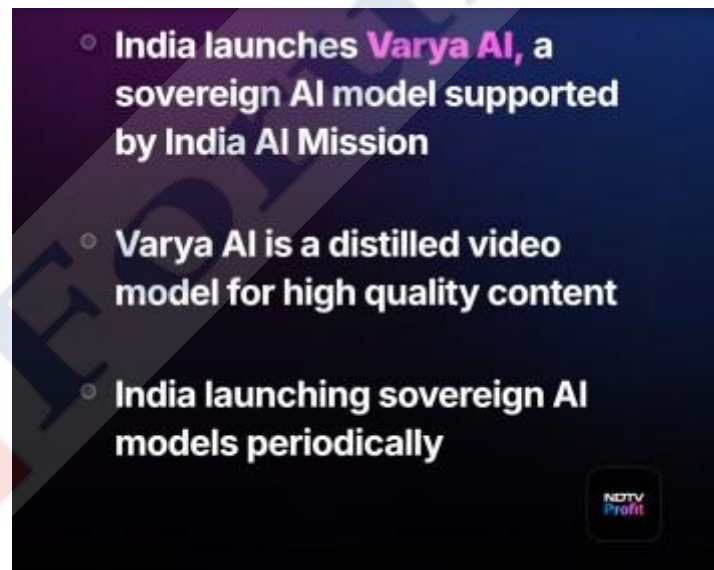
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Fauna	<ul style="list-style-type: none"><li>● The islands are home to endemic species such as the megapode bird, Solomon Islands sea eagle, native bats, murid rodents, and the endangered hawksbill turtle, while surrounding waters support over 900 reef fish species and 500 coral species.</li><li>● East Rennell Atoll is a UNESCO World Heritage Site and constitutes the largest raised coral atoll on Earth.</li></ul>
Key Resources	The islands possess significant reserves of bauxite on Rennell Island and phosphates on Bellona Island, while some gold has been extracted on Guadalcanal.

### Varya

**News:** Avataar has launched Varya, a distilled video model built to make frontier video AI affordable, accessible and relevant for India's next generation of users.

#### About Varya



Source: NDTV

- Varya is a **distilled video model** built to make **frontier video AI** affordable, accessible and **relevant** for India's next generation of users.
- **Launched by:** It has been launched by Avataar, an **AI-native transformation company**.

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- It has been **developed with support from the [IndiaAI Mission](#)**.
- **Features:**
  - It uses a **distillation technique** that **reduces video generation from 50 steps to 4 steps**, while maintaining comparable output quality.
  - It **can generate video at ₹0.48 per second, making it up to 10x more cost-efficient** than several leading global video models.
  - It has been built to understand and generate culturally rich visual outputs across **India's regions, festivals, communities, food, clothing, public spaces and everyday life**.
- **How it works:**
  - Users can **type an idea, upload an image, generate a video**, and continue the story through additional clips.
  - One prompt can become a lesson, an ad, a guide, a film or a memory.

### About Avataar

- **Avataar is an AI-native transformation company building domain-specialized AI products** that help enterprises drive efficiency, unlock new operating models and build defensible IP-led capabilities.
- The company is **focused on applying AI to real-world business and consumer use cases across high-growth markets**.
- Avataar was among the companies **selected under the IndiaAI Mission** to develop indigenous AI capabilities using subsidized national computing infrastructure.

### About Distilled Video Generation

- **Distilled video generation** is a **machine learning model-compression technique** in which a **smaller, faster student model** learns to **replicate the outputs** of a larger, more computationally intensive **teacher model**.
- The process transfers the **teacher model's capabilities to the student** while reducing redundant computations and improving efficiency.
- **Traditional video generation models** often require **50 or more iterative denoising steps** to transform noisy inputs into high-quality video outputs.

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- Through distillation, the student model learns to approximate the same results using only a **few denoising iterations**, significantly accelerating the generation process.
- This approach enables **faster inference**, lower computational costs, and comparable output quality to the original teacher model.

### Key Facts about France

**News:** Prime Minister Narendra Modi visited France to begin his two-nation European visit, which includes high-level meetings, innovation-related events, and participation in the G7 Summit.

### Key Facts about France



Source: World Atlas

- **Location:** France is a country located in northwestern Europe.
- **Bordering states:** It shares land boundaries with eight countries, which encompass Italy, Germany, Belgium, Spain, Monaco, Andorra, Switzerland, and Luxembourg.
- It is also **bounded by the Bay of Biscay (North Atlantic Ocean) in the west, by the English Channel in the northwest and by the Mediterranean Sea in the south.**
- **Maritime borders:** It also shares **maritime borders** with the **UK in the north.**

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- Its physiography is **composed of relatively low-lying plains, plateaus, and older mountain blocks, or massifs.**
- **Climate:** France has a **temperate climate** with regional variation.
- **Major Rivers:** The **Loire River and Seine River** are the major rivers of France.
- **Major Mountain Ranges:** France is home to the **Alps in the south, the Jura Mountains** to the north of the Alps, and the **Pyrenees**, which form the border with Spain.
- **Natural Resources:** It has significant mineral resources, including **coal, iron ore, bauxite, zinc, uranium, antimony, arsenic, potash, feldspar, fluorspar, and gypsum.**

### Thamirabarani River

**News:** The Thamirabarani River is home to otters, but their numbers are declining due to habitat loss, raising concerns about the river's ecological health.

#### About Thamirabarani River

- It is a **perennial river flowing in Tamil Nadu.**
- **Origin:** It originates from the **Agastyarkoodam peak of the Pothigai hills of the Western Ghats, above Papanasam in the Ambasamudram Taluk.**
- **Course of the river:** It flows through **Tirunelveli and Thoothukudi districts of the Tamil Nadu state of Southern India** into the **Gulf of Mannar.**
- **Length:** It is about **128km long.**
- **Drainage:** Along with its tributaries, **it drains an area of nearly 4,400 square kilometres.**
- **Tributaries:** It includes the **Manimuthar, Gadananathi, Pachaiyar, Chittar, Karaiyar, and Servalar**
- **Anicut situated on the river:** The **anicut** constructed on the river are **Kodaimelaalagain anicut, Nathiyunni anicut, Kannadian anicut, Ariyanayagipuram anicut, Palavur anicut, Suthamalli anicut and Marudur anicut.**
- **Associated waterfall:** The river forms waterfalls such as **Paanatheertham Falls near the Karaiyar Reservoir, Kalyanatheertham and Agasthiar Falls near Papanasam.**
- **Historical context:**
  - Sanskrit texts such as the **Mahabharata, Ramayana and various Puranas describe it as a sacred river.**

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- The **Porunai or Thamirabarani river** is mentioned several times in **Sangam-era literature**.
- It has been mentioned as **Porunai, Than Porunai, Porunal and Poruntham in Tamil literature** from the Sangam era.
- It has been referred to as Porunai in Tholkappiam, an ancient treatise on Tamil grammar.
- It is also referred to as **Porunai in the Sangam work Puranaanooru**.
- **Purananooru, Tamil Sangam literature**, describes the present-day 'Thamirabarani' as 'Than Porunai'.
- **Pandyan Kingdom:** During the Early Pandyan period, it served as a **vital centre for pearl fishing, conch collection, agriculture, and maritime commerce, fostering trade connections** between southern India and Sri Lanka.
- **Korkai, located at the mouth of the river**, was an **important Pandyan port** famous for its pearl trade.

### AN-32 Aircraft

**News:** An Indian Air Force AN-32 transport aircraft crashed near Jorhat, Assam, resulting in the death of five personnel.

### About AN-32 Aircraft



Source: India Today

- **About:** The Antonov AN-32 is a rugged, twin-engine turboprop military transport aircraft.
- It serves as the “workhorse” of the Indian Air Force.
- It was **built in the Soviet Union** specifically for Indian requirements.
- **Induction year:** It was **inducted in 1984**.
- The Indian Air Force **operates a fleet of about 100 of these aircraft**.
- **Features:**
  - It is **designed to excel in extreme environments**, functioning perfectly in high-altitude airfields and hot tropical climates.
  - It is **designed by mating the reliable and rugged airframe of the An-26** with more powerful engines.
  - This enables operations in **high-altitude airfields in Ladakh and Arunachal Pradesh**, making it indispensable for missions over the Himalayas and the Siachen Glacier.
  - It equips **six squadrons of the IAF, which are the 12, 25, 33, 43, 48 and 49 squadrons**.
    - Of these, 49 squadrons of the IAF are located in Jorhat in Assam.

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- It can **transport up to 7.5 tons of cargo, 50 passengers, or 42 paratroopers**, and conduct humanitarian missions such as disaster relief and medical evacuations.
- It has also been **part of India's green energy push, successfully flying on bio-jet fuel blends**.

### About Other Transport Aircraft of Indian Airforce

Transport Aircraft	Details
Boeing C-17 Globemaster III	<ul style="list-style-type: none"><li>● It is a <b>high-wing, 4-engine, military transport aircraft</b>.</li><li>● It was inducted into <b>service in 2013</b>.</li><li>● It is <b>capable of carrying large equipment like armoured vehicles, supplies, and troops</b> to a small airfield in harsh terrain anywhere in the world, either in the day or at night.</li></ul>
C-130 J Super Hercules	<ul style="list-style-type: none"><li>● It is a <b>4-engine, turboprop military transport aircraft</b>.</li><li>● It was <b>inducted into service in 2011</b>.</li><li>● It is the <b>best aircraft available for tactical airlift</b> and a premier aircraft used during the war for frontline paradrop near border areas.</li><li>● It is <b>also the most suitable aircraft for special operations</b> because of its short takeoff and landing capabilities.</li><li>● It is also <b>capable of taking off and landing on an unprepared runway</b>.</li><li>● Its <b>low-flying capabilities</b> make it favourable for para dropping, as it can easily escape from enemies' radar.</li><li>● Also, it is <b>used for dropping relief materials during disasters</b>.</li></ul>

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<b>Ilyushin IL-76</b>	<ul style="list-style-type: none"><li>● It is a <b>medium-range, 4-engine turboprop military transport aircraft.</b></li><li>● It has been in service with the <b>IAF since 1985.</b></li><li>● It is <b>capable of para drop and the carriage of troops, and combat materials with crew and armaments</b>, including medium-sized battle tanks, cargo airlifting for troops and also transport for disaster relief operations.</li><li>● It <b>can also be operated from unpaved runways in forward areas of operation.</b></li></ul>
<b>Dornier Do 228</b>	<ul style="list-style-type: none"><li>● It is a <b>twin-engine turboprop, multi-role, military transport aircraft.</b></li><li>● It is a <b>type of STOL (Short takeoff and landing) aircraft</b>, which requires a takeoff runway of only 792 m and a landing runway of only for 451 m.</li><li>● It has been <b>in service with the IAF since 1986.</b></li><li>● It <b>can be deployed in passenger and cargo transportation</b>, as an air taxi, for aircrew training, maritime surveillance, search and rescue missions, border patrol, and medical evacuation missions.</li></ul>

### Memflation

**News: Memflation has gained attention because rising memory chip prices are increasing the prices of electronic goods and adding pressure on retail inflation.**

#### About Memflation

- **Memflation (a combination of “memory” and “inflation”)** refers to the rapid and structural rise in the prices of semiconductor memory chips, such as **DRAM (Dynamic Random-Access Memory) and NAND flash memory.**
- **Coined by: Memflation was coined by market research firm Gartner.**
- **The Root Cause:**

## Factly Compilation June 2026

- **AI Infrastructure Boom:** Rapid growth of AI systems, data centres, and high-performance computing has sharply increased demand for advanced memory chips.
- **Shift in Manufacturing Capacity:** Semiconductor companies are diverting production capacity from conventional memory chips to high-margin AI-related memory products.
- **Supply Shortage of Memory Chips:** Reduced production of DRAM and NAND memory chips has created shortages in consumer electronics markets.
- **Slow Capacity Expansion:** Semiconductor manufacturing expansion is costly and time-consuming, delaying the restoration of adequate supply.
- **Global Impact:**
  - **Higher Hardware Costs:** Rising memory prices are increasing the cost of laptops, servers, and other hardware products.
  - **Supply Chain Disruptions:** Semiconductor shortages are causing supply chain disruptions and shipment delays.
  - **Delayed Technology Demand:** Industry experts warn that non-AI technology demand may remain weak until around 2028.
- **Impact on India:**
  - **Costlier Electronic Devices:** Rising memory chip prices are increasing the prices of smartphones and other electronic goods.
  - **Pressure on Smartphone Segment:** Supply shortages are affecting budget smartphone segments and raising manufacturing costs.
  - **Import Dependence Risk:** India's dependence on imported semiconductor components increases its vulnerability to global disruptions.
  - **Challenge to Manufacturing Goals:** Persistent shortages may affect goals under Make in India, the Production Linked Incentive (PLI) Scheme, and the India Semiconductor Mission (ISM).
  - **Higher Inflation Risk:** Continued increases in electronics prices may add further pressure on retail inflation in India.

## Bharat Innovates 2026

**News: Prime Minister Narendra Modi and French President Emmanuel Macron jointly inaugurated Bharat Innovates 2026 in Nice, France.**

### About Bharat Innovates 2026

- **Bharat Innovates 2026:** It is a global platform that showcases India's deep-tech innovators and startups to global investors, industry leaders, universities, research organisations, corporations, and government stakeholders, while promoting innovation-led partnerships and international collaboration.
- **Nodal Ministry:** The initiative is organized by the Ministry of Education, Government of India.
- **Organizer:** The initiative is organized by the Ministry of Education with strategic guidance from the Office of the Principal Scientific Adviser (PSA)
- **Bilateral Aegis:** The initiative is organized under the India-France Year of Innovation.
- **Objectives:** The initiative aims to showcase Indian deep-tech innovations, connect startups and institutions with global investors, and promote international technology collaboration.
- **Eligibility:**
  - **Student-Faculty Teams:** Student-faculty teams working in research laboratories or pre-incubators of Ministry of Education-affiliated Higher Education Institutions (HEIs) or Centrally Funded Technical Institutes (CFTIs) are eligible to apply.
  - **Innovator and Independent Teams:** Innovator teams and independent innovators associated with the innovation ecosystem of HEIs or CFTIs can participate.
  - **Startups and Ventures:** Startups must be legally registered in India, and Indian founders must hold more than 51% ownership.
- **Key Features:**
  - **Global Participation:** The summit brings together 120 selected deep-tech startups, over 15 Institutes of Excellence, and more than 350 global investors and venture capitalists.
  - **Incubator & Innovation Bridge:** It supports incubation, research translation, mentoring, and cross-border startup immersion.
  - **Industry Innovation Bridge:** It connects mature startups with corporates for PoCs, IP licensing, technology transfer, and international market entry.

- **The 13 Frontier Technology Domains:**The initiative concentrates on research and development-backed solutions across 13 technology domains, including Advanced Computing, Semiconductors, Space & Defence, Biotechnology, Healthcare & MedTech, Energy, Sustainability & Climate Change, Smart Cities & Mobility, Advanced Materials & Critical Minerals, Manufacturing & Industry 4.0, Next-Generation Communications, Blue Economy, and Agri & Food Technologies and Disaster Management.

### GI Tag Products from Jharkhand

**News:** Jharkhand's Bhagaiya silk, Kuchai silk, Munda jewellery, and bamboo craft products have received Geographical Indication (GI) tag recognition.

#### About GI Tag Products from Jharkhand

##### 1. Bhagaiya Silk:

- **Identity:** Bhagaiya silk is a **hand-spun silk textile of Jharkhand**.
- **Community Association:** It is mainly woven by **Santhal tribal women**.
- **Uniqueness:** The silk is deeply rooted in indigenous craftsmanship and local knowledge systems and represents generations of traditional skills preserved within rural communities.

##### 2. Kuchai Silk:

- **Identity:** Kuchai silk is a traditional tussar silk of Jharkhand.
- **Origin:** The silk tradition **originated in the village of Kuchai in Seraikela-Kharsawan** and later spread across Jharkhand.
- **Uniqueness:** It is produced through wild Tussar silk **cultivation using tussar silkworms reared on Asan and Arjun trees**.

##### 3. Munda Jewellery:

- **Tribal Craftsmanship:** Munda jewellery is a distinctive artistic **tradition of the Munda tribal community**.
- **Uniqueness:** It is **characterised by unique geometric patterns, nature-inspired motifs**, and distinctive craftsmanship.

##### 4. Jharkhand Bamboo Craft:

- **Local Resource:** The craft is made from locally available bamboo and produces utility and decorative items.
- **Community Association:** The craft is primarily practiced by indigenous tribes such as the Santhal, Ho, Gond, and Pahariya
- **Sustainable Livelihood:** It supports rural artisans and promotes bamboo-based entrepreneurship.

#### About GI Tag

- **Geographical Indication (GI) tag:** It is an official intellectual property sign used on products that have a specific geographical origin and possess qualities, characteristics, or a reputation linked to that place of origin.
- GI is governed under the Agreement on TRIPS at the World Trade Organisation (WTO).
- In India, GI registrations are governed by the **Geographical Indications of Goods (Registration and Protection) Act, 1999**.

## Drop Shipping

**News:** Growing concerns over AI-created online storefronts and unverified sellers have brought renewed attention to drop shipping practices.

### About Drop Shipping

Drop shipping is a retail model where sellers accept customer orders without storing the products they sell.

### Working Mechanism:

- **Business Arrangement:** The seller enters into an agreement with a wholesaler, manufacturer, or another retailer for supplying the advertised products.
- **Customer Order Process:** Customers place orders through an online platform, after which the seller receives the order and sends a confirmation.
- **Transfer of Order:** The seller passes the customer's order details to the wholesaler, manufacturer, or retailer responsible for fulfillment.
- **Direct Delivery:** The supplier dispatches the product directly to the customer, who then receives the ordered item.

### Key Features:

- **No Inventory Requirement:** The seller does not keep products in stock and purchases them only after receiving customer orders.
- **Intermediary Role:** A dropshipper acts as a link between consumers and suppliers by promoting and selling products.
- **Profit Through Pricing:** Since the dropshipper is a middleman, the product may be sold at a higher price, and the profit is retained by the seller.
- **Low Business Cost:** The model reduces expenses related to warehouse storage and unsold inventory and requires relatively low capital investment.

### Major Concern:

- **Lack of Transparency:** Buyers may not check the actual origin of the product or reviews of the seller before making a purchase.
- **Misleading Online Presence:** Customers may pay to a seller whose business is only a webpage and who does not own any product inventory.

## Xuanzang (Hiuen Tsang)-Chinese Buddhist monk and scholar

**News:** India and China are in talks to jointly nominate The Great Tang Records on the Western Regions, authored by Xuanzang (Hiuen Tsang), Chinese Buddhist monk and scholar, for recognition by UNESCO.

### About Xuanzang (Hiuen Tsang)-Chinese Buddhist monk and scholar



Figure 12. Source: The Print

- Hiuen Tsang (Xuanzang) was a **Chinese traveller, scholar and Buddhist monk**.
- **His travel to India:** He travelled from China to India in the **7th century to study at the Nalanda University, collect manuscripts of the true teachings of Buddha, and visit the sacred places associated with Buddha.**
  - He studied under the famous **scholar Shilabhadra at Nalanda University** and learned **subjects like logic, grammar, philosophy, and Sanskrit.**

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- He spent 16-17 years on his entire journey across Central Asia and India.
- **Visited during the reign of:** He came during the **reign of King Harshavardhana (also known as King Harsha) of the Vardhana Dynasty.**
- **Literary contribution:** He authored **Great Tang Records on the Western Regions**, also known as **Si-Yu-Ki. ("The Buddhist Records of the Western World")**. He referred to Vadnagar, located in Gujarat, as "**Anandapura**" in his **travelogue Si-Yu-Ki.**
  - One of the most **influential scriptures translated by Xuanzang was the Heart Sutra (Prajñāpāramitāhṛdaya Sūtra).** It is **widely recognised for expressing the Mahāyāna Buddhist teaching of emptiness.** It is also **regarded as a powerful protective talisman.**
- **Significance:**
  - He gave a **detailed account of the kingdoms and towns he visited in India,** including the city of Kanauj, the capital of King Harsavardhana's empire.
  - His **account is also exceptional because of his meticulous records of Buddhist sites** such as Bamiyan and Nalanda.
  - His account provides **insight into the political, diplomatic and religious activities** undertaken by contemporary rulers in Central and South Asia.

## Energy Storage Technologies

**News:** Defence Minister Rajnath Singh approved a 250 MW solar project with Battery Energy Storage System in Sitapur, Uttar Pradesh.

### About Energy Storage Technologies

- **Energy storage technologies store excess renewable electricity and supply it later when demand rises** and power generation remains low.
- **Status of Energy Storage Capacity:**
  - **Global Leader:** China continues to dominate energy storage deployment, accounting for about 60% of new installations in 2025, followed by the United States at 16%.
  - **Major Technologies:** Globally, **Pumped Hydro Storage (PHS) and Battery Energy Storage Systems (BESS)** are the two most widely deployed electricity storage technologies.
  - **India's Current Capacity:** India has **approximately 7 GW of operational Pumped Storage Project (PSP) capacity and less than 1 GW of operational Battery Energy Storage System (BESS) capacity.**
  - **Future Target:** India has planned a total energy storage capacity of 174 GW, including **80 GW of BESS and 94 GW of Pumped Hydro Storage (PHS),** to support 509 GW of solar capacity and 155 GW of wind capacity by 2036.
- **Types of Energy Storage Technology:**
  - **Pumped Hydro Storage (PHS):** This technology **uses surplus electricity to pump water from a lower reservoir to a higher reservoir.** When demand increases, the stored water is released through turbines to generate electricity.
  - **Battery Energy Storage System (BESS):** This technology **stores electricity chemically and releases it when required.** Lithium-ion batteries, especially Lithium Iron Phosphate (LFP) batteries, are widely used because of their high efficiency, lower costs, and long operational life.
  - **Concentrating Solar-Thermal Storage:** This technology **uses mirrors to focus sunlight onto a receiver.** The generated heat is stored using materials such as molten salt and later used to produce electricity.

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- **Compressed-Air Energy Storage:** This technology stores compressed air in underground caverns or tanks and releases it later to drive turbines for electricity generation.
- **Flywheel and Gravity Energy Storage:** Flywheel systems store electricity as rotational energy, while gravity systems store energy by lifting heavy weights and generating electricity when the weights are lowered.
- **India's Initiatives:**
  - **Advanced Chemistry Cell (ACC) PLI Scheme:** This Rs.18,100 crore scheme aims to establish 50 GWh of domestic battery manufacturing capacity.
  - **Viability Gap Funding (VGF) Scheme:** This scheme provides financial support to improve the commercial viability of BESS projects.
  - **Energy Storage Obligations (ESO):** DISCOMs are required to source a specified share of electricity from storage-backed systems, reaching 4% by 2030.
  - **Round-the-Clock (RTC) and FDRE Tenders:** Renewable energy agencies are promoting contracts that require developers to integrate battery storage for reliable power supply.
  - **ISTS Charges Waiver:** The government has waived inter-state transmission system (ISTS) charges for electricity used by energy storage systems, making it cheaper to transport stored green energy across states.
  - **Battery Storage Vision:** Under the India Battery Storage Vision 2047, ministries are developing a policy framework to provide financial support and interest subventions for long-duration energy storage technologies.

## Padma Barrage

**News:** Bangladesh recently approved the construction of the Padma Barrage before the 1996 Ganga Water Sharing Treaty expires in December 2026.

### About Padma Barrage

- **Location:** Padma Barrage is a major river engineering project proposed on the Padma River (the Bangladesh stretch of the Ganga) in Bangladesh.
- **Objective:** The project aims to control the Padma River, reduce seasonal water scarcity, and address salinity intrusion caused by reduced dry-season flows.
- **Timeline:** The project is expected to take around a decade to complete, with Phase-1 planned from 2026 to 2033.
- **Key Features:**
  - **Length:** The main barrage will be approximately 2.1 km long and will include spillways, undersluices, navigation locks, fish passages, and embankments
  - **Hydropower Generation:** The barrage will have an embedded hydropower plant with a generation capacity of 113 MW.
  - **Coverage and Impact:** The project is projected to influence nearly 37% of Bangladesh's land area.

### India-Bangladesh Dimension:

- **Link with Farakka Barrage:** The project is closely linked to concerns over reduced dry-season flows in Bangladesh, which are often attributed to the operation of the Farakka Barrage. Consequently, the Padma Barrage has important implications for transboundary water management between India and Bangladesh.

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- **Water Sharing Treaty:** The 1996 Ganga Water Sharing Treaty between India and Bangladesh is scheduled to expire in December 2026.

### About Farakka Barrage

- **Location:** It is located on the Ganga River in the Murshidabad and Malda districts of West Bengal.
- **Purpose:** It was constructed to divert water into the Bhagirathi-Hooghly River system and maintain the navigability of Kolkata Port.
- **Feeder Canal:** It has a feeder canal with a designed flow capacity of 40,000 cusecs.

## International Day of Yoga 2026

**News:** Union AYUSH Minister Prataprao Jadhav announced that the main national event of International Day of Yoga 2026 will be held in Kolkata.

### About International Day of Yoga 2026

- International Day of Yoga is a **global observance** that **promotes awareness about the benefits of yoga** for health and well-being.
- **Origin:** It began in 2014 after the **United Nations General Assembly** unanimously adopted a resolution declaring **21 June as the International Day of Yoga**.
  - The **first International Day of Yoga** was observed worldwide on **21 June 2015**.
- **Edition (2026):** The year 2026 marks the **12th edition of the International Day of Yoga**.
- **Host City:** **Kolkata** has been selected to host the main national celebrations of International Day of Yoga 2026.
- **Nodal Ministry:** The **Ministry of Ayush** is the nodal ministry for the International Day of Yoga.
- **Theme (2026):** The theme for International Day of Yoga 2026 is **“Yoga for Healthy Ageing.”**
- **Objectives:** The observance aims to **promote yoga as a means of achieving physical fitness, mental well-being, holistic health, and healthy ageing**.
- **Key Aspects of International Day of Yoga 2026:**
  - **Global Participation:** More than **210 Indian missions abroad** are organizing **Yoga Day** programmes at nearly 2,500 locations worldwide, reflecting growing global participation.
  - **Health and Wellness Focus:** The theme highlights the **role of yoga in helping people lead healthy, active, self-reliant, and mentally resilient lives as they age**.
  - **Nationwide Outreach:** The **Ministry of Culture** is organizing **special events at 100 iconic and heritage sites** to connect yoga traditions with India’s cultural legacy.

## DengiAll Vaccine

**News:** Concerns have emerged over DengiAll after severe adverse events during Brazil’s Butantan-DV dengue vaccination campaign.

### About DengiAll Vaccine

- **DengiAll:** It is **India’s indigenous tetravalent dengue vaccine** designed to **protect against all four dengue virus** serotypes.
- **Developed by:** DengiAll has been **developed by Panacea Biotec** in collaboration with the **Indian Council of Medical Research (ICMR)**.
- **Vaccine Type:** DengiAll is a **live-attenuated tetravalent dengue vaccine** that combines weakened forms of **DENV-1, DENV-2, DENV-3, and DENV-4**.

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- **Live-Attenuated Vaccines:** These vaccines contain weakened forms of pathogens that can trigger a strong and long-lasting immune response without causing illness in healthy individuals.
- **Current Status:** The Phase 3 clinical trial of DengiAll was conducted in 2024 with more than 10,335 participants across 19 sites in 18 States and Union Territories.
- **Dosing:** DengiAll is a two-dose vaccine followed by two years of medical follow-up.
- **Efficiency:** Early Phase 1 and Phase 2 clinical trials demonstrated an efficacy rate of 77% to 82% and showed a balanced antibody response against all four dengue virus serotypes, indicating promising protection against dengue infection.
- **NIH-Based Technology:** It is derived from the TV003/TV005 strain originally developed by the U.S. National Institutes of Health (NIH).

### About Dengue

- **Nature of Disease:** Dengue, also known as break-bone fever, is a mosquito-borne viral infection.
- **Occurrence:** It is more common in tropical and subtropical regions, especially in urban and semi-urban areas.
- **Transmission:** The disease spreads through the bite of infected Aedes mosquitoes carrying one of the four dengue virus serotypes.
- **Serotypes:** The dengue virus has four serotypes—DENV-1, DENV-2, DENV-3, and DENV-4—and all four serotypes are known to circulate in India.
- **Symptoms:** Common symptoms include high fever, headache, body aches, nausea, and rash, while severe cases may cause bleeding and breathing difficulties.
- **Treatment:** There is no specific medicine for dengue, and treatment mainly involves pain relief, rest, and adequate fluid intake.

## The 52nd G7 Summit

**News:** Prime Minister Narendra Modi is participating in the ongoing 52nd G7 Summit in Evian, France, to discuss key global issues.

### About The 52nd G7 Summit



Figure 13. Source- Indiastrategic

- The 52nd edition of the G7 Summit is being held under the French G7 Presidency
- **Host City & Country:** Évian-les-Bains, France is hosting the 52nd G7 Summit.
- **Duration:** The summit is being held from 15 June to 17 June 2026.
- **Theme:** The theme of the 52nd G7 summit is “Working Together to Address Major International Challenges.”
- **G7 Member Countries:** The G7 consists of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
  - The European Union also participates permanently in the forum.
- **Guest Countries for 2026:** The invited guest countries for the 2026 summit are India, China, South Korea, Kenya, and Brazil.

- **Core Agenda:**

- **Global Challenges:** Leaders are discussing major international challenges and rebuilding international solidarity.
- **Geopolitical Issues:** The summit is focusing on the Middle East, Ukraine, regional conflicts, and global stability.
- **Artificial Intelligence and Social Media:** Discussions are being held on security risks related to AI and social media.
- **Cyber Security:** Leaders are examining ways to improve cyber security and protect children and democracies.
- **Global Imbalances and Crime:** The summit is addressing global imbalances, organized crime, and illicit flows.

**About G7 Summit**

- **Nature of the Forum:** The G7 is an **intergovernmental political and economic forum** that **brings together some of the world's most advanced industrialized economies** to discuss **major global issues**.
- **Origin:** The group **originated from an informal gathering of finance ministers and leaders in 1973** to coordinate responses to global oil shocks and economic challenges.
  - It later **evolved into a high-level international forum**.
- **Purpose:** The summit serves as a **platform for political and economic coordination** among member countries.
  - It helps **leaders discuss trade, security, economic issues, climate change, and other global challenges**.
- **Evolution:** The **group expanded into the G8 with the inclusion of Russia in 1998**.
  - It returned to the G7 format **in 2014 after Russia's participation was suspended**.

**Ballistic Missile Defence (BMD) system**

**News:** In a significant development, the Defence Research and Development Organisation (DRDO) successfully tested a Multi-layered Ballistic Missile Defence (BMD) capability.

**About Ballistic Missile Defence (BMD) system**



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Source: India Today

- A **Ballistic Missile Defence (BMD) system** is an **advanced network of radars, command centres, and interceptor missiles** designed to detect, track, and neutralise incoming ballistic missiles.
- **Initiated in:** The BMD program was **launched in 1999** in the **aftermath of Pakistan's 1998 nuclear tests**.
- **Component:** It consists of several **launch vehicles, specialised long-range radars, Launch Control Centres (LCC), and the Mission Control Centre (MCC)**.
- **Features:**
  - **Technology:** It relies on the indigenous **Long Range Tracking Radar (LRTR)**, which was developed **using technology derived from the Green Pine radar produced by Israel Aerospace Industries**.
  - **Dual-Altitude Tiered Architecture: It works on two levels:**
    - **Endo-atmospheric** (within Earth's atmosphere) and e
    - **Exo-atmospheric** (the space stretching beyond Earth's atmosphere).
  - **Three Phases:**
    - **Phase I:** It consists of the **Prithvi Defence Vehicle and Advanced Air Defence interceptors, which can engage targets at altitudes of approximately 100 kilometers (62 miles) and 25 kilometers (15.53 miles), respectively**.
    - **Phase II:** The Phase-II architecture significantly **expands the defensive envelope by targeting ballistic missiles within the 5,000-kilometre class**, including Intermediate-Range Ballistic Missiles and selected Intercontinental Ballistic Missile-level threat profiles.
      - The system **comprises two interceptors, AD-1 and AD-2** designed to engage ballistic missile threats in both the **endo-atmospheric and exo-atmospheric phases of flight**.
      - **AD-1 missile** is a **long-range interceptor missile** designed for both low exo-atmospheric and endo-atmospheric interception of long-range ballistic missiles as well as aircraft.
      - **AD-2 missile** is **capable of intercepting intermediate-range ballistic missiles (3000-5500 km)**.
    - **Phase III:** Phase III will see the **development of two new interceptor missiles, which are internally called AD-AH and AD-AM**.
      - **AD-AH** is designed to address the challenges of **intercepting hypersonic glide vehicles (HGVs)**, which can maneuver unpredictably and alter their flight path during transit.
      - **AD-AM** is **optimized for countering hypersonic cruise missiles (HCMs)**, which sustain extremely high speeds while operating within the Earth's atmosphere.
- **Significance:**
  - It is designed to **intercept hypersonic weapons and maneuverable hypersonic glide vehicles** that can alter their trajectory during flight.
  - The system is also intended to counter missiles equipped with **Multiple Independently Targetable Re-entry Vehicle (MIRV) technology**.
  - By addressing MIRV threats, **the system can defend against attacks aimed at multiple targets spread across a wide geographical area** using a single missile launch.

## Greater Hog Badger

**News:** The Kaziranga National Park and Tiger Reserve has released the first scientific assessment report on the greater hog badger.

### About Greater Hog Badger



Aspects	Details
About	<ul style="list-style-type: none"> <li>● The greater hog badger is a <b>terrestrial mustelid</b>.</li> <li>● Globally, it has three living species: <b>the greater hog badger, the northern hog badger (<i>Arctonyx albogularis</i>), and the Sumatran hog badger (<i>Arctonyx hoevenii</i>)</b>. The first two are found in India</li> <li>● In Assamese, it is referred to as <b>“Mati Gahori.”</b></li> </ul>
Scientific name	Its scientific name is <b>Arctonyx collaris</b> .
Habitat	It prefers living in <b>tropical evergreen forests, savannas, grasslands, shrubland, hills, and mountains</b> .
Distribution	<ul style="list-style-type: none"> <li>● It is native to Southeast Asia.</li> <li>● Its geographic range stretches from <b>Bangladesh and northeastern India eastward through Myanmar, Thailand, Laos (Lao PDR), and Vietnam</b>. <ul style="list-style-type: none"> <li>○ They are found in the <b>Terai of the Indian subcontinent</b>, from the Yamuna River east, through the states of <b>Haryana, Uttarakhand, Uttar Pradesh, Bihar, Assam and West Bengal</b>.</li> </ul> </li> </ul>
Features	<ul style="list-style-type: none"> <li>● It is one of the <b>world’s largest terrestrial extant mustelids (by average body mass)</b>.</li> <li>● It has medium-length brown hair, a stocky body, a white throat, two black stripes on an elongated white snout, and a pink, pig-like nose.</li> <li>● The body weight is 7–14 kg.</li> </ul>

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	<ul style="list-style-type: none"><li>● Its appearance <b>generally resembles the European badger</b>, but have a <b>pronounced pig-like snout and larger claws on the front feet</b>.</li><li>● Its tail has <b>long white hairs</b>, and its <b>front feet have white claws</b>.</li></ul>
Diet	It is <b>omnivorous</b> . Its diet consists of <b>fruits, roots and small animals</b> .
Behaviour	<ul style="list-style-type: none"><li>● It is a <b>nocturnal and terrestrial mammal</b> that is <b>highly shy and typically lives a solitary life</b>.</li><li>● It is <b>territorial and uses scent markings on grass, rocks, and tree trunks</b> to define its territory.</li><li>● It is <b>skilled at digging and creating underground burrows for shelter and forage</b> by excavating the soil in search of food.</li></ul>
Ecological Significance	<ul style="list-style-type: none"><li>● It is an <b>ecologically important mesocarnivore</b>.</li><li>● It <b>contributes to ecosystem functioning through soil disturbance, nutrient redistribution, and the turnover of leaf litter during foraging activities</b>.</li><li>● Its digging behaviour <b>enhances soil aeration and may facilitate seed germination and microhabitat formation</b> for invertebrates and small vertebrates.</li></ul>
Threat	Its global population is <b>declining due to habitat loss and high levels of poaching</b> .
Conservation status	<ul style="list-style-type: none"><li>● <b>IUCN: Vulnerable</b></li><li>● <b>Wildlife Protection Act of 1972: Schedule I</b></li></ul>

### National Statistical Commission (NSC)

**News:** The Appointments Committee of the Cabinet (ACC) approved the appointment of the Chairperson and Members of the National Statistical Commission (NSC).

#### About National Statistical Commission (NSC)



Source – MoSPI

- **National Statistical Commission (NSC)** is an **autonomous advisory body** that serves as the **nodal agency for core statistical activities in India**.

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- **Establishment:** India established the NSC in 2005 through a Resolution on the recommendations of the Rangarajan Commission.
- **Parent Ministry:** It functions under the **Ministry of Statistics and Programme Implementation (MoSPI)**.
- **Structure and Composition:**
  - **Chairperson and Members:** The Commission consists of a **part-time Chairperson** and **four part-time Members** with specialization and experience in statistical fields.
  - **Appointment:** The Chairperson and Members of the Commission are appointed with the **approval of the Appointments Committee of the Cabinet (ACC)**.
  - **Current Appointments:** **Dr. Saibal Chattopadhyay has been appointed Chairperson**, while Prof. Shubhabrata Das, Shri Satyendra Bahadur Singh, and Dr. Madhavan Mukund have been appointed as Members.
  - **Ex-officio Member:** The **CEO of NITI Aayog serves as a permanent, ex-officio Member** of the Commission.
  - **Secretary:** The **Chief Statistician of India** serves as the Secretary of the Commission.
- **Key Functions:**
  - **Policy Formulation:** The NSC evolves national policies, priorities, concepts, definitions, and methodologies relating to statistics.
  - **Quality Standards:** The Commission **lays down national quality standards and recommends measures** for their effective implementation.
  - **Statistical Coordination:** The NSC **promotes coordination** among Ministries, Departments, State Governments, and Union Territory Administrations.
  - **Monitoring and Audit:** The Commission **reviews the statistical system and undertakes statistical audits** to ensure quality and integrity of statistical products.

## WT-MARUT

**News:** Union Minister Pralhad Joshi launched the WT-MARUT Portal during the Global Wind Day 2026 National Conference in Goa.

### About WT-MARUT



Source – PIB

- **WT-MARUT:** Wind Turbine Materials and Resources Utility Tracker (WT-MARUT) is India's first dedicated digital platform for managing and streamlining the wind energy supply chain.
- **Launched by:** The portal was launched by **Union Minister for New and Renewable Energy (MNRE)**

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- **Developed by:** The portal was developed jointly by the Ministry of New and Renewable Energy (MNRE) and the Indian Wind Turbine Manufacturers Association (IWTMA).
- **Objective:** The portal aims to strengthen the domestic wind manufacturing ecosystem, streamline the wind energy supply chain, improve transparency, support supplier access, and promote India's clean energy transition.
- **Key Features:**
  - **Supply Chain Visibility:** The portal is designed to improve visibility across the wind energy supply chain and strengthen collaboration among stakeholders.
  - **Domestic Sourcing Support:** The platform facilitates compliance with domestic sourcing requirements under the Approved List of Models and Manufacturers (ALMM) framework.
  - **Supplier Discovery and Qualification:** The portal helps users identify and qualify suppliers and provides easier access to domestic suppliers.
  - **Transparency and Export Readiness:** The platform improves transparency in component sourcing, enhances data security, and supports export readiness for the wind energy sector.

## World Day to Combat Desertification and Drought

**News:** World Day to Combat Desertification and Drought was recently observed to raise awareness and promote action against desertification, land degradation and drought

### About World Day to Combat Desertification and Drought



Source: United Nations

- World Day to Combat Desertification and Drought is **observed every year on 17 June** under the United Nations Convention to Combat Desertification (UNCCD).
- **Objective:** It is observed to spread awareness about international cooperation to combat desertification and the effects of drought.
  - It also **reminds people that desertification can be effectively tackled, solutions are possible and important** is participation and cooperation at all levels are important.

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- **Theme for 2026:** The theme for this year is “Rangelands: Recognise. Respect. “Restore”.”
  - It calls for **greater recognition of the economic, ecological and cultural value of rangelands, respect for their traditional stewards and stronger investment** in restoring degraded rangelands.

### About United Nations Convention to Combat Desertification (UNCCD)

- The United Nations Convention to Combat Desertification (UNCCD) is the **sole legally binding international agreement** linking environment and development to sustainable land management.
- **Establish year:** It was **established in 1994**.
- **Parties:** **197 countries and the European Union are now Parties to the Convention.**
  - **India signed the UNCCD in October 1994 and ratified it in December 1996. MoEF is the National Coordinating Agency** for the implementation of the UNCCD in the country.
- **Governing body:** The **Conference of the Parties (COP)**, which is the supreme governing body.
- **Purpose:** The Convention addresses **the arid, semi-arid and dry sub-humid areas**, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found.
  - Parties to the convention work together **to improve the living conditions for people in drylands, to maintain and restore land and soil productivity, and to mitigate the effects of drought.**
  - It **facilitates cooperation between developed and developing countries**, particularly around knowledge and technology transfer for sustainable land management.
- It collaborates closely with the other **two Rio Conventions– The Convention on Biological Diversity (CBD) and The United Nations Framework Convention on Climate Change (UNFCCC)**
- India, for the first time, hosted the **14th session of the Conference of the Parties (COP-14) of the United Nations Convention to Combat Desertification (UNCCD)** in September 2019.

### About Rangeland

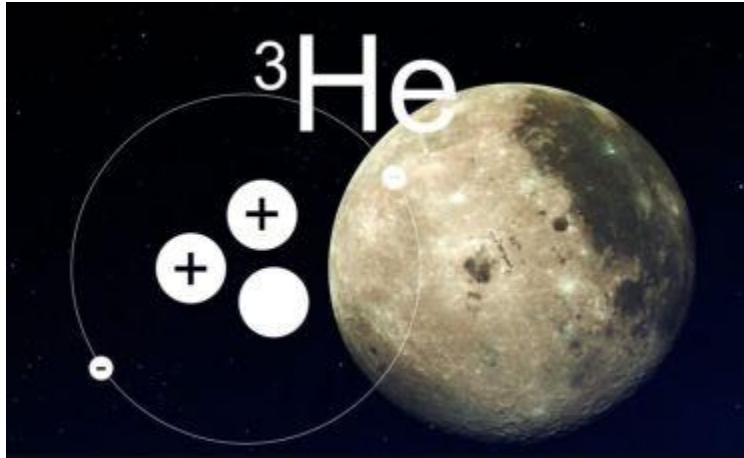
- **Definition:** The UNCCD report defines **rangelands as natural or semi-natural ecosystems that are grazed by livestock or wild animals.**
- Rangelands contain vegetation **such as grasses, shrubs, bushes, open forests, and agroforestry systems (land which contains trees and crops or pastures).**
- **Current status of Rangeland:** Currently, rangelands **cover 80 million sq km of Earth’s terrestrial surface area** (over half of Earth’s land), and are **thus the largest land cover or land use type in the world.**
- **Role:**
  - They act as **carbon sinks (which absorb more carbon from the atmosphere than they release), storehouses of freshwater, and prevent desertification of land.**
  - Millions of people worldwide depend on rangelands for food security and livelihoods.
  - Rangelands generate **16% of global food production and 70% of feed for domesticated herbivores, most significantly in Africa and South America**
- **Status in India:** In India, rangelands occupy about 1.21 million sq km, from the Thar Desert to Himalayan meadows, as per the UNCCD report.

## Helium-3

**News:** Growing demand for Helium-3 has increased interest in lunar mining and the extraction of the isotope from the Moon.

### About Helium-3

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Source – Gold Hydrogen

- **Helium-3** is a **rare isotope of helium** that is considered one of the most valuable substances found in nature.
- **Structure:** Helium-3 **possesses two protons and one neutron in its atomic nucleus**, which distinguishes it from Helium-4 that contains two neutrons.
- **Physical State:** Helium-3 is a **stable, non-radioactive, and chemically inert noble gas**.
  - It acts as a **fermionic superfluid at ultralow temperatures**.
- **Source & Distribution:**
  - **Scarcity on Earth:** Helium-3 is extremely rare on Earth. Most of the current Earthbound supply comes from the **decay of tritium in nuclear weapon stockpiles**.
  - **Lunar Distribution:** Helium-3 is **deposited on the Moon's surface by solar winds** and becomes **embedded in the lunar dust (regolith)**.
  - **Deep Earth Presence:** Small quantities of Helium-3 are **believed to escape from deep within the Earth's core**. Scientists have found **high levels of the isotope in ancient lava rocks**.
- **Terrestrial Scarcity:** Helium-3 is **extremely scarce on Earth**, and future demand may exceed current production capabilities as quantum computing becomes more widespread
- **Applications:**
  - **Quantum Computing:** Helium-3 is an indispensable component in **dilution refrigeration systems and helps achieve millikelvin temperatures** required for operating quantum processors.
  - **Radiation Detection and Security:** Helium-3 has an **exceptionally high absorption cross-section for thermal neutrons**, it acts as a highly efficient converter gas in neutron detectors.
    - These are heavily used in **border crossings and seaports to detect smuggled nuclear materials**.
  - **Medical Diagnostics:** Hyperpolarized Helium-3 is used in **advanced MRI imaging** and provides **detailed lung imaging for pulmonary diagnostics**.
  - **Nuclear Fusion:** Helium-3 is considered a **potential fuel for future nuclear fusion** and is being explored as a clean energy source.
  - **Scientific Research:** Helium-3 is used in **ultra-low-temperature physics, materials research, particle physics, and dark matter investigations**.

## REWARD Program

**News:** The National Rainfed Area Authority (NRAA), knowledge partner to the Department of Land Resources, organised the second national consultation on draft watershed management guidelines under the World Bank-supported REWARD Programme.

### About the REWARD Program



Source: ICAR-IISWC

- Rejuvenating Watersheds for Agricultural Resilience through Innovative Development (REWARD) program **is a Watershed development program.**
- **Nodal Ministry:** The nodal ministry for the Program is the **Ministry of Rural Development.**
  - It is being implemented by the **Department of Land Resources (DoLR), assisted by the World Bank.**
- **Aim:** The program aims **to introduce modern watershed practices in the Department of Land Resources and in the States of Karnataka and Odisha.**
- **Objective:** Its objective is to **strengthen the capacities of National and State institutions** to adopt improved watershed management for increasing farmers' resilience and supporting value chains in selected watersheds of participating States.
- **Duration of the programme:** It is being implemented **from 2021 to 2026 in the States of Karnataka and Odisha.**
- **Key focus areas of REWARD:** The program focuses on **two important result areas:**
  - **Strengthen institutions and supportive policy** for watershed development
  - **Science-based watershed development** for climate resilience and enhanced livelihoods
- **Scope of program:** At the central level, the scope of the REWARD program **covers management, monitoring, communication and knowledge sharing** functions by DoLR.
- **Funding:** It works on a **financial instrument called "PforR" (Program for Results)**, which means the World Bank will reimburse the loan amount against the achievement of Disbursement Linked Indicators (DLIs).
  - The **funding pattern is 70:30, between the World Bank and the States, and it is 50:50 between the World Bank and the DoLR.**
- **Expected Outcomes:** It will help to **increase the farm productivity and income levels of the watershed community** through the application of modern and scientific practices in the field of watershed development.

## High Energy Medical Cyclotron Project (HEMCP)

**News:** The Maharashtra Cabinet approved the establishment of the High Energy Medical Cyclotron Project (HEMCP) in Nagpur with a provision of ₹300 crore.

### About High Energy Medical Cyclotron Project (HEMCP)



Source – Medical Buyer

- **High Energy Medical Cyclotron Project (HEMCP)** is a state-of-the-art nuclear medicine facility designed to **manufacture specialized short-lived medical radioisotopes for cancer diagnosis, treatment, and research.**
- **Location:** The project will be established at **Bhansoli (Kinhi) in Hingna Taluka, Nagpur, Maharashtra.**
- **Implementation Agency:** The project will be Managed through '**Mahacare**' (**Maharashtra Cancer Care, Research and Education Foundation**) via a **dedicated Special Purpose Vehicle (SPV) under the Companies Act, 2013.**
- **Working Mechanism:**
  - **Particle Acceleration:** The cyclotron (special particle accelerator) **accelerates charged subatomic particles** using **magnetic and radio-frequency electric fields** inside a vacuum chamber.
  - **Nuclear Transformation:** The accelerated particles bombard stable target materials and **transform them into short-lived radioactive isotopes.**
  - **Radiopharmaceutical Synthesis:** The radioisotopes are chemically bonded with biological molecules to produce **medical-grade radiopharmaceuticals for diagnostic and treatment purposes.**
- **Key Features:**
  - **Total Cost:** The estimated cost of the project is **₹300 crore.**
  - **Funding Model:** A **50:50 expenditure-sharing ratio** between the **Medical Education Department and the Industry Department.**
  - **Multi-State Service Coverage:** The facility will benefit patients within a 500-km radius across **Maharashtra, Madhya Pradesh, Chhattisgarh, Telangana, and Andhra Pradesh.**
  - **Institutional Integration:** The project will **support AIIMS Nagpur, the National Cancer Institute, and the Government Medical College,** strengthening regional cancer-care capacity.
- **Major Applications:**
  - **PET-CT Diagnostic Imaging:** The facility will produce **radioisotopes required for Positron Emission Tomography–Computed Tomography (PET-CT) scans** used in cancer diagnosis.
  - **Nuclear Medicine Therapies:** The project will **support the creation of radiopharmaceuticals for targeted treatment of tumors.**
  - **Cancer Research:** The facility will **support oncological research, clinical trials, and the development of new imaging tracers** and cancer therapies.

## Tenth Schedule and Party Mergers

**News:** Twenty rebel TMC MPs claimed merger with NCPI and sought protection under the Tenth Schedule's merger exception.

### About Tenth Schedule and Party Mergers



Source – LawBeats

- The **Tenth Schedule** was inserted by the **52nd Constitutional Amendment Act, 1985** to **prevent political defections and ensure stability** in the parliamentary system.
  - It provides for **disqualification of legislators who voluntarily give up party membership or defy the party whip**.
- **Merger Exception under the Tenth Schedule:** Paragraph 4 of the Tenth Schedule contains the merger provision.
  - It **allows legislators to retain their membership** of the House when a **valid party merger** takes place.
- **Conditions for Protection under the Merger Clause:**
  - **Two-Thirds Support Requirement:** Protection is available **only when not less than two-thirds of the members** of the legislature party agree to the merger.
  - **Original Political Party and Legislature Party:** The Tenth Schedule distinguishes between the **original political party, which sponsors candidates for elections**, and the **legislature party, which consists of its members in a House**.
    - This **distinction is important** because disputes over **mergers often involve the relationship between these two entities**.
  - **Protection to Both Groups:** Members who accept the merger and those who refuse it but function as a separate group are protected from disqualification.
  - **Only Available Exception:** The 91st Constitutional Amendment Act, 2003 **removed the earlier split provision**.
    - As a result, **merger under Paragraph 4 remains the only exception to disqualification under the Tenth Schedule**.
- **Interpretational Debate:** A key issue is **whether support from at least two-thirds of the legislature party is sufficient to claim the merger exception**, or whether the original political party must also formally merge with another political party.
- **Key Amendments :**
  - **52nd Constitutional Amendment Act, 1985:** Inserted the Tenth Schedule into the Constitution.
  - **91st Constitutional Amendment Act, 2003:** Deleted the Paragraph 3 split provision and retained only the merger provision under Paragraph 4.
- **Important Judicial Pronouncements:**

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- **Kihoto Hollohan v. Zachillhu (1992):** The Supreme Court **upheld the constitutional validity of the Tenth Schedule** and held that the **Speaker's decision is subject to judicial review** on limited grounds.
- **Ravi S. Naik v. Union of India (1994):** The Supreme Court held that a **member may be considered to have voluntarily given up party membership** even **without a formal resignation** if such intention is evident from the member's conduct.
- **Subhash Desai Case (2023):** The Supreme Court held that the **political party and the legislature party are distinct entities**.
  - The Court also held that the **power to appoint the whip and leader belongs to the political party** and not merely to the faction that commands a majority in the House.
- **Deciding Authority:** The **Speaker or Chairman of the concerned House decides** whether a legislator should be **disqualified under the Tenth Schedule** and **whether a claimed merger qualifies for protection from disqualification**.
- **Judicial Review:** The Speaker's decision can be reviewed by courts on limited grounds such as **mala fide action, violation of natural justice, procedural irregularity, or error of law**.
  - **Courts generally do not intervene** before the Speaker has given a decision.

### Whale Shark (Rhincodon typus)

**News:** In recent years, community-driven conservation efforts along India's west coast have helped reduce bycatch-related deaths of Whale Shark (Rhincodon typus), although several other threats continue to endanger the species.

#### About Whale Shark (Rhincodon typus)



Source: I Naturalist

Aspects	Details
About	<ul style="list-style-type: none"><li>● The Whale shark is a <b>slow-moving, filter-feeding shark</b>.</li><li>● They are the <b>largest shark and the largest fish in the world</b>.</li><li>● They're also often referred to as '<b>gentle giants</b>' due to their size.</li><li>● They are the <b>most massive living non-cetacean animal</b>.</li></ul>

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<b>Scientific name</b>	Their scientific name is <b>Rhincodon typus</b> .
<b>Habitat</b>	They live along <b>coastlines and in open waters</b> , where dense <b>planktonic concentrations</b> can be found.
<b>Distribution</b>	<ul style="list-style-type: none"> <li>● They inhabit <b>all tropical and warm temperate waters</b> of the world, <b>except for the Mediterranean</b>.</li> <li>● They are found in various regions such as the <b>Indian Ocean, the Western and Central Pacific Ocean, and the Atlantic Ocean</b>. <ul style="list-style-type: none"> <li>○ In India, whale sharks are found primarily along the <b>western and eastern coastlines</b>.</li> <li>○ <b>Their highest concentrations and largest known aggregations is off the coast of Gujarat (particularly the Saurashtra region)</b>.</li> </ul> </li> </ul>
<b>Appearance</b>	<ul style="list-style-type: none"> <li>● They have a <b>broad, flattened head</b> with a <b>large mouth</b> and <b>two small eyes</b> located at the front corners.</li> <li>● <b>Size:</b> They can grow to <b>18 meters</b>.</li> <li>● <b>Weight:</b> They weigh around <b>34 tones and may live for 100 years</b>.</li> <li>● The <b>spiracles</b> are located just <b>behind the eyes</b>.</li> <li>● They have <b>five large pairs of gills</b>.</li> <li>● <b>Distinctive feature:</b> Their skin is <b>dark grey with a white belly marked with an arrangement of pale grey or white spots</b> and stripes that is unique to each individual.</li> <li>● Their mouths are located <b>at the front of the head rather than on the underside of the head</b>.</li> <li>● Their mouths <b>can be exceptionally wide</b> and are <b>located at the front of the head</b> rather than on the underside of the head.</li> <li>● <b>Mouth</b> can contain <b>over 300 rows of tiny teeth and 20 filter pads</b>, which it uses to filter feed.</li> <li>● There have <b>specialized flaps called velums</b> inside the <b>mouth</b> which <b>stop the backflow of water</b> as the whale shark closes its mouth, <b>helping retain captured food</b>.</li> <li>● They have <b>two dorsal fins</b> set relatively far back on the body, a pair of <b>pectoral fins</b>, a pair of <b>pelvic fins</b>, and a <b>single medial anal fin</b>.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>● They are <b>omnivores</b>.</li> <li>● They <b>feed on plankton</b>, including copepods, krill, chaetognaths, jellyfish, fish eggs, and <b>small nektonic life, such as small squid or fish</b>.</li> </ul>

<b>Behaviour</b>	<ul style="list-style-type: none"> <li>● They are <b>migratory in nature</b>.</li> <li>● They are <b>generally solitary</b>, but may sometimes form aggregations of 100 or more individuals.</li> <li>● They <b>spend most of their daytime hours swimming at shallow depths</b>, apparently feeding, sometimes right at the water surface.</li> </ul>
<b>Ecological Roles</b>	It plays a role in <b>maintaining the marine food chain</b> by regulating plankton and small fish populations.
<b>Threats</b>	The species faces threats from <b>ship collisions, fishing gear entanglement, climate change, offshore drilling, and habitat loss due to coastal development</b> .
<b>Conservation status</b>	<ul style="list-style-type: none"> <li>● <b>IUCN: Endangered</b></li> <li>● <b>Wildlife Protection Act 1972: Schedule I</b></li> </ul>

### Gulf of Kutch Marine Sanctuary

**News:** The Gujarat High Court has dismissed a long-standing petition by Tata Chemicals Ltd (TCL) and held it liable for extensive environmental damage to the Gulf of Kutch Marine Sanctuary.

#### About Gulf of Kutch Marine Sanctuary

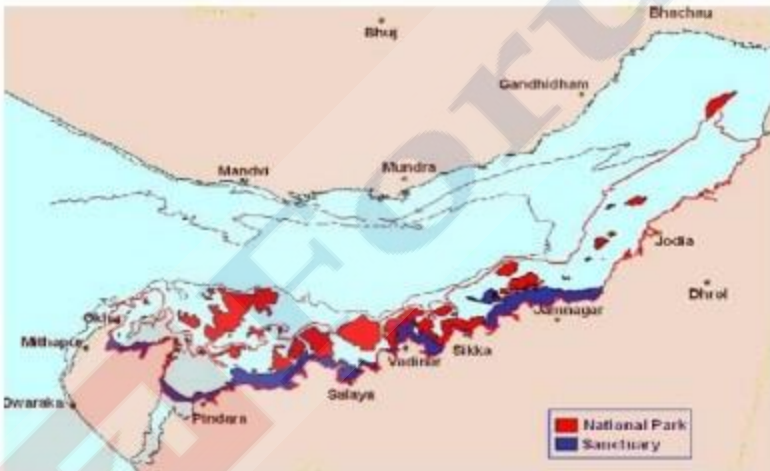


Figure 1: The Gulf of Kutch Marine National Park and Sanctuary  
(Source: Adapted from DOD-ICMAM Report, 2002)

Source: icsf

- **Location:** The Gulf of Kutch Marine Sanctuary is located on the **southern shoreline of the Gulf of Kutch**, along the **Jamnagar coast, Gujarat**.
  - The sanctuary area also **encompasses a national park** (Marine National Park).
- It is the **first protected marine area in India**.
- **Established in:** It was established in **1980**.
- **Area:** It covers **458 sq. km**, of which the **park covers 163 sq. km**.

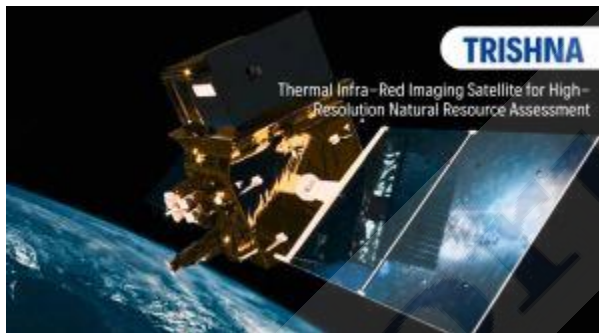
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- It covers **five islands and the intertidal zone from Navlakhi to Okha.**
- **Ecosystem:** It primarily protects **two major ecosystems – corals and mangroves.**
- **River associated:** Some of the major rivers, such as the **Ghi, Sinhan, and Sasoi Rivers**, flow through it.
- **Flora:** It contains **seven species of mangroves**, along with **120 species of algae** and several species of **grasses, shrubs and herbs.**
- **Fauna:**
  - The mangroves are breeding grounds for **colonies of near-threatened species of birds such as the Painted Stork, Darter and Black-necked Ibis.**
  - It is home to **more than 40 species of sponges, starfish, octopuses, puffer fish, and dolphins.**
  - Nearby beaches serve as **breeding grounds for the green sea turtle**, and is also home to **the rare and endangered sea cow, [Dugongs](#).**
  - It is also home to the [Kharai camel](#).

### TRISHNA Mission

**News:** Prime Minister Narendra Modi announced that India and France will jointly launch the TRISHNA satellite next year for global water and food security.

#### About TRISHNA Mission



Source – ISRO

- **TRISHNA (Thermal Infra-Red Imaging Satellite for High-resolution Natural Resource Assessment)** is a **joint mission** of the Indian Space Research Organisation (**ISRO**) and the **French Space Agency CNES** for high-resolution **monitoring of Earth's surface temperature, vegetation health, and water cycle dynamics.**
- **Schedule:** It is scheduled to be **jointly launched by India and France in 2027.**
- **Objective:** The mission aims to **monitor Earth's surface temperature, energy and water budgets, vegetation health, and water cycle dynamics** to address **water and food security challenges** and support **efficient water resource management.**
- **Key Aspects:**
  - Orbit:** The satellite will operate in a **sun-synchronous orbit** at an **altitude of 761 km** with a **local time of 12:30 PM at the equator.**
  - Life Span:** The mission is designed for an **operational life of 5 years.**
  - Resolution:** The satellite will provide a **spatial resolution of 57 m for land and coastal areas** and **1 km for oceanic and polar regions.**
- **Key Payloads:**

**Thermal Infra-Red (TIR):** This CNES-provided payload has a **four-channel long-wave infrared imaging sensor** for high-resolution surface temperature and emissivity mapping.

**VNIR-SWIR (Visible-Near Infra-Red-Short Wave Infra-Red):** This ISRO-developed payload contains **seven spectral bands** and is used to study how the Earth's surface reflects sunlight.

- It helps generate important information on vegetation, land surface conditions, and radiation-related variables required for monitoring natural resources and the Earth's energy balance.
- **Global Contributions:** TRISHNA's data will support global initiatives such as GEOGLAM for agricultural monitoring, the United Nations Sustainable Development Goals (SDGs), and Global Water Watch.
  - The mission's outputs will also serve as **Essential Agricultural Variables (EAVs)** and **Essential Climate Variables (ECVs)** for the global community.

### National Internet Exchange of India (NIXI) and Its Digital Portals

**News:** National Internet Exchange of India (NIXI) celebrated its 23rd Foundation Day and launched four new digital initiatives.

#### About National Internet Exchange of India (NIXI)



Source – ET

- **National Internet Exchange of India (NIXI)** is a **not-for-profit organization** that **strengthens India's Internet infrastructure** and **supports a secure, resilient, and inclusive Internet ecosystem**.
- **Established:** It was **established in 2003**.
- **Registered Under:** It is registered under **Section 8 of the Companies Act, 2013**.
- **Ministry Involved:** It functions under the aegis of the **Ministry of Electronics and Information Technology (MeitY)**.
- **Aim:** NIXI was set up to **facilitate the exchange of domestic Internet traffic within India**, improve service quality, reduce latency, and lower international bandwidth costs.
- **Key Features of National Internet Exchange of India (NIXI)**
  - **Internet Infrastructure Support:** NIXI facilitates the **efficient exchange of domestic Internet traffic among Internet Service Providers (ISPs), Content Delivery Networks (CDNs), and other entities**, which helps route Internet traffic within India more efficiently.

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- **Domain Management:** NIXI manages India's .IN and .भारत (.Bharat) country-code top-level domains and currently administers more than 39 lakh .IN domain names, supporting the growth of India's digital ecosystem.
- **Digital Inclusion:** NIXI supports domain registrations in 22 Indian languages and promotes Internet services across the country.
- **Technology Advancement:** It operates 79 Internet Exchange Points (IXPs) and has helped India achieve about 78.34% IPv6 adoption.

### About NIXI Digital Portals

<b>IX Portal</b>	<ul style="list-style-type: none"><li>● The <b>Internet Exchange (IX) Portal</b> is designed to improve the <b>operation and management of Internet exchanges across India.</b></li><li>● It <b>helps Internet Service Providers (ISPs) and Content Delivery Networks (CDNs)</b> route domestic Internet traffic more efficiently and enhances operational efficiency.</li></ul>
<b>myIRINN Portal</b>	<ul style="list-style-type: none"><li>● The <b>my Indian Registry for Internet Names and Numbers (myIRINN) Portal</b> is a secure platform for affiliates and members.</li><li>● It enables users to <b>manage their Internet Protocol (IP) addresses and Autonomous System (AS) numbers</b> through a dedicated dashboard.</li></ul>
<b>.IN Auction Portal</b>	<ul style="list-style-type: none"><li>● The <b>.IN Auction Portal streamlines the auction, bidding, and acquisition process</b> for premium and highly sought-after .in domain names.</li><li>● It also <b>brings greater transparency to the country-code domain name market in India.</b></li></ul>
<b>AI-Powered WHOIS Screening Platform</b>	<ul style="list-style-type: none"><li>● The <b>Artificial Intelligence (AI)-Powered WHOIS Screening Platform</b> helps <b>enhance domain name security and strengthens the detection of suspicious websites in the .in domain space.</b></li><li>● It serves as the <b>official WHOIS search platform for domain registration details, ownership information, registrar details, and domain availability.</b></li></ul>

### Smart Seed Coating Technology

**News:** ICAR-IIOR, Hyderabad, has developed a patented biopolymer-based Smart Seed Coating Technology to improve seed quality and climate resilience.

#### About Smart Seed Coating Technology



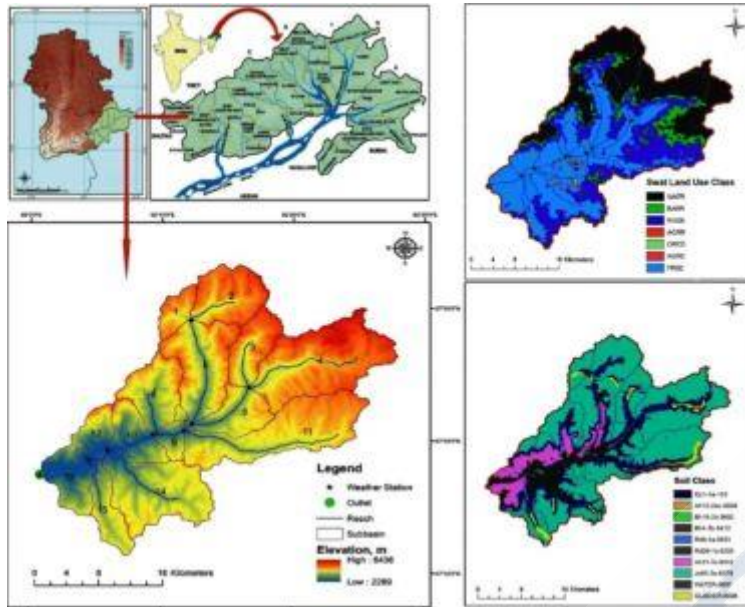
Source – Businessline

- **Smart Seed Coating Technology** is an **Indian-patented, biodegradable seed enhancement platform** that **improves seed performance from the earliest stages of crop growth.**
- **Developed By:** The technology was developed and scientifically validated by the **ICAR-Indian Institute of Oilseeds Research (ICAR-IIOR)** based in **Hyderabad.**
- **Aim:** The technology aims to **strengthen climate-resilient agriculture, reduce production risks in rainfed farming systems, and improve overall crop productivity** by protecting seedlings from climatic and environmental stresses.
- **Working Mechanism**
  - **Protective Coating:** The technology uses **biodegradable biopolymers to form a multifunctional protective layer around seeds.**
  - **Input Delivery:** The coating serves as a **delivery platform for beneficial microorganisms, nutrients, micronutrients, crop protection agents, and plant growth-promoting compounds** at the seed-soil interface.
  - **Favourable Microenvironment:** It creates a favourable microenvironment that **supports faster germination, stronger seedling growth, and better root development.**
  - **Stress Tolerance:** The coating enhances **tolerance to both biotic and abiotic stresses** during the crop establishment stage.
- **Key Features:**
  - **Biodegradable Technology:** It uses **biodegradable biopolymers** and functions as a multifunctional seed enhancement platform.
  - **Integrated Support:** The technology **combines protection, nutrition, and biological support in a single seed treatment.**
  - **Customizable Application:** It can be **tailored for cereals, millets, pulses, oilseeds, fibre crops, fodder crops, vegetables, spices, and horticultural crops.**
  - **Productivity Improvement:** All India Coordinated Research Project on Seed (AICRP-Seed) trials reported **productivity gains of 12% to 37% over untreated seeds, while Telangana trials showed nearly 30% higher yields in groundnut and soybean.**
  - **Suitable for Rainfed Areas:** The technology is particularly **valuable for rainfed agriculture** and helps improve crop resilience and establishment.

## Mago Chu River

**News:** A satellite-based assessment reported expansion of glacial lakes in the Mago Chu Basin, raising concerns about possible GLOF risk.

### About Mago Chu River



Source – ResearchGate

- **Location:** It is located in the **Tawang district of Arunachal Pradesh** and originates near **Mago village**.
- **Formation:** It is formed near **Mago village** by the confluence of the **Goshu Chu and Dungma Chu** rivers.
- **Course:** Mago Chu joins the **Tsona Chu** near **Kyelatongbo** to form the **Tawang Chu**.
- **Tributaries:** The major tributaries of the Mago Chu river system are **Goshu Chu, Dungma Chu, Gorjo Chu, and Tsona Chu**.
- **Key Aspects:**
  - **Part of Manas River system:** Tawang Chu later receives the **Nuranang River and Nyamjang Chu** before entering **Bhutan** and eventually contributing to the **Manas River** system.
  - **High-Altitude Basin:** The river basin includes **high-altitude glacial** regions where glacier movement and glacial lakes are being monitored.
  - **Glacial Lake Monitoring Area:** The **Mago Chu basin** contains a **potentially unstable proglacial lake** that is being monitored due to **concerns about a possible GLOF (Glacial Lake Outburst Flood)**.

### About GLOF Risk

- **Growing Concern in Mago Chu Basin:** Scientists identified a potentially unstable proglacial lake within the Mago Chu basin and warned that **accumulated meltwater and unstable moraine debris could trigger a sudden lake breach**.
- **Nature of GLOF:** A Glacial Lake Outburst Flood **occurs when a weak moraine dam holding glacial lake water fails and suddenly releases a large volume of water downstream**.
- **Potential Impact:** Such floods can carry debris and boulders, damage hydropower projects, and threaten downstream settlements, river systems, property, and human lives.

## Energy Transition Index 2026

**News:** The Energy Transition Index 2026 reported that India recorded one of the strongest improvements in global energy transition readiness.

### About Energy Transition Index 2026



Source: World Economic Forum, (2026), Energy Transition Index 2026.

Source – WEF

- The **Energy Transition Index 2026** tracks energy transition progress across **120 countries** by assessing current energy system performance and future readiness.
- **Published by:** The index is published by the **World Economic Forum (WEF)** in collaboration with **Accenture**.
- **Structure of the Index:**
  - **Tracking Parameters:** The index evaluates **120 countries** using **44 indicators** across **two major pillars**.
  - **Current System Performance:** The index benchmarks national energy systems across the dimensions of **security, sustainability, and equity**.
  - **Transition Readiness:** This pillar evaluates the **enabling environment, including institutional frameworks, infrastructure, stable policies, and capital investment**.
- **Key Highlights:**
  - **Top Performers:** Nordic countries continued to lead the index. **Sweden ranked first, followed by Finland in second place and Denmark in third place.**
  - **Global Transition Challenges:** Despite record **global energy investment of USD 3.3 trillion, energy transition progress has slowed** due to geopolitical tensions, infrastructure bottlenecks, and rising energy demand.
  - **Decline in Readiness:** Global energy transition readiness **declined for the first time in more than a decade**, showing that investment alone is not sufficient to maintain momentum.

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- **India's Performance:**
  - **Ranking and Progress:** India moved up two places to rank 70th and was among the strongest improvers in the Energy Transition Index 2026.
  - **Drivers of Improvement:** India's progress was supported by stronger transition readiness, major infrastructure gains, and improvements in equity, sustainability, and financial investment.
  - **Green Energy Strategy:** The report identified renewable energy capacity expansion, grid expansion, and green hydrogen development as key parts of India's infrastructure-led clean-energy strategy.
    - The share of low-carbon jobs increased by 24 percent in 2024, while renewable energy jobs reached 1.3 million, with hydropower providing the largest source of employment.

### Dunagiri, Sanshodhak and Agray

**News:** The Indian Navy will commission the indigenously built Dunagiri, Sanshodhak and Agray platforms in Kolkata on Sunday.

**About Dunagiri, Sanshodhak and Agray**

## Why INS Dunagiri, INS Sanshodhak and INS Agray are more powerful together than separately

DEFENCEHQ  
—THE TONES OF INDIA

**INS SANSHODHAK**  
THE MAPPER  
Survey Vessel  
(Large)



### MAPS THE BATTLEFIELD

Creates accurate seabed maps and collects ocean data.

#### Key Capabilities

- Hydrographic surveys & seabed mapping
- Oceanographic data collection
- Equipped with sonar, AUVs & survey systems
- Over 80% indigenous content

**INS AGRAY**  
THE HUNTER  
Anti-Submarine Warfare Shallow Water Craft



### HUNTS THE THREAT

Detects, tracks and engages enemy submarines in coastal waters.

#### Key Capabilities

- Anti-submarine warfare operations
- Advanced sonar & underwater sensors
- Lightweight torpedoes & depth charges
- High manoeuvrability in shallow waters

**INS DUNAGIRI**  
THE PROTECTOR  
Stealth Guided Missile Frigate



### PROTECTS THE BATTLESPACE

Provides long-range protection and striking capability.

#### Key Capabilities

- Multi-role: Anti-air, anti-surface, anti-submarine warfare
- BrahMos supersonic missiles
- Advanced radar, EW suite & helicopters
- Designed for blue-water operations

### HOW THEY WORK TOGETHER

#### Sanshodhak maps an area

Provides detailed seabed and environment data.



#### Agray patrols it

Detects and neutralises submarine threats.



#### Dunagiri provides long-range protection

Detects and neutralises submarine threats.

Together they create a layered maritime picture of awareness, surveillance and combat power.

Source – ToI

- These are **three indigenously built Indian Navy platforms** designed to strengthen **combat, survey and anti-submarine capabilities**.
- **Manufacturing & Design:** The three vessels were designed by the Indian Navy's Warship Design Bureau .

## Factly Compilation June 2026

- **Constructed by:** All three vessels constructed by the **Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.**
- **Objective:** The platforms are intended to **enhance operational capabilities** in maritime combat, hydrographic surveying and anti-submarine warfare.
- **Key Aspects of Dunagiri:**
  - **Stealth Frigate:** Dunagiri is the **fifth stealth frigate** built under **Project 17A.**
  - **Advanced Weapon Systems:** It is equipped with **BrahMos surface-to-surface missiles** and the **Medium Range Surface-to-Air Missile (MRSAM) system.**
- **Key Aspects of Sanshodhak:**
  - **Survey Role:** It is the **fourth Survey Vessel (Large)** designed for **coastal and deep-water hydrographic surveys.**
  - **Data Collection:** The ship **collects oceanographic and geophysical data** for defence and civilian applications.
  - **Advanced Technology:** It is equipped with **Autonomous Underwater Vehicles (AUVs) and Remotely Operated Vehicles (ROVs).**
- **Key Aspects of Agray:**
  - **Anti-Submarine Warfare Craft:** Agray is the **fourth vessel of the Arnala-class Anti-Submarine Warfare Shallow Water Craft series.**
  - **Indigenous Combat Systems:** It is fitted with **lightweight torpedoes, indigenous rocket launchers and shallow-water sonar systems.**
  - **Coastal Security Role:** The platform is designed to detect and engage **underwater threats in littoral and coastal waters.**

## Turquoise Nexus Initiative (TNI)

**News:** Turkey and FAO introduced the Turquoise Nexus Initiative ahead of COP31 to promote integrated food-water-climate approaches in climate commitments.

### About Turquoise Nexus Initiative (TNI)



Source – FAO

## Factly Compilation June 2026

- **Turquoise Nexus Initiative (TNI)** is a **proposed initiative to integrate food, water, and climate actions** within **national climate commitments**.
- **Proposed:** The initiative was **proposed during a side event at the Bonn Climate Change Conference 2026** and is **scheduled for a formal launch at COP31 later this year**.
- **Launched by:** The initiative was **introduced by Turkey's COP31 Presidency and the Food and Agriculture Organization of the United Nations (FAO)**.
- **Objective:** The initiative aims to **help developing countries embed integrated food-water-climate approaches** into their **Nationally Determined Contributions (NDCs)** and **Paris Agreement implementation efforts**.
- **Parent Mechanism:** The TNI operates under the **FAO's multi-stakeholder Food and Agriculture for Sustainable Transformation (FAST) Partnership**.
- **Key Aspects:**
  - **Addressing Fragmentation:** The initiative seeks to **overcome fragmentation in national climate commitments** by linking food, water, and climate policies.
  - **Strengthening Adaptation Efforts:** It promotes **coordinated approaches** because separate policy frameworks often reduce the effectiveness of adaptation and resilience measures.
  - **Farmer-Centred Approach:** The **World Farmers' Organisation supported the initiative** and called for farmers to be recognized as primary managers of water resources.
  - **Improved Water Governance:** The initiative highlights that **effective water governance should be developed with farmers** and their organisations rather than through top-down approaches.

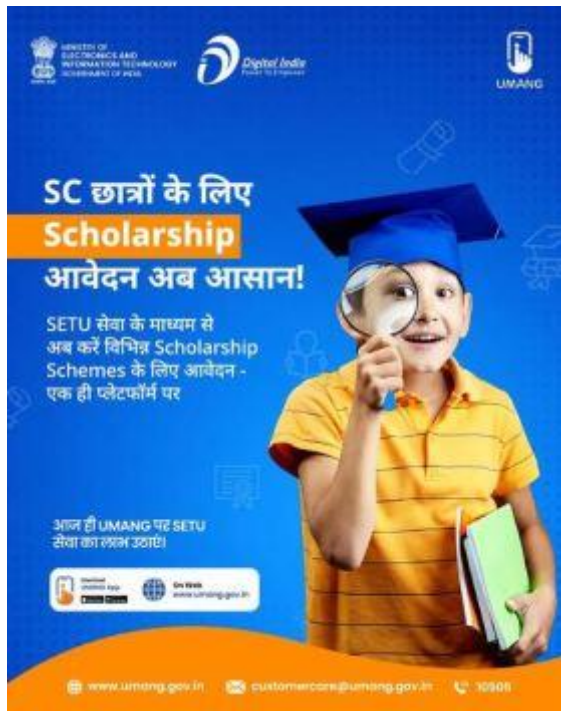
### **About Food and Agriculture for Sustainable Transformation (FAST) Partnership**

- FAST is a **multi-stakeholder initiative and partnership** that aims to catalyze and accelerate the **transformation of agriculture and food systems by 2030 for people, climate, and nature**.
- **Launch:** It was **launched at COP27 in Sharm el-Sheikh, Egypt, in 2022**.
- **Hosted By:** It is hosted **by the Food and Agriculture Organization (FAO)**.
- **Core Objective:** It seeks to increase the quantity and quality of climate finance for transforming agrifood systems, support adaptation efforts, and maintain a 1.5-degree pathway while ensuring food and economic security.
- **Three Pillars of FAST:**
  - **Access to Finance:** It enhances country capacities to identify and access climate finance and investment.
  - **Knowledge and Capacity:** It develops analyses and voluntary guidelines and supports capacity development across stakeholders.
  - **Policy Support and Dialogue:** It ensures that agrifood systems are fully embedded and prioritized in climate change policies.

### **SETU (Scholarship for Educational Transformation and Upliftment)**

**News:** The Department of Social Justice & Empowerment launched SETU on UMANG and removed the domicile certificate requirement for scholarship applications.

### **About SETU (Scholarship for Educational Transformation and Upliftment)**



Source – UMANG App

- **SETU** is a comprehensive **digital platform on UMANG** that **provides scholarship-related services through a single interface.**
- **Developed By:** It was developed by the **Department of Social Justice & Empowerment (DoSJE).**
- **Aim:** The platform aims to **improve accessibility, streamline scholarship processes, strengthen digital governance, and ensure effective delivery of scholarship benefits.**
- **Key Features:**
  - **Single Digital Gateway:** It acts as a unified platform for **One-Time Registration, application tracking, and validation of scholarship services.**
  - **Multi-tiered Interface:** The platform **brings students, Institutional Nodal Officers, District Nodal Officers, and State officials** onto a single dashboard for application verification.
  - **UMANG Integration:** The platform is **hosted directly on the UMANG platform** to provide easy access to scholarship services.
  - **Direct Benefit Transfer:** Financial assistance is **transferred directly into students' bank accounts in a transparent manner.**
  - **Technology-Based Security:** The platform uses **modern authentication features, including face-recognition technology,** to reduce fund leakage and administrative paperwork.

#### About UMANG ( Unified Mobile Application for New-age Governance)

- **Developed By:** It was developed by the **Ministry of Electronics and Information Technology (MeitY)** and the **National e-Governance Division (NeGD).**
- **Key Objective:** It is a key **e-governance initiative under the Digital India programme.**
- **Service Delivery:** It provides citizens with a **unified, multilingual platform for single-point access to hundreds of Central and State Government services.**

## State of World Fisheries and Aquaculture 2026 Report

**News:** India ranked as the world's second-largest aquatic animal producer in the FAO's State of World Fisheries and Aquaculture 2026 report.

### About State of World Fisheries and Aquaculture 2026 Report



Source – FAO

- It is a **biennial report** that provides evidence-based information on fisheries and aquaculture trends, challenges, opportunities and solutions.
- **Released by:** The report is released by the **Food and Agriculture Organization of the United Nations (FAO)**.
- **Key Highlights:**
  - **Global**
    - **Record Global Production:** Global fisheries and aquaculture production **reached 235 million tonnes in 2024**.
    - **Major Producing Bloc:** **India, China, Indonesia, Viet Nam and Bangladesh** together **produced 82 per cent of all farmed aquatic animals**.
    - **Food Availability:** Per capita aquatic animal food availability **increased from 21.1 kg in 2023 to a preliminary estimate of 21.3 kg in 2024**.
    - **Regional Consumption Pattern:** **Asia** recorded the **highest** availability at **26.3 kg per person**.
    - **Declining Wild Stocks:** The **share of marine fish stocks** within biologically sustainable levels **fell to 62.4% in 2023, down from 64.5% in 2021**.
  - **India**
    - **India's Global Position:** India produced **9 per cent of the world's aquatic animals in 2024** and **ranked second globally after China**.

## Factly Compilation June 2026

- **Inland Water Catch:** India ranked first in inland water catches, producing 2.2 million tonnes from rivers, lakes and freshwater systems
- **Aquaculture Contribution:** India ranked second in farmed aquatic animal production and contributed 12 per cent of global output.
- **Policy Relevance:**
  - **Blue Transformation Agenda:** The report showcases **FAO's efforts to translate the Blue Transformation vision into action.**
  - **Global Commitments:** It highlights the **role of sustainable aquatic food systems in supporting the United Nations Sustainable Development Goals (SDGs) and the Kunming-Montreal Global Biodiversity Framework.**

### White-bellied Heron

**News:** The Forest Advisory Committee has given in-principle approval for a hydropower project in an area of Arunachal Pradesh that serves as a habitat for the White-bellied Heron.

#### About White-bellied Heron



Source: Birds of the World

Aspects	Description
About	<ul style="list-style-type: none"><li>● The white-bellied heron is a <b>large heron species.</b></li><li>● It is the <b>second-largest heron.</b></li><li>● It is also known as the <b>imperial heron or great white-bellied heron.</b></li></ul>
Scientific name	<ul style="list-style-type: none"><li>● Its scientific name is <b>Ardea insignis.</b></li></ul>
Habitat	<ul style="list-style-type: none"><li>● It prefers habitats with <b>fast-flowing rivers and forests.</b></li><li>● It inhabits the <b>wetlands of tropical and subtropical forests in the foothills of the eastern Himalayas of northeast India and Myanmar.</b></li></ul>
Distribution	<ul style="list-style-type: none"><li>● Today, it is found only <b>in parts of Arunachal Pradesh, Myanmar, and Bhutan,</b> in regions that are relatively undisturbed by development.</li></ul>

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	<ul style="list-style-type: none"> <li>○ In the <b>early 1900s</b>, the bird was found across <b>Nepal, Sikkim, Arunachal Pradesh, Bangladesh, and Myanmar</b>.</li> </ul>
<b>Appearance</b>	<ul style="list-style-type: none"> <li>● It has a <b>uniform dark grey plumage, a whitish belly and long silvery or whitish plumes</b> on the rear crown and lower fore-neck.</li> <li>● It has a <b>relatively long neck, a compact body, short legs, and large, well-developed toes</b>.</li> <li>● Its <b>elongated and highly flexible neck, combined with a sharp, serrated bill</b>, enables it to efficiently catch fish even in deep water.</li> <li>● The face is <b>greenish-grey</b> and has <b>long bill black</b>, but greenish near the base and tip.</li> <li>● The <b>legs and feet are dull grey</b>.</li> <li>● <b>Weight:</b> Its mean weight is estimated at <b>3.2–3.4 kg</b>.</li> <li>● In breeding plumage, it has a <b>greyish-white nape plume and elongated grey breast feathers with white centres</b>.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>● It feeds primarily on <b>aquatic prey, mainly fish</b>.</li> </ul>
<b>Behaviour</b>	<ul style="list-style-type: none"> <li>● It needs <b>clear, shallow, and fast-flowing river streams to fish</b>.</li> <li>● It <b>waits for the fish to come</b>, and unlike other herons, they don't move around too much.</li> </ul>
<b>Significance</b>	It is an <b>indicator species</b> of a pristine habitat.
<b>Threats</b>	<ul style="list-style-type: none"> <li>○ <b>Habitat loss</b></li> <li>○ <b>Increasing disturbance and habitat degradation</b> due to <b>conversion of wetlands</b> for agriculture and <b>expansion of settlements</b>, harvesting of wetland resources and <b>poaching</b></li> </ul>
<b>Conservation status</b>	<ul style="list-style-type: none"> <li>● Wildlife Protection Act, 1972: <b>Schedule I</b></li> <li>● IUCN Red List: <b>Critically Endangered</b></li> </ul>

### NAFEX.in Portal

**News:** Nafed will launch its own e-auction portal, NAFEX.in, to sell oilseeds and pulses, enhancing transparency and efficiency in agricultural commodity auctions.

#### About NAFEX.in Portal

- NAFEX.in is a **digital auction portal to strengthen transparency, efficiency and technology-driven reforms** in the cooperative sector.
- **Launched by:** It has been launched by the [National Agricultural Cooperative Marketing Federation \(Nafed\)](#).
- **Developed by:** It has been **developed in collaboration with the consulting firm Deloitte**.

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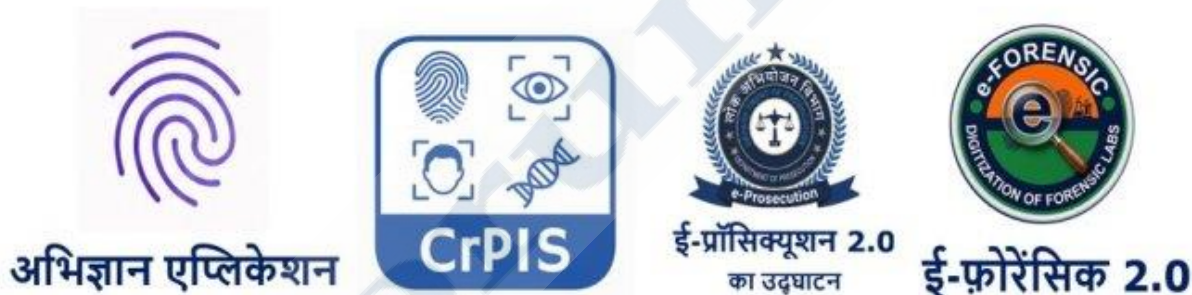
## Factly Compilation June 2026

- It will consider **allowing state-level federations of cooperatives and agencies** to conduct their e-auction on the portal.
- It is to **strengthen transparency, efficiency and ease of operations** in the auction process.
- **Expected outcome:** It is expected to **provide a digital platform for streamlining auction-related activities and enhancing the overall functioning of NAFED** in the interest of farmers, member institutions and stakeholders.
- **Note:** Currently, Nafed uses private platforms such as **mjunction, NCDEX e Markets – NeML and E-Teach** for selling about 5.3 million tonnes (MT) of pulses and oilseeds annually from farmers under the price support scheme (PSS) and [price stabilisation fund \(PSF\)](#).
- **About Other Initiatives of Nafed:** Several other important digital and farmer-centric initiatives of Nafed have also been launched:
  - These include **NAFED-KALYAN scholarship** for children of farmers, the **DRISHTI portal** for inventory management of pulses and oilseeds, **ERP portal** for strengthening enterprise resource planning.

### NCRB-Abhigyan, CrPI, e-Prosecution 2.0 and e-Forensics 2.0 applications

**News:** Union Minister of Home launched four important applications, namely NCRB-Abhigyan, CrPI Application, e-Prosecution 2.0 and e-Forensics 2.0.

#### About NCRB-Abhigyan, CrPI, e-Prosecution 2.0 and e-Forensics 2.0 Applications



Source: NCRB

Applications	Description
NCRB-Abhigyan	<ul style="list-style-type: none"> <li>● It is a mobile application that enables <b>field police personnel to search the National Fingerprint Database from any location</b> using a certified fingerprint scanner for suspect identification.</li> <li>● It enhances the <b>efficiency and responsiveness of field policing</b> by enabling instant fingerprint matching.</li> </ul>
CrPI Application	<ul style="list-style-type: none"> <li>● The <b>multi-modal biometric technology</b> integrates <b>facial recognition, iris matching, and DNA matching capabilities</b>.</li> <li>● It <b>enhances the reliability of identification, reduces manual errors,</b> and makes the process more transparent.</li> <li>● Its primary applications include <b>the identification of repeat offenders and CCTV-based suspect identification</b>.</li> </ul>

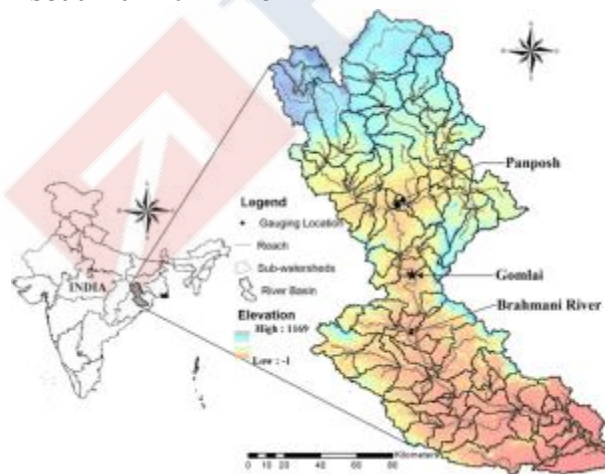
## Factly Compilation June 2026

	<ul style="list-style-type: none"> <li>● So far, 2,190 CrPI units have been distributed, and more than 553,000 enrollments have been completed.</li> </ul>
<b>e-Forensics 2.0</b>	<ul style="list-style-type: none"> <li>● It is a digital platform that <b>connects forensic laboratories and investigating agencies across the country.</b></li> <li>● Its key features include <b>case receipt and digital tracking for forensic examination, sample registration, laboratory workflow management, report generation, digital access</b> to reports, and strengthening of the chain of custody.</li> </ul>
<b>e-Prosecution 2.0</b>	<ul style="list-style-type: none"> <li>● It is a digital platform that <b>establishes digital coordination</b> among the <b>police, prosecution, and judicial processes.</b></li> <li>● It ensures that <b>once an offender is identified, timely prosecution and punishment</b> can also be secured.</li> </ul>
<b>Uses of these applications</b>	<ul style="list-style-type: none"> <li>● NAFIS and CrPI <b>identify the offender, CCTNS and Cri-MAC connect and support the investigation, e-Forensics strengthens the evidence, and e-Prosecution</b> drives the case towards conviction.</li> <li>● Together, these <b>four applications integrate policing, forensic investigation, prosecution management, and criminal identification into a seamless digital chain</b> of the Integrated Criminal Justice System (ICJS).             <ul style="list-style-type: none"> <li>○ They will <b>transform data into informed decision-making and fingerprints</b> into justice.</li> </ul> </li> </ul>

### Brahmani River

**News:** A recent study showed that Microscopic plastic pollution is infiltrating the pristine habitats of India's Bhitarkanika Wildlife Sanctuary, carrying a toxic cargo of heavy metals into the Brahmani River.

#### About Brahmani River



Source: Research Gate

## Factly Compilation June 2026

- The Brahmani is a **major seasonal river** in the **Odisha state of Eastern India**.
- It is **one of the few rivers that cut across the Eastern Ghats**.
- **Origin:** It originates near **Nagri village in the Ranchi district of Jharkhand** at an elevation of about 600m. It is initially known as the **South Koel River in its upper reaches**.
- **Drainage:** The river basin traverses the states of **Jharkhand, Chhattisgarh, and Odisha**.
- **Course of the river:** After meeting with the **Sankh River at Rourkela**, it is known as the **Brahmani River**.
  - It **generally flows south-southeast past Bonaigarh and Talcher in Odisha** before turning east to merge with the northern branches of the **Mahanadi River**, which eventually drains into the **Bay of Bengal at Palmyras Point, Odisha**.
- **Gorge formation:** It also forms a **minor gorge at Rengali (Angul district of Odisha)**.
- **Total Length:** Its total length is **about 799 km**.
- **Boundary:** The basin is bounded in the **North by the Chhotanagpur Plateau, in the West and South by the Mahanadi basin and in the East by the Bay of Bengal**.
- **Tributaries:** The major tributaries of the river include the **Sankh, Tikra, and Karo** rivers.
- **Delta formation:** Together with the **Mahanadi** and **Baitarani** rivers, it forms the **Brahmani delta** before emptying into the **Bay of Bengal**.
  - The **Brahmani delta is the site of the Bhitarkanika Wildlife Sanctuary**, known for its estuarine crocodiles.
- **Dams situated:** It supports irrigation through dams and canals like the **Rengali Dam and Samal Barrage**.
- **Historical significance:** Historically, its origin is linked to the **legend of Ved Vyasa**.

## Battle of Plassey

**News:** June 23, 2026 marks 269 years of the Battle of Plassey, a turning point in British expansion in India.

### About Battle of Plassey



Source – India Today

- The **Battle of Plassey** was fought on **23 June 1757** between the **British East India Company**, led by **Robert Clive**, and **Nawab Siraj-ud-Daulah of Bengal**.
- **Location:** The battle was fought **near Palashi (Plassey) in present-day Nadia district of West Bengal**.
- **Mughal Emperor:** **Alamgir II** was the Mughal Emperor when the Battle of Plassey was fought.
- **Causes of the Conflict:**

## Factly Compilation June 2026

- **Misuse of Dastaks:** The East India Company misused **the dastaks (duty-free trade permits) granted to it for trade in Bengal.**
  - The **Company's privileged position** and the **loss of revenue** caused to the Bengal administration created resentment and increased tensions between the Nawab and the Company.
- **Unsanctioned Fortifications:** The Company strengthened the fortifications of **Fort William in Calcutta without the permission** of Siraj-ud-Daulah, challenging his authority.
- **Asylum to Political Fugitives:** The Company gave shelter to **Krishna Ballabh**, whom the Nawab had charged with fraud, creating further tension.
- **Black Hole Tragedy:** Siraj-ud-Daulah **captured Calcutta in June 1756** after the East India Company ignored his warnings.
  - Following the capture, several British officials and soldiers were reportedly confined in a **small and poorly ventilated room.**
  - According to **British accounts**, many **prisoners died** due to **overcrowding, heat, and lack of fresh air.**
  - The incident became **known as the Black Hole Tragedy.**
  - However, the event remains **controversial**, and the East India Company later **used it to justify military action against the Nawab.**
- **Course of the Battle:**
  - **The Odds:** Siraj-ud-Daulah's army had about **50,000 men** and around **50 field guns**, while **Clive commanded only 3,000 men and 10 field guns.**
  - **The Betrayal:**
    - **Mir Jafar (Commander-in-Chief):** He entered into a **secret understanding with the British** and kept the largest contingent of the Nawab's army inactive during the battle.
    - **Rai Durlabh (Army General and Court Official):** He brought his forces to the battlefield but **deliberately did not participate in the fighting.**
    - **Jagat Seths (Banking Family):** They supported the conspiracy against Siraj-ud-Daulah and **backed the plan to replace him with Mir Jafar.**
  - **Turning Point:** A sudden **heavy downpour weakened the Nawab's artillery**, while the British protected their ammunition and continued fighting effectively.
  - **The Climax:** The battle ended in **Robert Clive's victory.**
    - Siraj-ud-Daulah fled but was **later captured and put to death.**
- **Impacts:**
  - **Political Transformation:** **Mir Jafar became Nawab of Bengal** but functioned largely as a **puppet ruler under the Company's influence.**
  - **First Step to Empire:** The victory enabled the Company to move beyond trade and gain political influence in Bengal.
  - Bengal became the **first base of the Company's expanding power across India**, laying the foundation of British colonial dominance.

## Air Force Arjan Singh Memorial Hockey Tournament 2026

**News:** The 7th edition of the Air Force Arjan Singh Memorial Hockey Tournament 2026 is being held in Bengaluru from 23 June to 3 July 2026.

### About Air Force Arjan Singh Memorial Hockey Tournament 2026

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Source – NOA

- It is a **hockey tournament** organized to **honour the legacy of Marshal of the Air Force Arjan Singh** and his passion for the sport.
- **Organized by:** The tournament has been **organized by the Air Force Sports Control Board (AFSCB) since 2018.**
- **2026 Edition:** The 2026 event is the **7th edition** of the tournament.
- **Venue:** The tournament is being **held at Air Force Station Jalahalli, Bengaluru.**
- **Participants:** A total of **16 teams from across the country** are participating in the tournament.
- **Foreign Team Status:** **No foreign teams are participating in this edition** due to the ongoing crisis in the Middle East.
- **Format:** The matches are being conducted on a **league-cum-knockout basis.**
- **Prize Pool:** The **winning team will receive ₹10 lakh** and the **runners-up will receive ₹8 lakh.**
  - The **Man of the Match in each game will receive ₹25,000**, while the **Player of the Tournament will receive ₹50,000.**

### Right to Walk

**News:** The Supreme Court in a judgment, declared right to walk on demarcated and well-maintained footpaths a fundamental right which has priority over movement by motorized vehicles.

#### About Right to Walk

- The Supreme Court ruled that the **right to walk on a demarcated footpath is a fundamental right.**
- **Rights under:** It is a **fundamental right** under **right to movement guaranteed under [Article 19 \(1\) \(d\)](#) and [Article 21- Right to life and liberty.](#)**
- **Supreme Court Ruling:**
  - The court held that a citizen's fundamental right to walk on a **demarcated footpath is primary and shall have priority over movement by motorised vehicles.**
  - It held that **this fundamental right has a correlative duty and if the road exists, there is a duty to ensure that there are demarcated and well-maintained footpaths** for walkers.
  - **Responsible bodies:** **Urban development authorities, municipal corporations, municipalities, and panchayats** are responsible for providing safe footpaths.
    - They **must mark, build, maintain, and protect footpaths and other facilities for pedestrians** because walking is an essential part of daily life.
  - The Court suggested **creating an independent regulatory body** to effectuate the **fundamental right to walk on demarcated footpaths.**
    - Such a **regulator will maintain institutional integrity** by taking independent and objective decisions without governmental or industrial control.

## Chapekar Brothers

**News:** On June 22, 1897, the Chapekar brothers attacked Walter Charles Rand during Queen Victoria's Diamond Jubilee celebrations in Pune.

### About Chapekar Brothers



Source – Govt. of Maharashtra

- **The Chapekar brothers: Damodar Hari Chapekar (28), Balkrishna Hari Chapekar (24), and Vasudeo Hari Chapekar (18)** – were Indian revolutionaries who took up armed resistance against British colonial rule.
  - They hold a unique place in India's freedom struggle as **three brothers who were executed for their role in the fight against British rule.**
- **Early Life:** The brothers belonged to the **Chapekar community** from the **Konkan region**.
  - Their **father, Haripant Chapekar**, was a **well-known kirtankar** who later moved the family to **Sadashiv Peth in Pune.**
- **Inspired By:** Chapekar brothers were inspired by the **stories of Ram and Krishna.**
- **Patriotic Influence:** The brothers were **strongly influenced by the armed struggle of Vasudev Balwant Phadke** against British interests.
- **Followers of:** The brothers were ardent **followers of Lokmanya Tilak** and regularly read his newspaper '**Kesari**'.
- **Provocation:**
  - **Plague Crisis in Pune:** On **October 2, 1896, Pune recorded its first plague cases.**
    - Within four months, 271 people died and 308 people were infected, leading the **British administration to adopt stringent plague-control measures.**
  - **Insensitive British Measures:** Under **Walter Charles Rand**, British soldiers **entered private homes during plague inspections**, violating the sanctity of kitchens and home temples.
    - They also **made men and women stand in public and bare parts of their bodies for plague examinations**, which many people found humiliating and horrifying.
- **The Assassination:**
  - **Planning and Warning:** The brothers **planned to assassinate Rand during Queen Victoria's Diamond Jubilee** celebrations on June 22, 1897, and **sent him a warning letter before the attack.**

## Factly Compilation June 2026

- **Attack on June 22, 1897:** Due to confusion in the dark, **Balkrishna first** attacked a carriage carrying **Lieutenant Charles Ayerst**, who **died** immediately. **Damodar then attacked Rand**, who later died on July 3, 1897.
- **Betrayal:** The police were led to the brothers by **Ganesh Shankar Dravid and Ramchandra Shankar Dravid**.
- **Trial:** After their arrest, the Chapekar brothers were **tried and sentenced to death**.
- **Executions:** **Damodar** was hanged on **April 18, 1898**, **Vasudeo** on **May 8, 1898**, and **Balkrishna** on **May 12, 1898**.
- **Contribution to the Freedom Movement:** Their sacrifice **inspired later revolutionaries**, and a young **Vinayak Damodar Savarkar** took an oath to continue their unfinished revolutionary work.

## Project Nimbus

**News:** Google CEO Sundar Pichai's Stanford speech was disrupted by students protesting Project Nimbus and its alleged link to Palestinian civilians.

### About Project Nimbus



Source – OECD

- **Project Nimbus** is a **high-security cloud computing contract** between the **Israeli government, Google, and Amazon**.
- **Executed By:** It is **jointly** executed by **Google Cloud Platform** and **Amazon Web Services (AWS)**.
- **Objective:** The project aims to **digitize and modernize Israel's public sector infrastructure** by shifting government data, processing systems, and applications to commercial cloud platforms.
- **Key Features:**
  - **Duration:** The contract was planned for an **initial seven-year period**, with a possible **extension of up to 23 years**.
  - **Cloud Services for Government:** The agreement **provides cloud services to Israeli ministries, authorities, and government-owned companies**.
  - **Advanced Technology Support:** The project **offers data storage, high-compute machine learning tools, and Artificial Intelligence services**.
  - **Primary Cloud Provider:** **AWS (Amazon Web Services)** was selected as the **primary cloud provider** for government ministries and related entities.
  - **Usage Assurance:** Reports cited leaked documents claiming that **Israel required Google and Amazon not to restrict how government units used cloud services**.

- **Major Concern – Surveillance Risk:** Opponents of Project Nimbus argue that **cloud service technology could increase the surveillance of Palestinians and support the expansion of Israeli settlements** on Palestinian land.

### Ecologically Sensitive Areas

**News:** The Western Ghats may soon receive stronger legal protection in at least three states through the notification of Ecologically Sensitive Areas (ESAs).

#### About Ecologically Sensitive Areas



Source: TH

- **Ecologically Sensitive Areas** are **protected buffer areas** around protected areas, such as **national parks and wildlife sanctuaries**.  
It is also known as **Ecologically Sensitive zones in some contexts**.  
It is **identified for special environmental protection** because of its rich biodiversity, fragile ecosystems, or important ecological functions.
- **Origin:** The concept gained **prominence under India’s National Wildlife Action Plan (2002-2016)**, which recognised that areas around national parks, wildlife sanctuaries, and wildlife corridors are vital for maintaining ecological connectivity.
- **Importance:** ESZs are created as **“shock absorbers” for the protected areas** to minimize the negative impact on **“fragile ecosystems” by certain human activities taking place nearby**.  
These areas are also meant to **act as a transition zone from areas requiring higher protection** to those requiring lesser protection.
- **Notified under:** It is **notified under the Environment (Protection) Act, 1986**.
- **How are ESZs determined:** The size of an ESZ is **decided on a case-by-case basis**.  
Around national parks and wildlife sanctuaries, **it can extend up to 10 km from their boundaries**.  
**Ecologically important corridors and landscape linkages beyond this limit may also be included.**
- **Supreme Court Ruling (2022):** In June 2022, the Supreme Court directed that **every protected forest, national park, and wildlife sanctuary must have a mandatory eco-sensitive zone of at least 1 km from its boundary**.  
The Court stated that **these buffer zones are essential to protect fragile ecosystems from human activities** and to maintain ecological connectivity.
- **Protection ESA Areas get:**

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Being declared an **Ecologically Sensitive Area (ESA)** does not stop all development activities. Instead, it restricts or regulates activities that may harm the environment while promoting sustainable practices.

Activities such as **mining, quarrying, thermal power projects, highly polluting industries, and large construction projects are often prohibited or strictly controlled.** Other activities, including **tree felling, road expansion, hotel construction, and intensive farming, are regulated.** At the same time, **eco-friendly practices like organic farming, rainwater harvesting, and green technologies are encouraged.**

ESA status also ensures that **development projects undergo stricter environmental assessment**, taking into account biodiversity, wildlife, water resources, and ecological connectivity before approval.

- **Designated ESA Areas in India:** The Centre has **notified hundreds of protected areas, including national parks, wildlife sanctuaries and wetlands, as eco-sensitive zones** to regulate development and preserve ecological connectivity.
- **Examples:**
  - **Kumbhalgarh Wildlife Sanctuary** in Rajasthan's Aravalli range
  - **Kaziranga-Karbi Anglong landscape** in Assam
  - Gir National Park in Gujarat
  - Ranthambore Tiger Reserve in Rajasthan
  - Sundarbans in West Bengal etc.

### Thewa Art

**News:** Thewa art received global attention when Prime Minister Narendra Modi gifted Thewa cufflinks to Slovak President Peter Pellegrini during his visit to Slovakia.

#### About Thewa Art



Source: India Gov

- Thewa art is an **intricate and elegant form of jewellery-making** that involves fusing gold onto colored glass to create intricate designs and patterns.
- **Origin:** It originated in the **Pratapgarh district of Rajasthan**, under the patronage of Maharawat Samant Singh.
- **Meaning:** Thewa, which means “**setting**” in a literal sense, is a **unique way of fusing gold and colored glass** to create magnificent pieces.

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- **History:** The technique **dates back over 400 years** and has been passed down through generations of skilled artisans.
- **Practised by:** This inbred art is exclusively practised only by the **Sonis or goldsmiths of the Nathulal Soni family**. They call themselves **“Raj-Sonis”** now.
- **How it is made:** The basic Thewa jewellery is **made on a mottled sheet of pure gold**, which is then combined with coloured glass, which constitutes a single unit.
  - The glass that is **blended with the gold is treated with a special process**, which renders a dazzling effect and, in turn, **highlights the gold patterns**.
  - It has **evolved with changing times, incorporating techniques such as Meenakari and diamond setting**, along with the use of materials like beads and threads, to create a contemporary appeal.
- **Design:** Thewa jewellery is inspired by **Hindu mythology, folk stories, nature, and the rich culture of Rajasthan**.
  - Its designs often show scenes of **bravery, romance, historical events, rulers, and gods like Lord Krishna**.
  - **Flowers, plants, birds, and animals** are also **common motifs**.
  - The **bright and colourful designs** reflect the traditions of Rajasthan.
- This entire **range of jewellery is handmade**, and **sometimes a single piece of jewellery takes more than a month to design**.
- **Use:** The initial usage of Thewa art was to **adorn chests and boxes gifted to royalty**.
  - Today, **artisans apply this craft to a wide range of products**, including **photo frames, mirrors, cufflinks, brooches, trays, plates, and jewellery such as rings and necklaces**, which are worn by both men and women.
- **Significance:** It is **known for its delicate beauty and timeless elegance**, with each piece showcasing a level of craftsmanship that is unmatched in the world of jewellery-making.
- **Recognition:** It earned a **GI Tag in 2014**.
  - Selected master artisans and families of this craft have also been **recognised and awarded by UNESCO**.

### Caspian Sea and Volga River

**News:** A recent study found that the Caspian Sea is shrinking mainly because of human activities, along with the impact of climate change.

#### About Caspian Sea



Source – Britannica

- The Caspian Sea is the **world's largest inland body of water** and an **enclosed water body** surrounded by land on all sides.
- **Location:** It is located **between Asia and Europe**.
- **Surrounded by:** It is bordered by **Russia and Azerbaijan** in the west, **Kazakhstan and Turkmenistan** in the north and east, and **Iran** in the south.
- **Water Composition:** The water is **almost fresh in the northern part** and becomes **saltier towards the south**.
- **Water Source:** The **Volga, Ural, and Terek rivers** flow into the Caspian Sea from the north.
- **Key Features:**
  - **Basin:** It is an **endorheic basin**, which means it is a **closed drainage basin** where **water flows in through rivers but has no natural outlet to the oceans**.
  - **Energy Resources:** It is known for large offshore and coastal oil and natural gas reserves.
  - **Major Cities:** **Baku is the largest city on the Caspian**, while Nowshahr is another important coastal city.
  - **Important Islands:** Major islands include Chechen, Tyuleny, Morskoy, Kulaly, Zhiloy, and Ogurchin.
- **Threats:** Human activities, including dams, river diversion, irrigation, industrial use, weak pollution control, and rising evaporation, are causing the Caspian Sea to shrink.

### About Volga River



Source – Britannica

- The Volga River is the **longest river in Europe** and the **principal waterway of Russia**.
- **Origin:** The river **originates in the Valdai Hills, northwest of Moscow**.
- **Course:** It **flows southeast** through the Upper, Middle, and Lower Volga before **forming its delta at Astrakhan and entering the Caspian Sea**.
- **Key Tributaries:** Its major tributaries are the **Kama, Oka, Vetluga, and Sura rivers**.
- **Key Features:**
  - **Freshwater source:** The Volga River is the **primary freshwater source for the Caspian Sea**, accounting for **approximately 80% of its total surface inflow**.
  - **Navigation:** The river is **navigable for most of its length** and is **linked with the Baltic, Black, and Caspian Seas through canals and river networks**.
  - **Economic Importance:** It supports transportation, irrigation, hydroelectric power, fishing, agriculture, and major industries across Russia.

### Volcán de Fuego

**News:** Tourists on Guatemala's Volcán de Fuego ran for safety after the volcano erupted and burning rocks fell across the trekking route.

**About Volcán de Fuego**

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Source – Smithsonian Instt.

- **Location:** Volcán de Fuego is located in **Guatemala** near the historic **city of Antigua**.
- **Meaning:** It means “**Volcano of Fire**” in Spanish.
- **Type of Volcano:** It is a **young basaltic stratovolcano** with an **open-vent system**, which allows gas and magma to escape through regular eruptions.
- **Key Aspects:**
  - **Elevation:** The volcano stands **3,763 m (12,346 feet)** above sea level and is **located between Acatenango and Agua volcanoes**.
  - **Geological Setting:** It is part of the **Central American Volcanic Arc** and lies along the **boundary of the Cocos Plate and the Caribbean Plate**.
  - **Eruption Pattern:** It frequently produces **small eruptions** and is known for **vulcanian activity**, which is sometimes accompanied by **pyroclastic flows**.
  - **Historical Activity:** It has **erupted more than 60 times over the last 500 years**.
    - The **2018 eruption killed 194 people**, left 234 missing, and the volcano has continued to produce small eruptions several times each day.

### Omega Block




**News:** Western Europe is facing a severe heatwave, and the Omega Block or heat dome effect has trapped hot air over the region.

**About Omega Block**

## WHAT IS AN OMEGA BLOCK?

An Omega Block is a large weather pattern shaped like the Greek letter  $\Omega$  (omega). It traps hot air over a region, leading to prolonged heatwaves and dry conditions.

### WHY IT CAUSES HEATWAVES

-  High pressure acts like a lid, trapping warm air near the surface.
-  Sinking air prevents cloud formation and rainfall.
-  The trapped air heats up further, leading to extreme temperatures.

### HOW IT WORKS

1 Normally, the jet stream flows from west to east, moving weather systems along.



2 Sometimes, the jet stream becomes wavy and develops large bends.



3 A high pressure area builds in the middle, rising over the region.



4 This blocks the usual flow, trapping warm air beneath it.



5 The pattern can persist for days or weeks, intensifying the heat.



### IMPACTS OF AN OMEGA BLOCK

-  **EXTREME HEAT**  
Temperatures soar and can break records.
-  **DRY CONDITIONS**  
Lack of rain leads to drought, wildfires, and water stress.
-  **HEALTH RISKS**  
Heat exhaustion, heatstroke and higher risk for vulnerable people.
-  **IMPACTS ON DAILY LIFE**  
Disrupted transport, school closures, strain on power and health systems.



### WHY IT'S HAPPENING MORE OFTEN?

Climate change is altering jet stream patterns, making persistent Omega Blocks—and severe heatwaves—more likely.



### EXAMPLE: EUROPE 2025

A powerful Omega Block over Europe has led to record-breaking heat, deaths, power cuts, school closures and major disruption.

Source – IE

- **Omega Block** is an atmospheric weather pattern in which a **high-pressure area** remains between two **low-pressure zones** and traps warm air.
- **Naming:** It is called the Omega Block because the **wind flow forms a pattern similar to the Greek letter  $\Omega$  (Omega)**.
- **Distribution:** Omega Blocks occur **mainly in the mid-latitudes of the Northern Hemisphere, where the jet stream shows large bends**.
- **Mechanism of Formation:**
  - **Jet Stream Disruption:** **Jet streams** normally blow continuously from **west to east** and carry weather systems across Europe. When these **winds slow down** and their **path bends** into large loops, they form a **pattern resembling the Greek letter  $\Omega$  (Omega)**.
  - **High-Pressure Block Formation:** This Omega-shaped pattern **creates a high-pressure zone between two low-pressure zones**, forming an **atmospheric block that remains nearly stationary**.
  - **Heat Dome Development:** The high-pressure zone **acts like a lid over the land**.
    - **Warm air rising from the ground cannot escape into the upper atmosphere** and becomes trapped near the surface.
    - This **trapped high-pressure system is also called a Heat Dome**.
  - **Continuous Heating:** As the **trapped air sinks**, it becomes **compressed and warmer**.
    - At the same time, the **high-pressure system suppresses cloud formation, allowing prolonged sunshine** and causing temperatures to rise continuously.
- **Impact on Weather Conditions:**

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- **High-Pressure Region:** The region under the high-pressure area experiences **prolonged hot, dry, and settled weather** with intense heat.
- **Low-Pressure Regions:** The regions under the two low-pressure areas receive **abundant rainfall** because weather **fronts carrying moisture** are diverted around the high-pressure block.
- **Cause: Climate change** has warmed the baseline temperature and may slow the jet stream, **making Omega Blocks more intense and longer-lasting.**
- **Impacts:** The Omega Block has **caused severe heatwaves, widespread disruption, power outages, extreme heat alerts,** and loss of lives across Western Europe.

### BHARATI Initiative

**News:** The Agricultural and Processed Food Products Export Development Authority (APEDA) has successfully concluded first cohort of BHARATI Initiative.

#### About BHARATI Initiative



Source – APEDA

- **BHARATI** stands for – **Bharat's Hub for Agritech, Resilience, Advancement and Incubation for Export Enablement.**
- **Launched by:** Agricultural and Processed Food Products Export Development Authority (APEDA) under **Ministry of Commerce & Industry**
- **Aim:** This initiative aims to **empower 100 agri-food and agri-tech startups**, accelerate innovation, and create export opportunities, aligned to APEDA's vision of **\$50 billion** agri-food exports by **2030**.
  - It also aims to build **globally competitive** agri-products, deepen **demand-led backward integration.**
- **Launch and scale:** Its **pilot cohort** begins from **September 2025** with **100 startups** (high-value agri-food producers, technology-driven service providers, innovators).
- It is aligned with **Atmanirbhar Bharat, Vocal for Local, Digital India,** and **Start-Up India** initiatives.

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- **Features**

- **Programme design:** It complements government- and industry-led incubators and runs a **three-month acceleration** on product development, export readiness, regulatory compliance, and market access.
- **Focus categories:** Focus areas include **GI-tagged** products, **organic** foods, **superfoods**, **novel processed Indian agri-foods**, **livestock**, and **AYUSH**
- **Tech focus:** It invites advanced technologies such as **AI-based quality control**, **blockchain-enabled traceability**, **IoT-enabled cold chains**, and **agri-fintech**, while addressing **packaging**, **sustainability**, and **sea protocols**.
- **Challenges targeted:** It tackles export bottlenecks of **quality assurance**, **perishability**, **wastage**, and **logistics**.
- **Ecosystem building:** It connects agri-food innovators, tech-driven solution providers, and **SPS-TBT-focused startups** to deliver scalable, cost-effective solutions.

### Asiatic Black Bear (*Ursus thibetanus*)

**News:** Human-bear encounters are increasing across Kashmir as shrinking habitats and changing land use have led to more attacks on people.

#### About Asiatic Black Bear (*Ursus thibetanus*)



Source – Britannica

- The **Asiatic Black Bear (*Ursus thibetanus*)** is a **medium-sized bear species** of the **bear family (*Ursidae*)** native to **Asia**.
- It is also known as the **Moon Bear**.
- **Habitat:** The species prefers **heavily forested broadleaved and coniferous forests** as habitat.
  - It uses **orchards, agricultural fields and human habitation** to move between forest patches.
- **Distribution:**

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- **Global:** It lives in a **narrow band stretching from south-eastern Iran to Myanmar, across the Himalayan foothills.**
- **In India:** It is found across the Himalayan region, including **Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal, Arunachal Pradesh, Assam, and other northeastern states.**
- **Characteristics:**
  - **Common Name:** It is commonly known as the **Himalayan Black Bear** and is locally called **Reechh.**
  - **Appearance:** It has smooth **black fur with a white crescent-shaped or V-shaped mark on its chest.**
  - **Diet:** It is an **omnivorous species** that feeds on insects, fruits, nuts, honey, small mammals, birds, and carrion.
  - **Behaviour:** It is an **arboreal species** that climbs trees to feed on fruits or honey or to escape intrusion, although it does not sleep on trees like the Sun Bear.
  - **Hibernation:** It usually **hibernates during winter in the colder northwestern Himalayas**, but it can **remain active** throughout the year in the **warmer eastern Himalayas.**
- **Ecological Role:** Its foraging habits **help in seed dispersal** and maintaining forest health.
- **Threat:**
  - Habitat loss
  - Poaching for body parts
  - Increasing human-wildlife conflict
- **Conservation Status:**
  - **IUCN Red List: Vulnerable**
  - **Appendix I of CITES**
  - **Schedule II of the Wild Life (Protection) Act, 1972**

### Airborne Early Warning & Control System 'Netra'

**News:** DRDO handed over the Final Operational Clearance (FOC) certificate of the indigenous Netra Airborne Early Warning and Control system to the Indian Air Force.

**About Airborne Early Warning & Control System 'Netra'**



Source – TH

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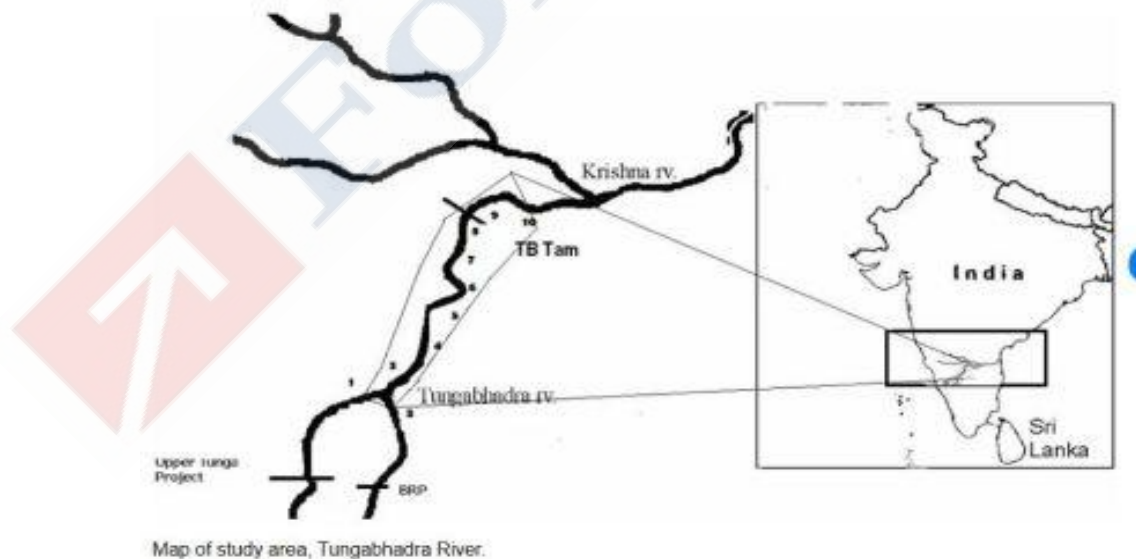
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- **Netra** is an indigenous Airborne Early Warning and Control (AEW&C) system that functions as a flying radar station for detecting, tracking and identifying airborne and maritime threats.
- **Global Achievement:** This capability makes India the fifth country in the world to design and build its own airborne surveillance and battle management platforms.
- **Initial Operational Clearance:** The Initial Operational Clearance (IOC) for the Netra AEW&C system was granted in 2017.
- **Developer:** It has been developed by the Centre for Airborne Systems (CABS) under DRDO in collaboration with the Indian Air Force (IAF) and Indian defence industry partners.
- **Commonly Known as:** It is commonly known as the Indian Air Force's (IAF) "Eye in the Sky".
- **Key Features:**
  - **Base Aircraft Platform:** It is built around the Brazilian Embraer EMB-145 aircraft, on which an Active Electronically Scanned Array (AESA) radar is mounted.
  - **Long-range Detection:** It detects incoming projectiles, ships and aircraft at long ranges and directs friendly fighters in real time.
  - **Radar Coverage:** It provides 250–500+ km detection range and 300° to 360° radar coverage for tracking hostile aircraft, drones and missiles.
  - **Advanced Mission Equipment:** It includes an AESA radar, Identification Friend or Foe (IFF), mission computer, secure communication networks, Electronic Support Measures (ESM) and Communication Support Measures.
  - **Real-time Information Sharing:** It shares real-time information with fighter jets, ground stations and other military assets.

## Tungabhadra River

**News:** The newly installed 33 spillway gates at the Tungabhadra reservoir are expected to address a long-standing water crisis affecting lakhs of farmers.

### About Tungabhadra River



Source – ResearchGate

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- **Origin:** The Tungabhadra River originates at **Koodli near Shivamogga district in Karnataka**, where **the Tunga and Bhadra rivers meet** after rising from the eastern slopes of the **Western Ghats**.
- **Hindu Mythology:** Hindus consider the river **sacred** and the **Ramayana** refers to it as **Pampa**.
- **Course:** It flows through **Karnataka**, **forms the boundary between Karnataka and Telangana**, enters **Andhra Pradesh**, and **joins the Krishna River at Sangamaleshwaram**.
- **Final Drainage:** After the **Tungabhadra joins the Krishna River** at Sangamaleshwaram, the **Krishna River** finally drains into the **Bay of Bengal**.
- **Major Tributaries:** The **Varada, Vedavathi, and Handri rivers** are the major tributaries of the Tungabhadra River.
- **Raichur Doab:** The Raichur Doab is a **highly fertile triangular tract between the Krishna and Tungabhadra rivers**.
  - **Continuous silt deposition** makes it **suitable for intensive cultivation** of crops such as rice, cotton, and sugarcane
- **Ecological Corridor:** The river basin extends from the **evergreen Western Ghats to the dry Deccan plains** and supports species such as the **smooth-coated otter and Mugger crocodile**.
- **Hampi:** The historic city of **Hampi, the capital of the Vijayanagara Empire**, is located on the river's banks.
  - **Dams & Irrigation:** The river has several dams, including the **Tungabhadra Dam, Tunga Anicut Dam, Bhadra Dam, and Hemavathy Dam**, which support irrigation.

### Totapuri Mangoes

**News:** The Centre approved financial assistance for Karnataka's Totapuri mango growers under the Market Intervention Scheme due to falling prices and adverse weather.

#### About Totapuri Mangoes



Source – ICAR

- **Totapuri** is an **indigenous South Indian mango variety** that is widely valued for its juice and pulp.
- **Alternative Names:** It is also known as **Ginimoothi, Sandersha and Banglora**.
- **Cultivated in:** Totapuri mangoes are mainly cultivated in **Andhra Pradesh, Karnataka and Tamil Nadu**.
- **Characteristics:**

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- **Physical Features:** Totapuri is a prominent juicy mango cultivar with an elongated shape, a distinct parrot beak-like tip, greenish-yellow skin and edible skin with minimal bitterness.
- **Nutritional Value:** It is rich in Vitamins C and A and contains calcium, potassium, magnesium and antioxidants that support immunity, eye, bone, muscle and skin health.
- **Uses:** It is widely used for juice, pulp extraction and mango drinks and is highly preferred by food processing industries.
- **Growing Conditions:**
  - **Climate:** Totapuri grows best in tropical climates with warm to high temperatures, dry summers and moderate rainfall.
  - **Soil:** It thrives in well-drained loamy soil with a neutral to slightly acidic pH.

### AIR SUVIDHA 2.0 Portal

**News:** The Ministry of Civil Aviation launched AIR SUVIDHA 2.0 to strengthen airport public health surveillance during the ongoing Ebola outbreak.

#### About AIR SUVIDHA 2.0 Portal

Source – MoCA

- AIR SUVIDHA 2.0 portal is an upgraded contactless Passenger Health Self-Declaration Portal for international passengers arriving in India.
- **Aim:** The portal aims to strengthen public health surveillance and identify at-risk travellers during the ongoing Ebola outbreak.
- **AIR SUVIDHA Portal 1.0:** The original AIR SUVIDHA Portal 1.0 was launched in August 2020 for COVID-19 health monitoring and contact tracing.
  - It was permanently shut down in February 2023.
- **Launched by:** The Ministry of Civil Aviation launched the portal in collaboration with Delhi International Airport Limited (DIAL).
- **Developed by:** The portal was developed in collaboration with the Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare.

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- **Key Features:**
  - **Online Health Declaration:** International passengers must submit an **online Health Self-Declaration** before immigration, **including their 21-day travel history, exposure history and related symptoms.**
  - **Advance Submission:** Passengers **can complete the Self-Declaration Form up to 24 hours before arriving in India** and should carry the downloaded form for verification.
  - **Real-Time Information Sharing:** The portal shares information with **Airport Health Officers, the Bureau of Immigration, the Integrated Disease Surveillance Programme (IDSP) and State Surveillance Officers.**
  - **Quick Risk Identification:** The system **enables authorities to quickly identify and refer at-risk travellers** while eliminating the need for physical forms.

### Banganapalle Mangoes

**News:** Agricultural and Processed Food Products Export Development Authority (APEDA) has successfully facilitated the first commercial sea shipment of premium Banganapalle mangoes from India to Singapore.

#### About Banganapalle Mangoes



Source – DD India

- **Banganapalle Mangoes** are a **famous variety of mango** primarily **cultivated** in the Indian states of **Andhra Pradesh and Telangana.**
  - It is also **grown in the other parts** of India.
- **Naming:** The **variety is named** after the town of **Banganapalle in Andhra Pradesh.**
- It is also known as **Benishan, Safeda, and Baneshan** in different regions.
- **Botanical Name:** **Mangifera indica**
- It is **state fruit of Andhra Pradesh.**
- **Harvest Season:** It is generally harvested from **April to June.**
- **Major Producing States:** **Andhra Pradesh (largest producer), Telangana,** with limited cultivation in parts of **Tamil Nadu and Karnataka.**
- **Recognition:** It was registered as one of the **geographical indication (G.I.) from Andhra Pradesh** on **3 May 2017.**
- **Characteristics**

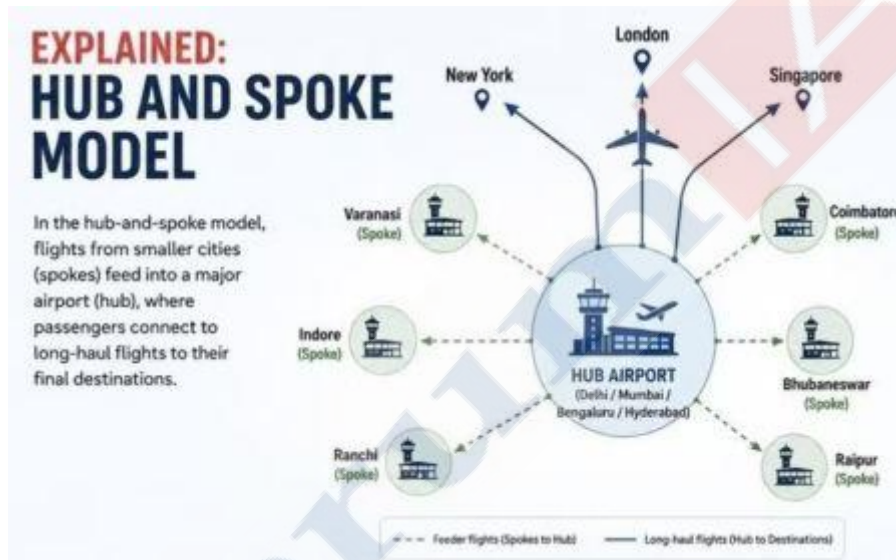
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- The **fruit** is described as obliquely **oval in shape**, around **20 cm in length**, with **yellow flesh** and a **thin, smooth yellow skin**.
- The **flesh** is of a **firm, meaty texture** and is **sweet and lacks fibre**.
- It is a **very late-season variety** that is **good for canning**.
- It is a source of **vitamin A and C** and is also called **king of Mangoes**.
- It is widely exported due to its **long shelf life** and **superior fruit quality**.

## Hub-and-Spoke Aviation Model

**News:** India launched its first 'Easy Connect' flight under the Hub-and-Spoke Aviation Model from Varanasi to New Delhi.

### About Hub-and-Spoke Aviation Model



Source – Business Standard

- **Hub-and-Spoke Aviation Model** is an **aviation model** that **connects smaller airports, called spokes, with major airports, called hubs**, to enable **seamless international travel**.
  - **The Spokes:** The spoke airports **serve as the starting point of the international journey**, where passengers complete check-in, immigration and customs formalities before flying to a designated Indian hub airport.
  - **The Hub:** The **hub airport receives passengers from the spoke airports** and allows them to board their onward international flight **without repeating departure formalities**.
- **Introduced by:** Hub-and-Spoke Aviation Model was **introduced by the Ministry of Civil Aviation**.
- **Aim:** The model aims to **make India the preferred aviation hub for Indian passengers by 2030** and for the **world by 2047** while **improving connectivity from Tier-II and Tier-III cities**.
- **Key Features:**
  - **Decentralized Processing:** Passengers **complete check-in, immigration and customs formalities at the spoke airport**, where they receive separate **'D' (Domestic)** and **'I' (International)** boarding passes before beginning their international journey.

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- **Seamless International Transit:** Passengers are checked in to their final international destination, their **baggage is transferred automatically, and they directly board their onward international flight at the hub airport** without repeating departure formalities.

### About First 'Easy Connect' Flight

- **Launch:** India launched its **first 'Easy Connect' flight** under the **Hub-and-Spoke Aviation Model** from **Lal Bahadur Shastri International Airport, Varanasi, to New Delhi.**
- **Operator:** The inaugural 'Easy Connect' flight is operated by **Air India.**

## National Awards to Teachers 2026

**News:** The Department of School Education and Literacy, under the Ministry of Education, is inviting online applications and nominations for the National Teachers Awards 2026.

### About National Teachers Awards 2026



Aspects	Details
About	It seeks to <b>recognize the outstanding contribution of teachers</b> towards improving the <b>quality of school education and promoting the holistic development</b> of students.
Nodal Ministry	The awards are conferred by the <b>Department of School Education and Literacy</b> , under the <b>Ministry of Education.</b>
First Instituted	They were first <b>instituted in the year 1958.</b>
Frequency	They are <b>conferred annually on 5th September (Teacher's Day)</b> to honour teachers who have <b>demonstrated excellence, innovation and commitment in the field of school education.</b>

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<b>Eligibility</b>	<ul style="list-style-type: none"> <li>● <b>Teachers</b> working in schools managed by the <b>Central Government, State Governments, Union Territory administrations, local bodies, and aided or private schools affiliated with recognized education boards</b> are eligible to apply, subject to the prescribed guidelines.</li> <li>● <b>Note: Only regular Teachers and Heads of Schools</b> with a <b>minimum of ten years of service</b> are eligible.</li> </ul>
<b>Not eligible</b>	<b>Educational administrators, inspectors of education, and the staff of training Institutes, teacher/Headmaster who are indulged in tuitions, Contractual teachers and shiksha mitras</b> are not eligible.
<b>Categories</b>	<ul style="list-style-type: none"> <li>● It is <b>conferred on the exemplary teachers/faculty members of higher education institutions and Polytechnics</b> as per the following categories:</li> <li>● <b>Category I:</b> It includes <b>teachers of Higher Educational Institutions:</b> <ul style="list-style-type: none"> <li>○ <b>Sub-category (i):</b> Engineering &amp; Technology, Architecture.</li> <li>○ <b>Sub-category (ii):</b> Pure Sciences including Mathematics, Physical Sciences, Biological Sciences, Chemical Sciences, Medicine, Pharmacy</li> <li>○ <b>Sub-category (iii):</b> Arts and Social Sciences, Humanities, Languages, Legal Studies, Commerce, Management.</li> </ul> </li> <li>● <b>Category II:</b> It includes <b>teachers of Polytechnic Institutions.</b></li> </ul>
<b>Criteria for the Selection process</b>	<ul style="list-style-type: none"> <li>● For the selection process, teachers will be evaluated on <b>two types of criteria:</b> <ul style="list-style-type: none"> <li>○ <b>Objection Criteria:</b> Under this, the teachers will be awarded marks against each of the objective criteria. <ul style="list-style-type: none"> <li>○ <b>Weightage:</b> These criteria are given a <b>weightage of 10 out of 100.</b></li> </ul> </li> <li>○ Performance against criteria: Under this, the teachers will be awarded marks on criteria based on performance for exemplary initiatives to improve learning outcomes, innovative experiments undertaken, organisation of extra and co-curricular activities, use of teaching learning material, social mobility, ensuring experiential learning, unique ways to ensure physical education to students, etc. <ul style="list-style-type: none"> <li>○ <b>Weightage:</b> These criteria are given the weightage of 90 out of 100.</li> </ul> </li> <li>○ The National Level Independent Jury will <b>submit its recommendations to the Hon'ble Education Minister for acceptance and final approval.</b></li> </ul> </li> </ul>
<b>Prizes</b>	<ul style="list-style-type: none"> <li>● Each award carries a <b>certificate</b> of merit, a cash award of <b>Rs. 50,000 and a silver medal.</b></li> <li>● Selected teachers are awarded by the <b>President or Vice President of India.</b></li> </ul>

## World's First Nuclear-Powered Hydrogen Plant (Cu-Cl Cycle)

**News:** The Department of Atomic Energy inaugurated the world's first nuclear-powered hydrogen production facility based on the Copper-Chlorine (Cu-Cl) thermochemical cycle at Kalpakkam.

### About World's First Nuclear-Powered Hydrogen Plant (Cu-Cl Cycle)



Source – PIB

- **Nuclear-Powered Hydrogen Plant ( based on Cu-Cl Cycle)** is the world's first hydrogen production facility that uses nuclear process heat through the **Copper-Chlorine (Cu-Cl) thermochemical cycle**.
- **Location:** The facility is located at the **Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Tamil Nadu**, under the **Department of Atomic Energy (DAE)**.
- **Developed by:**
  - **Core Technology:** The **Copper-Chlorine (Cu-Cl) thermochemical process** was developed indigenously by the **Bhabha Atomic Research Centre (BARC), Mumbai**.
  - **Facility Development:** The **hydrogen production facility** was jointly established and commissioned by **BARC and IGCAR**.
- **Working Mechanism:**
  - **Hydrogen Production:** **Copper** combines with **dry hydrogen chloride gas** at **430–475°C** to generate **hydrogen gas** and form **copper chloride**.
  - **Hydrolysis:** **Copper chloride** reacts with **superheated steam** at **400°C**, producing **copper oxychloride** while regenerating **hydrogen chloride gas**.
  - **Oxygen Production:** **Copper oxychloride** is heated to about **500°C** using **FBTR process heat**, which releases **oxygen gas** and forms **cuprous chloride**.
  - **Closed Cycle:** **Cuprous chloride** passes through **low-voltage electrolysis** to regenerate **copper and copper chloride**, thereby completing the **Cu-Cl thermochemical cycle**.
- **Key Features:**
  - **Nuclear-Powered System:** The facility uses **process heat from the Fast Breeder Test Reactor (FBTR)** for hydrogen production.
  - **Lower Temperature Requirement:** The **Cu-Cl cycle** requires a **maximum temperature of only 530°C**, which is **lower than the Sulfur-Iodine cycle**.

- **Low Electricity Consumption:** The electrolysis stage operates at only 0.5–1.0 volts, which is lower than conventional water electrolysis.
- **Continuous Operation:** The system provides round-the-clock, weather-independent hydrogen production using nuclear process heat.

### Cabinet Secretary

**News:** Cabinet Secretary urged senior bureaucrats to reassess routine administrative practices and improve the conduct of official meetings.

#### About Cabinet Secretary



मंत्रिमंडल सचिवालय  
Cabinet Secretariat

Source: CabSec

- The Cabinet Secretary of India is the **most senior administrative servant** and the **highest-ranking executive official** in the Government of India.
  - **Position:** He is the **administrative head of the Cabinet Secretariat** and also the **principal and chief advisor to the Prime Minister**.
    - He **ranks eleventh in the Indian order of precedence** and is **directly accountable to the Prime Minister**.
  - **Appointment:** He is **appointed by the Appointments Committee of the Cabinet (ACC)**, chaired by the Prime Minister.
  - **Tenure:** He is appointed for a **fixed two-year term, but his tenure can be extended up to four years, with an additional extension of up to three months possible**, as per the amended All India Service (Death-Cum-Retirement-Benefits) Rules, 1958.
  - **Function:** To **facilitate the smooth functioning of the government by providing secretarial assistance to the Cabinet**, coordinating activities among ministries and departments, and resolving inter-ministerial issues through various committees.
  - **Current Cabinet Secretary:** The **current Cabinet Secretary of India is T. V. Somanathan**.

#### About Cabinet Secretariat

- The Cabinet Secretariat is a **department of the Government of India** under the **Prime Minister's portfolio**.
- **Administrative head:** Its **administrative head is the Cabinet Secretary**, who is the **ex officio head of the Civil Services Board** and the **senior-most IAS officer in the country**.
- The Cabinet Secretariat **functions directly under the Prime Minister**.
- **Function:**
  - The Cabinet Secretariat is responsible for the **administration of the Government of India (Transaction of Business) Rules, 1961** and the **Government of India (Allocation of**

**Business) Rules, 1961**, facilitating smooth transaction of business in Ministries/ Departments of the Government.

- The Cabinet Secretariat **provides secretarial support to the Cabinet and its Committees.**
- It **ensures coordination among ministries, resolves inter-departmental differences, and helps build consensus through Committees of Secretaries.**
- It **manages major crisis situations in the country** and coordinates the activities of various Ministries in such situations.
- It **ensures that the President, the Vice President and Ministers** are kept informed of the major activities of all Ministries/ Departments **by means of a monthly summary of their activities.**

#### About Chief Secretary

- The Chief Secretary is the **highest-ranking civil servant and administrative head of a state government or Union Territory in India.**
- They are **appointed by the Chief Minister.**
- They **serve as the principal advisor on all administrative matters, head the state civil services,** and act as the secretary to the state cabinet.

### RBI's New Fraud Compensation Mechanism

**News:** The Reserve Bank of India introduced a revised fraud compensation mechanism for small-value digital payment frauds, effective from January 1, 2027.

#### About RBI's New Fraud Compensation Mechanism

<b>RBI TO BEAR 65% OF LOSS</b>	
<p>➤ For losses below ₹29,412, the victim will receive <b>85% of the lost amount (₹25,000)</b></p> <p>➤ <b>RBI will bear 65% of the total loss</b>, while the customer's bank and the beneficiary bank will each bear 10%</p> <p>➤ Provision extends coverage even to customers who have <b>shared credentials such as one-time passwords</b></p>	<p>➤ Customers who lose <b>more than ₹50,000</b> in a cyber fraud incident <b>will not qualify for this compensation mechanism</b></p> <p>➤ The central bank has also imposed <b>strict eligibility conditions</b> to ensure the scheme functions as a <b>limited safety net</b> rather than a recurring insurance cover for customers</p>



Source – ToI

- **RBI's New Fraud Compensation Mechanism** is a revised framework that **provides compensation to eligible victims of fraudulent electronic banking transactions involving losses up to ₹50,000.**

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- The **new framework builds on the RBI's Limited Liability Framework (2017, updated)**, which established that **customers would have zero or limited liability** if they reported unauthorized electronic banking transactions promptly.
- **Common Types of Digital Fraud: SIM swapping, phishing, vishing (voice call fraud), OTP theft, fake UPI handles, QR code scams, and AI-driven deepfake frauds** are common forms of digital payment fraud.
- **Effective from:** The revised framework will apply to electronic banking transactions **undertaken on or after January 1, 2027**.
- **Aim:** The framework **aims to limit customer liability, strengthen customer protection, and improve banks' responsibility** for fraud prevention and grievance redressal.
- **Key Features:**
  - **Compensation:** A bona fide victim **can receive 85% of the net loss or ₹25,000, whichever is lower, once during the lifetime** for eligible fraud cases.
  - **Eligibility:** The customer **must report** the fraud to **both the bank and the National Cyber Crime Reporting Portal or Helpline 1930** within five calendar days.
  - **Zero Liability:** **Customers will have zero liability** if the fraud results from bank negligence or a third-party breach reported within five days.
  - **Burden of Proof:** **Banks must establish customer negligence before rejecting** any compensation claim.
  - **Bank Obligations:** Banks must **provide 24×7 complaint channels**, instant **SMS alerts for transactions above ₹500**, **email alerts** where available, and **direct complaint links on websites and mobile applications**.
  - **Complaint Resolution:** Banks must resolve complaints **within 45 days for domestic frauds and 60 days for cross-border frauds**.

## New GI Tag Crops of Madhya Pradesh

**News:** Four traditional crops of Madhya Pradesh have received the Geographical Indication (GI) Tag, providing legal recognition to their authenticity, quality, and traditional agricultural heritage.

### About New GI Tag Crops of Madhya Pradesh

- **Four traditional crops of Madhya Pradesh** have received the **Geographical Indication (GI) Tag**.
- They are **Sitahi Kutki (Sitahi Minor Millet), Nagdaman Kutki (Nagdaman Minor Millet), Baigani Arhar (Dindori Pigeon Pea), and Mahakoshal Chhatriya Chawal (Chhatriya Paddy)**.
  - **Sitahi Kutki and Nagdaman Kutki (Minor Millets):**
    - **Location:** These traditional minor millet varieties are **cultivated in the Dindori region of Madhya Pradesh**.
    - **Tribal Association:** **The Baiga and Gond tribes** have **preserved their native seeds for generations** and have mainly cultivated them for **self-consumption**.
    - **Key Features:** These varieties are **naturally organic and climate-resilient**.
      - They are rich in **dietary fibre, complex carbohydrates, antioxidants**, and essential minerals such as **iron, potassium, and magnesium**.
      - They also have a **low Glycemic Index**.
    - **Importance:** Their high nutritional value and climate resilience make them important traditional crops with strong health benefits.
  - **Baigani Arhar (Dindori Pigeon Pea):**
    - **Location:** Baigani Arhar originates from the **Dindori region**.

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- **Tribal Association:** It is deeply linked with the **heritage of the Baiga tribe** and is cultivated **using traditional organic practices**.
- **Key Features:** It has **high natural protein content**, a distinct sweet flavour.
  - It has a **shorter maturation cycle** (5–6 months) , and requires **less cooking time**.
  - **Importance:** It is valued for its high nutritional content, including **dietary fibre, iron, calcium, and B-complex vitamins**.
- **Mahakoshal Chhatriya Chawal (Chhatriya Paddy):**
  - **Location:** This **traditional rice variety originates from Jabalpur and Katni districts**.
  - **Key Features:** It is known for its distinct aroma, taste, local adaptability, and retains its **bran layer with vitamin B1(thiamine), minerals, and healthy fats**.
  - **Importance:** The crop is recognised for its culinary excellence and balanced nutritional profile.

### Strawberry Moon, Blue Moon & Micromoon

**News:** June's full moon, known as the Strawberry Moon, has drawn attention to the Strawberry Moon, Blue Moon, and Micromoon.

#### About Strawberry Moon



Source – IE

- **Meaning:** The **Strawberry Moon** is the **traditional name given to the full moon that occurs in June**.
- **Naming:** Its name comes from **Native American Algonquian tribes**, who used it to **track the ripening and harvesting season of wild strawberries**.

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- **Alternative Names:** It is also referred to as the **Hot Moon, Mead Moon, or Rose Moon** in other cultures.
- **Position:** It rises in the **southeastern sky** and follows the **lowest path across the southern sky**.
- **Atmospheric Physics:** As the Strawberry Moon **stays low above the horizon, its light passes through more of Earth's atmosphere**, where **shorter blue wavelengths are scattered**, giving the Moon a **warm golden or orange glow**.
- **Moon Illusion:** It often appears **abnormally large when close to the horizon** due to the Moon Illusion (an **optical illusion that makes the Moon appear larger against nearby objects**).

### About Blue Moon

- **Meaning:** A Blue Moon is **identified by the timing of full moons rather than its colour**.
- **Types:** Blue Moons are of **two types**.
  - A **monthly Blue Moon** is the **second full moon in a calendar month**.
  - A **seasonal Blue Moon** is the **third full moon in an astronomical season that has four full moons instead of the usual three**.
- **Visual Effect:** The Moon **does not turn blue**, although **smoke or volcanic ash can sometimes make it appear bluish**.
- **Frequency:** Because the **lunar cycle lasts about 29.5 days and does not align perfectly with calendar months**, both **monthly and seasonal Blue Moons occur every two to three years**.

### About Micromoon

- **Meaning:** A Micromoon **occurs when a full moon coincides with apogee, the Moon's farthest point from Earth**.
  - By contrast, a **full moon at perigee, the moon's closest point to Earth in its orbit, is what's known as a "supermoon."**
- **Cause:** It occurs because the **Moon follows an elliptical orbit around Earth**.
- **Visual Effect:** It appears **roughly 14% smaller and 30% dimmer than a Supermoon**.

## Operation Amistad

**News:** India was among the first countries to respond to the devastating earthquakes in Venezuela, launching Operation Amistad to deliver critical medical and humanitarian assistance to the affected areas.

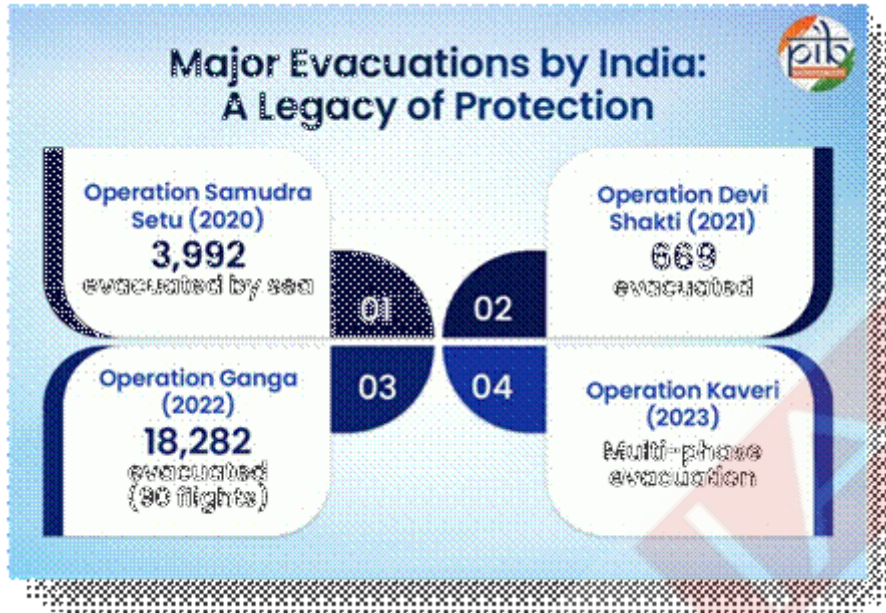
### About Operation Amistad



Source: TH

- **About:** It is a **Humanitarian Assistance and Disaster Relief (HADR)** mission in response to the **devastating earthquake in the Bolivarian Republic of Venezuela** that has caused extensive loss of life, injuries and widespread destruction.
- **Response:**
  - As part of the operation, **two Indian Air Force C-17 Globemaster aircraft departed for Venezuela, carrying humanitarian relief supplies and a 41-member rescue team** to assist the ongoing relief and rescue efforts.
    - **Humanitarian relief supplies:** The relief consignment included a **self-reliant Indian medical task force, an Indian Army Field Hospital unit with HADR pallets and medicines, 30 tons of relief supplies, 6 tons of medicines and medical equipment and 2 BHISHM cube portable hospitals.**
    - **Team Involved:** The 41-member team, **comprising experienced rescue personnel and medical professionals**, will work closely with the Venezuelan authorities on **search-and-rescue operations, emergency medical care, and humanitarian relief efforts** in the affected areas.

#### **About India's Other Humanitarian Operations**



Source: PIB

Operation Name	Details
<a href="#">Operation Sagar Bandhu (2025)</a>	Operation Sagar Bandhu is India's humanitarian relief initiative <b>providing vital Humanitarian Assistance and Disaster Relief (HADR)</b> support to Sri Lanka after Cyclone Ditwah.
<a href="#">Operation Brahma (2025)</a>	India launched this humanitarian mission after a <b>powerful 7.7-magnitude earthquake struck Myanmar on March 28, 2025.</b>
<a href="#">Operation Kaveri (2023)</a>	Operation Kaveri was <b>launched by India to evacuate its nationals from violence-hit Sudan.</b>
<a href="#">Operation Dost (2023)</a>	Operation Dost was launched <b>by India to help Syria and Turkey</b> after they witnessed a <b>massive earthquake</b> that left thousands dead, injured and trapped under the rubble.
<a href="#">Operation Ganga (2022)</a>	Operation Ganga was launched <b>to help stranded Indian nationals come back to India from Ukraine</b> through special flights amidst the Russian invasion of Ukraine.

## Green Ammonia and Green Urea

**News:** The Centre has taken a significant step towards promoting sustainable agriculture and reducing carbon emissions by unveiling a roadmap to establish Green Urea production in India, backed by a large-scale procurement of Green Ammonia under the [National Green Hydrogen Mission \(NGHM\)](#).

### About Green Ammonia

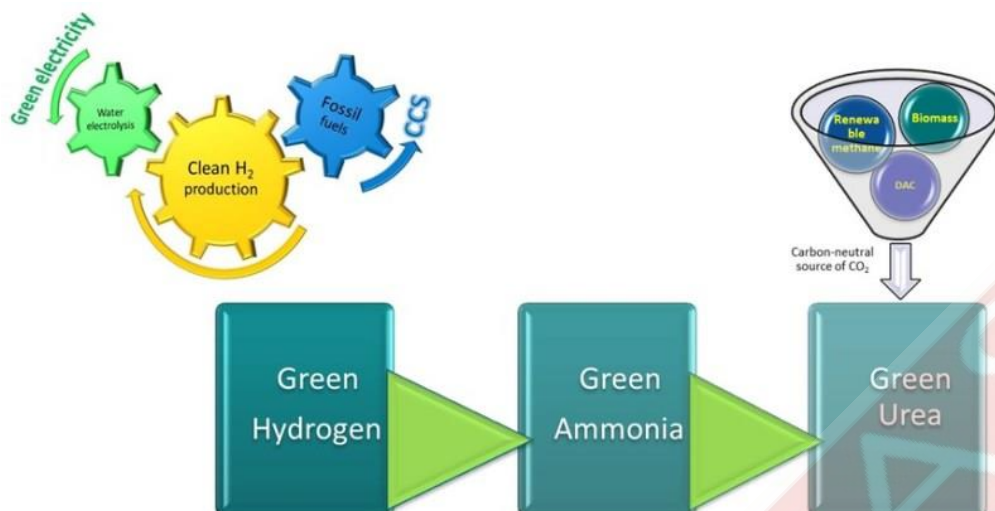


Source: World Economic Forum

- Green ammonia is **ammonia (NH<sub>3</sub>) produced using renewable electricity, green hydrogen, and nitrogen** extracted from the atmosphere. It is **manufactured through a process that results in little to no carbon emissions**.
- **Production of conventional ammonia:** Conventional ammonia production **relies on the Haber-Bosch process**, where hydrogen, typically obtained from natural gas, **is combined with nitrogen under high pressure and temperature**. Because **this method depends on fossil fuels, it generates substantial CO<sub>2</sub> emissions**. It is known as **Grey Ammonia**.
- **Production of green ammonia:** Green ammonia production is **a process where the production of ammonia is 100% renewable and carbon-free**.
  - Its production follows the **same fundamental synthesis process but replaces fossil-fuel-based hydrogen with green hydrogen**.
  - Green hydrogen is **produced through electrolysis powered by renewable energy sources** such as solar, wind, or hydropower.
  - **Nitrogen is supplied through air separation**, and both gases are then combined in a Haber-Bosch process operated using clean energy.
  - **The chemical reaction remains unchanged:  $N_2 + 3H_2 \rightarrow 2NH_3$**
  - When **both the hydrogen and the electricity used in the process come from renewable sources**, the result is carbon-free ammonia.
- **Application:** Green ammonia has significant potential in supporting the transition to net-zero emissions through:
  - **Energy Storage:** It can be stored and transported easily in liquid form, making it an **efficient medium for storing renewable energy**.
  - **Zero-Carbon Fuel:** It can be **used in engines or fuel cells to generate power**, producing only water and nitrogen as by-products.
  - **Hydrogen Carrier:** As ammonia is easier and cheaper to store and transport than hydrogen, it **can serve as an effective carrier and be converted back into hydrogen when needed**.
  - It is a versatile feedstock used in various applications, **including water purification and pharmaceutical manufacturing**.

### About Green Urea

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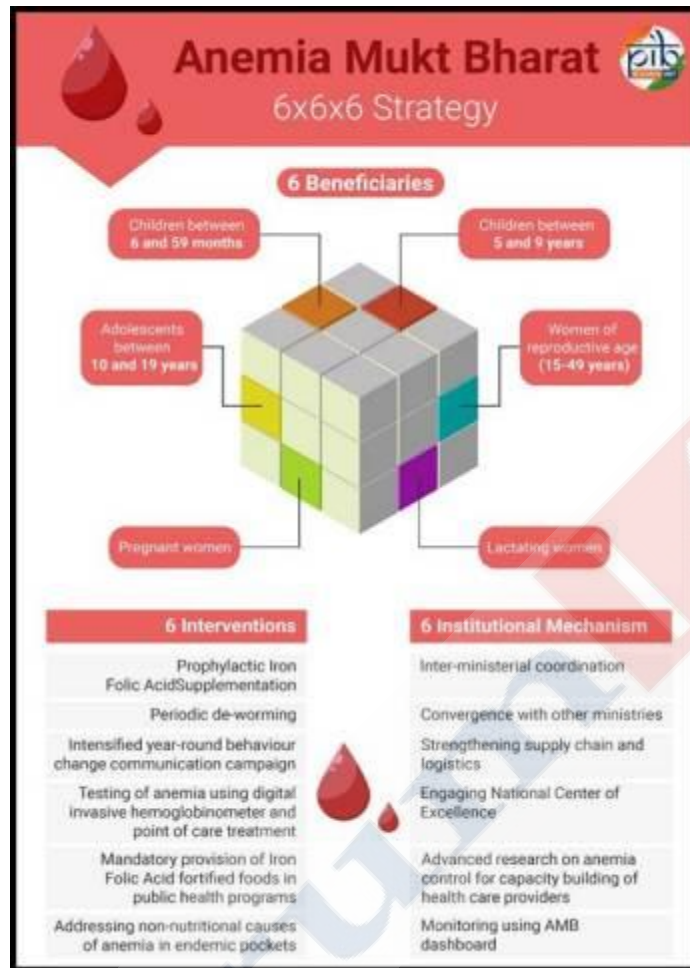
Source: csiro

- Green urea refers to **urea produced using renewable energy sources** such as municipal solid waste (MSW) to create a more sustainable and eco-friendly approach to waste management and urea production.
- **Production of Green urea:** It is produced by generating **green hydrogen** through the electrolysis of water using renewable electricity from sources.
  - **Nitrogen required for the process is obtained from the atmosphere** through an air separation unit.
  - The **green hydrogen and nitrogen are then combined** in the **Haber–Bosch process** to produce **green ammonia**.
  - **Carbon dioxide is captured from industrial sources** using **carbon capture and utilisation (CCU)** technologies instead of being released into the atmosphere.
  - The **green ammonia reacts with the captured carbon dioxide** to produce **urea (NH<sub>2</sub>CONH<sub>2</sub>)**.
- **Benefits:**
  - Green urea **reduces greenhouse gas emissions by replacing fossil fuels with renewable energy** and using captured carbon dioxide in production.
  - It supports **sustainable agriculture by providing nitrogen for crops and lowers the carbon footprint of fertiliser use**.
  - It **promotes renewable energy development, improves environmental sustainability** and helps build a climate-resilient food system.

### Anemia Mukh Bharat Abhiyaan

**News:** In a landmark step towards accelerating India's efforts to combat anemia, Union Minister for Health and Family Welfare released Anemia Mukh Bharat (AMB) Abhiyaan – Operational Guidelines.

#### About Anemia Mukh Bharat (AMB) Abhiyaan



Source: PIB

Aspects	Details
<b>About</b>	It is a <b>flagship health initiative</b> of the Government aimed at <b>eliminating anemia from the country</b> .
<b>Launched by</b>	It was launched in <b>2018</b> by the <b>Ministry of Health and Family Welfare</b> .
<b>Objective</b>	To reduce the prevalence of <b>anemia among children, adolescents and women in the reproductive age group (15-49 years)</b> .
<b>Implementation</b>	<ul style="list-style-type: none"> <li>It is implemented <b>across all villages, blocks, and districts in every State and Union Territory of India</b> through existing service delivery platforms.                             <ul style="list-style-type: none"> <li>It is carried out under the <b>National Iron Plus Initiative (NIPI)</b> and the <b>Weekly Iron and Folic Acid Supplementation (WIFS)</b></li> </ul> </li> </ul>

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	<b>programme</b> to prevent and reduce iron deficiency anemia, especially among adolescents aged 10–19 years.
<b>Key feature</b>	It includes a <b>6x6x6 strategy</b> under which there are six interventions to reduce the <b>prevalence of anemia (nutritional and non-nutritional) in six age groups</b> – pre-school children (6-59 months), children (5-9 years), adolescent girls and boys (10-19 years), pregnant women, lactating women, and women of reproductive age (15-49 years) <b>following a life cycle approach.</b>
<b>Six interventions</b>	<ul style="list-style-type: none"> <li>● <b>Prophylactic Iron and Folic Acid Supplementation</b></li> <li>● <b>Deworming</b></li> <li>● <b>Intensified year-round BCC campaign promoting four key behaviors:</b> <ul style="list-style-type: none"> <li>○ Improved compliance with Iron Folic Acid supplementation and deworming</li> <li>○ Appropriate infant and young child feeding (IYCF) practices</li> <li>○ Increased consumption of iron-rich and fortified foods through diverse, frequent diets using locally available resources</li> <li>○ Delayed cord clamping (3 minutes after birth) in health facilities</li> </ul> </li> <li>● <b>Testing and treatment of anemia</b>, using digital methods and <b>point-of-care treatment</b>, with special focus on pregnant women and school-going adolescents</li> <li>● <b>Mandatory provision of Iron and Folic Acid fortified foods</b> in government-funded public health programs</li> <li>● <b>Intensifying awareness, screening, and treatment of non-nutritional causes of anemia</b> in endemic pockets, with special focus on malaria, haemoglobinopathies, and fluorosis</li> </ul>
<b>Institutional Mechanisms</b>	<ol style="list-style-type: none"> <li>1. Intra-Ministerial Coordination</li> <li>2. National Anemia Mukht Bharat Unit</li> <li>3. National Centre of Excellences</li> <li>4. Convergence with other Ministries</li> <li>5. Strengthening Supply Chain and Logistics</li> <li>6. Anemia Mukht Bharat Dashboard and Digital Portal – One-Stop Shop on Anemia</li> </ol>

### About Anemia Mukht Bharat (AMB) Abhiyaan

- The Anemia Mukht Bharat is being transformed into Anemia Mukht Bharat (AMB) Abhiyaan.
- **Features:**
  - **6x6x6 strategy into a 7x7x7 framework:** The Anemia Mukht Bharat (AMB) Abhiyaan will expand the existing 6x6x6 strategy into a 7x7x7 framework by introducing a seventh beneficiary group, a seventh intervention and a seventh institutional mechanism.
    - **Seventh Beneficiary Group: Low Birth Weight (LBW) babies (0–6 months)** will be included as the **seventh beneficiary group.**

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- **Seventh Intervention: “Eating Right” approach**, which will promote **regular consumption of iron-rich and diversified diets** as a daily habit, will be introduced as the **seventh intervention**.
- **Seventh Institutional Mechanism: A strengthened monitoring and Evaluation framework** supported by digital tracking will serve as the **seventh institutional mechanism**.
- **Transition from T3 to T4 Approach:** It will include the **transition from the T3 approach (Test, Treat, Talk) to the T4 approach (Test, Treat, Talk and Track)**.
  - The revised strategy will **emphasise intensified haemoglobin testing, treatment of iron deficiency anemia in accordance with national anemia management protocols**, systematic tracking of beneficiaries for referral and follow-up, and targeted counselling to encourage healthy dietary practices.
- For the management of severe Anemia and non-responders among pregnant and lactating women, **Intravenous Iron Therapy using Ferric Carboxymaltose (FCM) and Iron Sucrose will be included as an important clinical intervention**.
- A **robust digital ecosystem for monitoring anemia services** across beneficiary groups will also be established.
- **Haemoglobin testing records for pregnant women will be mapped through the JANANI Portal**, and **records for children** will be captured through the **RBSK and U-WIN portals**.
  - These platforms will **converge into a unified AMB Abhiyaan Portal**, enabling **comprehensive monitoring, analysis and evidence-based planning**.

## White-rumped Vulture

**News:** A captive-bred, radio-tagged White-rumped Vulture released in Mudumalai Tiger Reserve died due to electrocution after its release in April 2026.

### About White-rumped Vulture



Source – Animalia

- The **White-rumped Vulture** is a **small ‘Old World’ vulture native to South and Southeast Asia**.
- **Scientific name: Gyps bengalensis**
- **Alternative Names:** It is also known as the **Indian White-backed Vulture** or the **Oriental White-backed Vulture**.

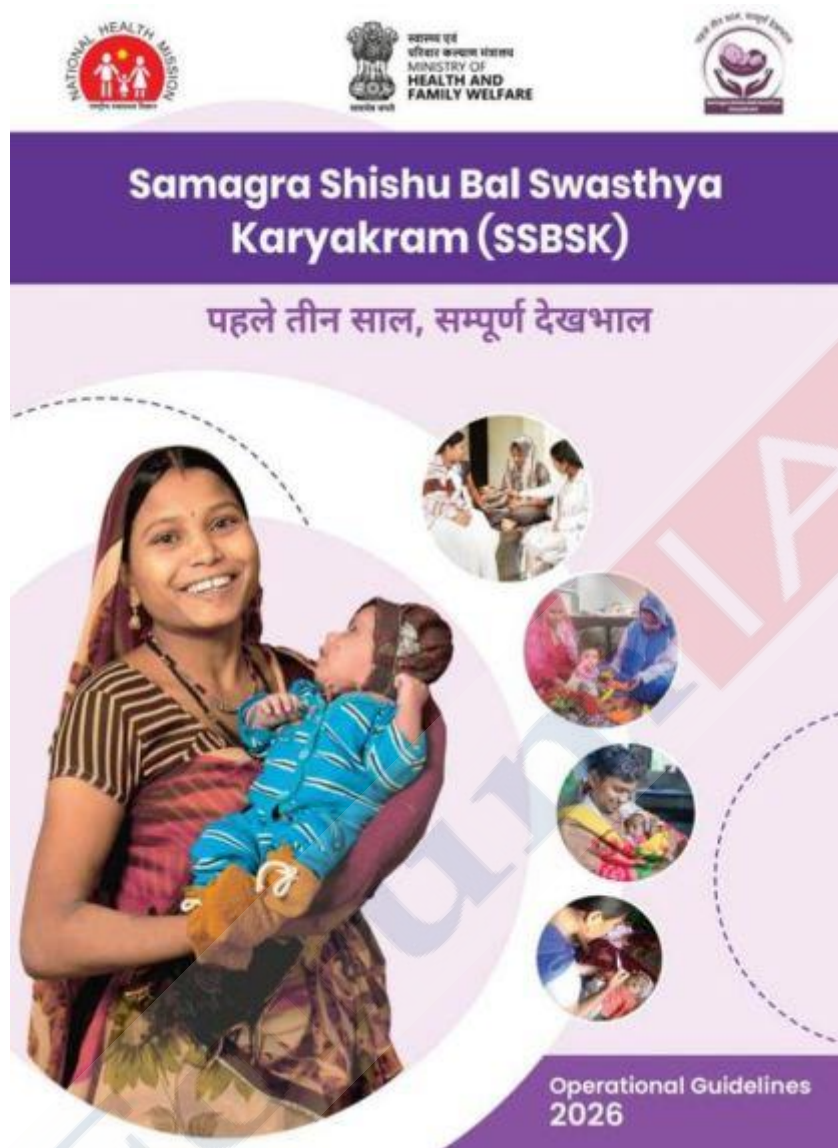
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- **Habitat:** It is found mostly in plains with **open areas, light woodland**, villages, and cities, and it is **occasionally seen in hilly regions**.
- **Distribution:** It is native to **India, Nepal, Bangladesh, Bhutan, Pakistan, Myanmar, Cambodia and southern Vietnam**.
  - **Extinction:** It is extinct in **China and Malaysia**.
- **Characteristics:**
  - **Appearance:** Adults have **blackish body feathers**, a **white neck-ruff**, and a **white patch on the lower back**, while **juveniles have brown feathers with white streaks**.
  - **Size:** It is a medium-sized vulture measuring **about 75–85 cm** in length, and **both sexes are approximately equal in size**.
  - **Behaviour:** It is highly **social, forms large flocks and communal roosts**, and **regularly gathers at carcasses**.
  - **Breeding:** It breeds in colonies on tall trees, often near human habitation.
  - **Diet:** It is an obligate scavenger that feeds on **fresh and decaying animal carcasses**.
- **Threats**
  - **Rapid population decline** is caused by **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)** such as **diclofenac, aceclofenac, and ketoprofen** used in livestock, which **cause kidney failure and visceral gout** in vultures.
  - **Other major threats** include **habitat loss, deforestation, poisoning, electrocution, collisions, and reduced food availability** due to changes in livestock management.
- **Conservation Status**
  - **IUCN Red List: Critically Endangered**
  - **Wildlife Protection Act, 1972: Schedule I**

### Samagra Shishu Bal Swasthya Karyakram (SSBSK)

**News:** Union Health Minister Jagat Prakash Nadda launched the Samagra Shishu Bal Swasthya Karyakram (SSBSK), a unified national child healthcare programme.

**About Samagra Shishu Bal Swasthya Karyakram (SSBSK)**



Source – MoHFW

- **Samagra Shishu Bal Swasthya Karyakram (SSBSK)** is a **unified national programme** that provides **integrated home and community-based healthcare** for every child from birth to 36 months of age.
- **Launched by:** The programme was launched by the **Ministry of Health and Family Welfare**.
- **Vision:** The programme carries forward the vision of “**पहले तीन साल सम्पूर्ण देखभाल**” (**Comprehensive Care During the First Three Years**).
- **Integrated with:** The programme **integrates** the existing **Home-Based Newborn Care (HBNC)** and **Home-Based Care for Young Child (HBYC)** programmes into a single framework.
- **Aim:** The programme aims to **strengthen child survival, nutrition, healthy growth and early childhood development** through an integrated approach for children from birth to 36 months.
- **Key Features:**
  - **Risk-based Follow-up:** The programme introduces a **risk-stratified approach**, and **identified ‘At-risk’ children** receive additional home visits according to their level of risk.

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- **Coordinated Home Care:** The programme ensures coordinated home visits by **Accredited Social Health Activists (ASHAs), Auxiliary Nurse Midwives (ANMs), Community Health Officers (CHOs) and Anganwadi Workers (AWWs)** to provide timely assessment, counselling and referral whenever required.
- **Early Screening:** The programme introduces **Well-Baby Sessions** at every **Village Health, Sanitation and Nutrition Day (VHSND)** and monthly **Shishu Shivirs at Ayushman Arogya Mandirs** to support regular screening, developmental assessment and comprehensive management of newborns and young children.
- **Maternal and Child Care:** The programme **includes post-partum maternal mental health screening** and promotes **nurturing care, early learning, age-appropriate play, child safety** and family participation.
- **Digital Monitoring:** The programme uses **digital tracking, Decision-Support Systems, referral mechanisms** and **integration with national digital health platforms** to improve follow-up and continuity of care.

### Delegation of Financial Powers to DRDO (DFP-2026)

**News:** Raksha Mantri Rajnath Singh released the Delegation of Financial Powers to DRDO (DFP-2026) on June 29, 2026, as a major administrative reform.

#### About Delegation of Financial Powers to DRDO (DFP-2026)



Source – PIB

- **Delegation of Financial Powers to DRDO (DFP-2026)** is a major **administrative reform** that **decentralizes financial decision-making to accelerate strategic defence R&D projects.**
- **Launched by:** It was launched by the **Ministry of Defence.**
- **Aim:** The framework aims to **enhance functional empowerment within the Department of Defence R&D, improve efficiency, ensure timely execution of strategic projects,** and strengthen **self-reliance in defence technologies.**
- **Key Features:**
  - **Enhanced Financial Powers:** The framework **increases financial powers at different levels within DRDO,** including the Secretary, Director General, and Laboratory Directors, to reduce administrative delays and improve project execution.
  - **Dedicated Trial and Testing Provisions:** It provides **dedicated financial provisions for trial campaigns, testing, and evaluation activities** to support timely completion of strategic R&D projects.

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- **Support for Pre-Project R&D:** The framework authorizes the sanctioning of pre-project research and development initiatives to encourage early-stage innovation before formal project approval.
- **Clear Grants-in-Aid Structure:** It clearly segregates financial powers for **Extra-Mural Research Projects, Defence Innovation Accelerator–Centres of Excellence, and Technology Development Fund (TDF)** projects.
- **Stronger Self-Reliance:** The framework promotes collaboration with industry and academia, reinforces the vision of **Aatmanirbhar Bharat**, and strengthens self-reliance in defence technologies and national defence preparedness.

### Global Skills Challenge Australia 2026

**News:** Team India delivered an impressive performance at the Global Skills Challenge (GSC) Australia 2026, securing three gold, one silver and one bronze medal.

#### About Global Skills Challenge Australia 2026



Source: DD India

- **About:** Global Skills Challenge Australia 2026 is an **international competition** held from **23–29 June 2026**.
  - It has **been designed as a full-scale simulation of the [WorldSkills Competition](#)**, enabling participants to compete under international assessment standards using the globally **recognised Competition Information System (CIS)**.

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- The event **also familiarized competitors with international equipment, evaluation processes and high-pressure competitive environments.**
- **Organized by:** It has been organized by **WorldSkills Australia.**
- **Participating nation:** It brought together nearly **600 competitors, experts, translators, and officials representing 16 WorldSkills member nations**, including India, alongside Australia, Austria, China, the USA, Japan, France, Korea, and more.
- **India's Participation:** **India sent a 30-member team to compete in 15 skill categories**, including 3D Digital Game Art, Automobile Technology, Beauty Therapy, Cloud Computing, Graphic Design, Hairdressing, Health and Social Care, Restaurant Service, Web Technologies, and more.
  - The team consisted of **15 competitors and 15 experts.**
- **Winners from India:**
  - **Gold medal winners:** India's gold medal winners were **Pavan Bhadravati Suresha** from Karnataka in **Additive Manufacturing**, **Mausam Kumar Giri** from Bihar in **Cloud Computing**, and **Vishnupriya Sunil** from Delhi in **Health and Social Care.**
  - **Silver Medal winner:** **Harsh Ramesh Pawar of Maharashtra** won the silver medal in **3D Digital Game Art.**
  - **Bronze Medal:** **Muskan from Haryana** secured the bronze medal in **Painting and Decorating.**
- **Other winning nations:** **Japan got a silver medal in Additive Manufacturing.**
  - **Japan** also got a **silver medal** and **Singapore got a bronze medal** in **Cloud computing.**
  - A **silver medal** was won by **Australia in Health and Social Care.**

### 1994 Upper Yamuna Water Agreement

**News:** Haryana and Rajasthan signed an agreement to implement the long-pending Yamuna Water Project under the 1994 Upper Yamuna Water Agreement.

#### About 1994 Upper Yamuna Water Agreement



Source – Mint

- The **1994 Upper Yamuna Water Agreement** is an **inter-state pact for sharing the utilisable surface waters of the Upper Yamuna Basin.**

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- **Signatory States:** The original Memorandum of Understanding (MoU) was signed by **Uttar Pradesh, Haryana, Rajasthan, Himachal Pradesh, and the National Capital Territory of Delhi.**
  - **Later Addition:** **Uttarakhand** became part of the agreement in 2000 after its creation.
- **Governing Body:** The **Upper Yamuna River Board (UYRB)** was established in **1995** to implement the MoU and regulate water allocation.
- **Objective:** The agreement **lays down rules for sharing the surface flow of the Upper Yamuna Basin** to meet drinking and irrigation needs among the basin states.
- **Dams and Infrastructure:** The agreement also recognised the need for future construction of upstream storage **dams such as Renuka, Kishau, and Lakhwar-Vyasi** to augment water supply.
- **Recent Breakthrough (June 2026):**
  - **Implementation Agreement:** **Haryana and Rajasthan signed a Memorandum of Agreement (MoA)** to operationalise the 1994 Upper Yamuna Water Agreement after nearly three decades of delay.
  - **Water Conveyance:** **Rajasthan's allocated 577 million cubic metres (MCM) of Yamuna water** will be transported from the **Hathnikund Barrage in Haryana to the Hansiyawas Reservoir in Churu** district through an underground pipeline network of about **295.5 kilometres.**
  - **Project Infrastructure:** The project includes three underground pipelines, each 3.6 metres in diameter, along with inspection roads, artificial reservoirs, and a modern water management system.
  - **Implementation Mechanism:** A **Special Purpose Vehicle (SPV) named the Rajasthan-Haryana Yamuna Water Project SPV (RHYW-SPV)** will oversee the implementation, construction, operation, and maintenance of the project.