Factly Weekly

Compilation

2025

For UPSC CSE Prelims Exam

4th Week

June 2025

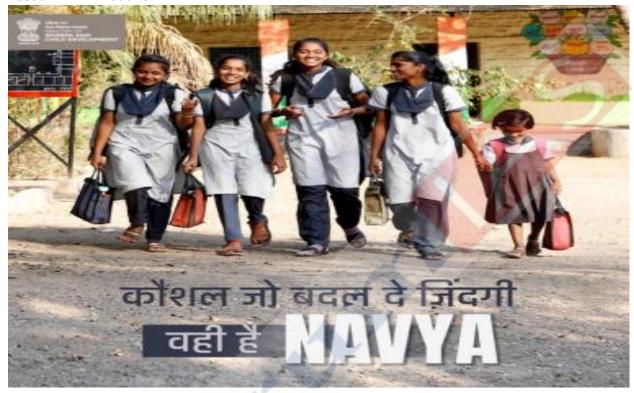
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NAVYA Initiative

News: Government to Launch 'NAVYA' – A Joint Pilot Initiative for Skilling Adolescent Girls Under Viksit Bharat@2047 Vision.

About NAVYA Initiative



Source - PIB

- Full name: NAVYA Nurturing Aspirations through Vocational Training for Young Adolescent Girls
- It is a **pilot initiative** aimed at equipping adolescent **girls aged 16–18 years** with a **minimum qualification of Class 10**, with **vocational training** mainly in non-traditional job roles.
- Launched by: Ministry of Women and Child Development (MWCD), in convergence with Ministry of Skill Development and Entrepreneurship (MSDE)
- Launched at: Sonbhadra, Uttar Pradesh
- **Target regions:** This **pilot initiative** will be implemented in 27 Districts of the country which include **Aspirational districts and districts of North -eastern States** spanning across 19 States.

Integration of e-Rakt Kosh with Rare Donor Registry

News: The Health Ministry is looking at integrating the country's Rare Donor Registry with the national online platform for blood bank management and blood availability information called e-Rakt Kosh.

About e-Rakt Kosh Platform





Figure 1.Source - C-DAC

- It is a **national platform** for information about **Blood Banks and Blood availability** across India.
- **Developed by:** It has been developed by **C-DAC** under the initiative of **Blood Cell, National Health Mission, Ministry of Health and Family Welfare.**
- It is the **official portal** for all blood-related services in India.
- Aim: It aims to provide all the information under a single umbrella as a one nation one platform for blood-related services in India.
- Key features
- Citizen-Centric Services
 containing real-time details from blood
 banks across India
- Provides an end-to-end IT solution for complete workflow managements in blood banks
- Available via the web, mobile apps on Google Play, iOS etc.
- O Integrated with **UMANG**, e-

Hospital, National Health Portal and flagship products of **CDAC e-Sushrut and e-Upkaran**.

About Rare Donor Registry of India (RDRI)

- It is a national database of rare blood group donors.
- Launched by: ICMR-National Institute of Immunohaematology (NIIH)
- It contains a data base of **4,000 carefully screened donors**, tested for over **300 rare blood markers**.
- It helps doctors **find rare** and specially matched blood quickly.

Integration of e-Rakt Kosh with RDRI

- The integration will allow those with rare blood groups to access a centralized system developed under the National Health Mission (NHS), providing details on blood banks, blood availability, and blood donation camps across the country.
- Essentially, it will help people find blood and blood banks, and assist blood banks manage their stock and donors.

INS Tamal

News: The Indian Navy is all set to commission its latest stealth multi-role frigate INS Tamal on 01 Jul 2025 at Kaliningrad, Russia.

About INS Tamal



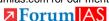


Source - PIB

- It is the **eighth stealth multi-role frigate** in the series of **Krivak class frigates** inducted from Russia over the past two decades.
- It is the **second ship of the Tushil Class**, which are the **upgraded versions** of their predecessors, **Talwar and Teg classes** having three ships each.
 - India is also building **two similar frigates** called the **Triput class at Goa Shipyard Limited** with transfer of technology and design assistance from Russia.
- Motto: The ship's motto is 'Sarvada Sarvatra Vijaya' (Victorious Always Everytime).

Features of INS Tamal

- It is a **125 m long**, 3900-ton stealth warship.
- Built by: It has been built at Yantar Shipyard in Kaliningrad, Russia but has 26% indigenous components.
- Equipments: It is upgraded with -
 - Vertically launched surface-to-air missiles including the **BrahMos long-range cruise missile** (both at sea and land)
 - Heavyweight torpedoes
 - Urgent-attack anti-submarine rockets
 - Surface Surveillance Radar complex
 - HUMSA NG Mk II sonar
 - Air Early Warning and Multi Role helicopters, which can operate from the deck of Tamal



- Naming: The ship's name symbolizes the **mythical sword** used for **combat by Indra** the King of the gods.
- **Mascot:** The ship's mascot is inspired by the congruence of the 'Jambavant' the Immortal Bear King of Indian Mythology and the Russian National Animal the Eurasian Brown Bear.
 - The ship's crew collectively takes great pride in calling themselves the 'The Great Bears'.
- It will join the 'Sword Arm' of the Indian Navy, the Western Fleet, under the Western Naval Command.

Sustainable Development Report (SDR), 2025

News: India has secured a position among the top 100 countries in the Sustainable Development Goals (SDG) Index for the first time.

About Sustainable Development Report (SDR)



Figure 2. Source - SDSN

- It is an annual assessment that tracks and ranks the progress of all 193 UN member states toward achieving the 17 Sustainable Development Goals (SDGs) adopted in 2015.
- Published by: It is published by the N. Sustainable Development Solutions Network (SDSN).
- SDG Index: The SDR uses a comprehensive set of indicators and data points to evaluate each country's performance which is used to provide an SDG Index score (0–100).
- **2025 edition:** It is the **10th edition** of SDR since its inception in 2016 (first edition).
- The 2025 edition introduced **new indicators** and provided an evaluation of which **countries have made the most progress** on the SDGs since 2015.

Key Highlights of Sustainable Development Report (SDR), 2025

- India: India has for the first time secured a place among the top 100 out of 193 countries.
- India ranks **99th** on the 2025 SDG Index with a score of **67**, while China ranks 49th with 74.4 and the US 44th with 75.2 points.
- India's neighbours: Bhutan

takes 74th place with 70.5 points, Nepal ranks 85th with 68.6, Bangladesh 114th with 63.9 and Pakistan 140th with 57 points.



- Maldives and Sri Lanka, stood at 53rd and 93rd places, respectively.
- Global scenario: SDG progress has stalled at the global level, with only 17 per cent of the 17 targets projected to be achieved by 2030.
 - Toppers: The Nordic nations continue to top the SDG Index, with Finland ranking first,
 Sweden second and Denmark
 - A total of **19 out of the top 20 countries are in Europe.**
 - East and South Asia have outperformed all other global regions in terms of SDG progress since 2015 largely due to rapid socioeconomic development.
 - Nepal (+11.1), Cambodia (+10), the Philippines (+8.6), Bangladesh (+8.3) and Mongolia (+7.7).
 - Others: Benin (+14.5), Peru (+8.7), the United Arab Emirates (+9.9), Uzbekistan (+12.1), Costa Rica (+7) and Saudi Arabia (+8.1).
 - Among G20 nations, Brazil (25) ranks highest, while Chile (7) leads among OECD countries.
 - The top three countries most committed to the **UN multilateralism** are Barbados (1), Jamaica (2) and Trinidad and Tobago (3).
 - **Five targets show significant reversals** in progress since 2015 obesity rate (SDG 2), press freedom (SDG 16), sustainable nitrogen management (SDG 2), the Red List Index (SDG 15) and the Corruption Perceptions Index (SDG 16).

Estimates Committee

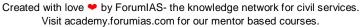
News: Lok Sabha Speaker inaugurated the national conference marking the platinum jubilee of the Parliamentary Estimates Committee in Mumbai's Vidhan Bhavan complex.

About Estimates Committee



Source - Maharashtra Vidhan Sabha

- The Committee on Estimates was constituted for the **first time in 1950**.
- Members: It is consisting of 30 members, elected every year by the Lok Sabha from amongst its Members.





- **Election:** Members are elected according to the **principle of proportional representation** by means of **single transferable vote**.
- **Chairperson:** The Chairperson of the Committee is **appointed by the Speaker** from amongst its members.
- A **Minister** cannot be elected as a member of the Committee and if a member after selection to the Committee is appointed a Minister, the **member ceases to be a Member of the Committee** from the date of such appointment.
- **Term of Office:** The term of office of the Committee is **one year**.
- Functions: The functions of the committee as **enshrined in Rule 310 of Rules of Procedure and Conduct of Business in Lok Sabha.** The functions of the Estimates Committee are:
 - o to report what economies, improvements in organisation, efficiency or administrative reform, consistent with the policy underlying the estimates may be effected;
 - o to suggest alternative policies in order to bring about efficiency and economy in administration;
 - to examine whether the money is well laid out within the limits of the policy implied in the estimates;
 - to suggest the form in which the estimates shall be presented to Parliament.
- Exceptions: The Committee does not exercise its functions in relation to such Public Undertakings
 as are allotted to the Committee on Public Undertakings by the Rules of Procedure and Conduct of
 Business of Lok Sabha or by the Speaker.

Thirstwaves

News: As per a research, the thirstwaves have increased in severity, with increased frequency in the growing season.

About Thirstwaves

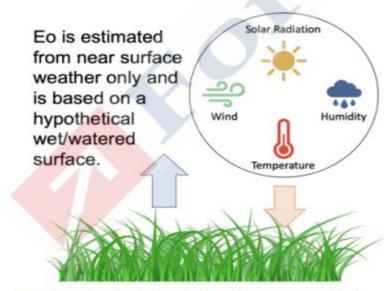


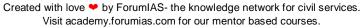
Figure 1. Schematic illustrating the atmospheric drivers of evaporative demand (labeled Eo in the figure) from a wellwatered reference surface.

Figure 3. Source - NOAA

- It is defined as a period of at least three consecutive days when the atmosphere's evaporative demand exceeds intensively.
- The term was introduced by researchers Meetpal Kukal and Mike Hobbins.
- They have grown more intense, are more frequent, and are lasting longer, especially in seasons when crops are grown.

Different from Heat Waves

- While **heat waves** are caused by particular **temperature and wind patterns**, a **thirstwave** is the product of **temperature**, **humidity**, **solar radiation**, and wind speed.
- When **temperatures rise**, the consequences include more heat as well as





the mechanics of water exchange between land and atmosphere, which in turn alters humidity, wind, and solar radiation.

• Global warming intensifies these combined factors, making the air more moisture-demanding.

Evaporative Demand

- It is a measure of **how thirsty the atmosphere** is.
- It determines the **near-maximum of how much water will evaporate from** a given piece of land **if sufficient water is available**.
- Measurement: It is measured using standardised short-crop evapotranspiration defined as
 the amount of water a grass surface 12 cm high and which has continuous access to sufficient
 water and is free of any stress will use.
 - **Evapotranspiration** itself refers to the **two processes** by which water moves from land to the atmosphere: **evaporation** from surfaces and **transpiration** from plant leaves.
- Consequences: Higher demand leads to increased moisture loss, leaving crops and soil drier, impacting crop health.

Organization of Islamic Cooperation (OIC)

News: Recently, the Organisation of Islamic Cooperation (OIC) strongly condemned the recent Israeli strikes on Iran, Syria, and Lebanon, urging the international community to take swift and decisive action.

About Organization of Islamic Cooperation (OIC)

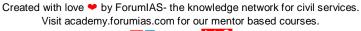
- It was formally established in May 1971 in Jeddah, Saudi Arabia.
- It originated after two key summits: The **1969 Rabat Summit** (in response to the arson attack on Al-Aqsa Mosque) and the **1970 Jeddah meeting** of Muslim foreign ministers.
- Membership: 57 member states across four continents, making it the second-largest intergovernmental organization after the UN.
- Members include countries such as **Afghanistan, Bangladesh, Egypt, Indonesia, Iran, Malaysia, Pakistan, Saudi Arabia, Turkey**, and the **Palestinian Authority**, among others.
- **Syria** has been **suspended since 2012** due to the civil war. **Egypt** was suspended in 1979 over the **Camp David Accords** but rejoined in 1984.
- The OIC also has permanent delegations to the United Nations and the European Union.
- **Headquarters**: Jeddah, Saudi Arabia.
- Official Languages: Arabic, English, and French.

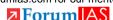
Key Bodies:

- **Islamic Summit Conference (ISC)**: Highest authority of OIC, convened every **three years** to set organizational policy.
- **Council of Foreign Ministers (CFM):** Meets **annually** to implement summit decisions and set directions for cooperation.
- **General Secretariat**: **Executive body** responsible for the implementation of decisions and coordination among members.
- **Ministerial Committees**: It was created for cooperation in **political, economic, social, cultural, spiritual, and scientific** fields. Some committees are chaired by heads of member states.

Key Initiatives and Institutions:

Islamic Development Bank (IsDB) – Promotes economic development and social progress.





- **Islamic Solidarity Fund (ISF)** Provides financial support for humanitarian and developmental activities.
- International Islamic News Agency (IINA) Aims to improve the global image of Islam and Muslims.
- World Centre for Islamic Education Promotes education in Islamic values and sciences.
- Collaborates with **UN agencies, governments, and civil society organizations (CSOs)** to **tackle global challenges affecting Muslims and member states.**

Tansen

News: The Madhya Pradesh High Court dismissed an appeal seeking permission to perform religious and cultural activities at the tomb of Tansen in Gwalior.

About Tansen





Source - Punjab Kesri

- Birth: He was born into a Hindu Gaur Brahmin family in Gwalior as Ramtanu Pandey.
- **Guru:** He was discipled to **Swami Haridas**, the legendary **composer from Vrindavan** and court musician of the stellar Gwalior court of **Raja Man Singh Tomar**.
- Career and patronage
 - He got his first break as musician and composer in the court of Raja Man Singh Tomar of Gwalior.
 - He spent most of his adult life in the court and patronage of the **Hindu king of Rewa, Raja Ramchandra Singh (1555–1592).**
 - He joined **Akbar's court** at about the **age of 60 in 1562.**
 - He was among the **Navaratnas (nine jewels)** at the court of Akbar.
 - Titles: The title "Mian" was bestowed upon him by Mughal Emperor Akbar.
 - While "Tansen" was his common name, bestowed upon him by Raja Vikramjit of Gwalior.

• Musical contribution

- He is remembered for his epic **Dhrupad compositions**, creating several new rags.
- He was instrumental in establishing the very **first musical gharana the "Gwalior Gharana**" of **Hindustani music**.
- He was also an instrumentalist who popularised and improved the plucked rabab (of Central Asian origin).



- Compositions: Tansen's musical compositions covered many themes, and employed Dhrupad.
 - Most of these were derived from the Hindu Puranas, composed in Braj Bhasha, and written in praise of gods and goddesses such as Ganesha, Saraswati, Surya, Shiva, Vishnu.
- Death: Tansen died in 1586 in Delhi.
 - Grave: His remains were buried in the mausoleum complex of his Sufi master Shaikh Muhammad Ghaus in Gwalior.
 - The tomb of Hazrat Sheikh Muhammad Ghaus was declared a protected monument of national importance in 1962 under the Ancient Monuments and Archaeological Sites and Remains Act, 1958.

RBI lowers priority sector lending target for Small Finance Banks

News: The Reserve Bank of India (RBI) has relaxed priority sector lending (PSL) norms for small finance banks (SFBs).

About Priority Sector Lending (PSL)



Figure 4. Source - Banknews

- and support marginalized sections of society.
- **Sectors included:** The sectors under PSL include:
 - Agriculture
 - Micro, Small and Medium Enterprises (MSMEs)
 - Education
 - Housing
 - Renewable energy
 - Export credit
 - Social infrastructure
- PSL Targets for Banks
 - Domestic commercial and Foreign Banks with 20 branches and above The overall PSL target is set at 40 per cent of their total adjusted net bank credit (ANBC) or Credit Equivalent of Off-Balance Sheet Exposures (CEOBE).

- It refers to the mandatory lending targets set by the Reserve Bank of India (RBI) for banks and financial institutions to ensure that certain sectors of the economy receive adequate credit and financial support.
- These guidelines are issued under the Banking Regulation Act, 1949.
- **Objective:** The objective of priority sector lending is to promote **inclusive growth**, **reduce regional imbalances**,



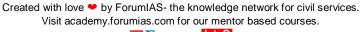
- **Foreign Banks with less than 20 B branches –** The overall PSL target is set at **40 per cent** of ANBC or CEOBE, whichever is higher.
 - Of this, **up to 32 per cent** can be for **export credit** and not less than **8 per cent** must be for any other priority sector.
- **For regional rural banks** The total PSL target is **75 per cent** of ANBC or CEOBE whichever is higher.
- For small finance banks (SFBs) The total PSL target is 60 per cent of ANBC or CEOBE whichever is higher.
- Primary (Urban) Co-operative Banks (UCBs) PSL Target of 60 per cent of ANBC or CEOBE, whichever is higher.
- Payment Banks Not subject to PSL targets.
- Adjusted Net Bank Credit (ANBC): It is computed after taking into account bill discounting, non-SLR (statutory liquidity ratio) securities and other exemptions via long-term bonds.
 - **Non-SLR securities** are debentures, mutual fund units, preference shares, commercial paper, equity shares, etc., issued by a securitization or reconstruction company.
- Credit Equivalent of Off-Balance Sheet Exposures (CEOBE): It include items that are not included on a company's balance sheet such as letter of guarantee, letter of credit, deferred payment guarantee, etc.

Revised RBI Guidelines for PSL BY SFBs

- Earlier: As per the 'Guidelines for Licensing of Small Finance Banks in Private Sector' dated 27 November 2014 a SFB was required to extend 75% of its ANBC or CEOBE to the sectors eligible for classification as priority sector lending (PSL).
 - Allocations: 40% of its ANBC or CEOBE should be allocated to different sub-sectors under PSL; the SFB can allocate the balance 35% to any one or more sub-sectors where it has competitive advantage.
- Present scenario: Now, from the financial year 2025-26 onwards, the additional component (35%) of PSL shall be reduced to 20%, thereby making the overall PSL target as 60% of ANBC or CEOBE, whichever is higher.

About Small Finance Banks (SFBs)

- They are **specialized financial institutions** established with the **primary goal** of fostering **financial inclusion** by offering basic banking services to underserved and unbanked segments of society.
- Key Features of Small Finance Banks
 - **Regulated by the RBI:** Operate under the RBI's Banking Regulation Act, 1949, and other relevant regulations.
 - **Basic Banking Services:** Offer savings accounts, current accounts, fixed deposits (FDs), recurring deposits (RDs), and loans.
 - Scheduled Bank Status: SFBs receive this status upon meeting specific criteria under the RBI Act, 1934.
 - Focus on Priority Sectors: At least 60% (earlier 75%) of their Adjusted Net Bank Credit (ANBC) is allocated to priority sectors like agriculture and small-scale industries.
 - Capital Requirements: Minimum paid-up capital is ₹200 crore, ensuring financial stability.
 - No Subsidiaries Allowed: SFBs cannot establish subsidiaries for non-banking financial services.
- Regulation and Governance of Small Finance Banks: SFBs are governed by:





- Banking Regulation Act, 1949
- o RBI Act, 1934
- o FEMA, 1999
- Credit Information Companies (Regulation) Act, 2005

Digital Payment Intelligence Platform (DPIP)

News: RBI ropes in banks to build Digital Payment Intelligence Platform to bolster fraud risk management by facilitating real-time intelligence sharing.

About Digital Payment Intelligence Platform (DPIP)



Figure 5. Source - Sab Paisa

- It is a forthcoming, RBI-led digital public infrastructure (DPI) designed to strengthen fraud risk management in India.
- Objective: The platform seeks to bolster fraud risk management by facilitating real-time intelligence sharing and gathering, thereby preventing fraudulent digital transactions.
- **Background:** RBI had formed a **committee** (June, 2024) chaired by **A.P. Hota** to examine various aspects of establishing this digital public infrastructure.
- To be built by: The Reserve Bank Innovation Hub (RBIH) has been assigned to build a prototype of DPIP in consultation with 5-10 banks.
- Working: It will collect and analyze data from various sources to identify potential threats and prevent fraudulent.

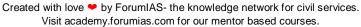
O By enabling **real-time data sharing**, the platform will help **prevent scams** and ensure **secure transactions**.

- Need: As per annual report of the RBI, there was a significant surge in bank frauds, with the amount involved rising nearly three times to Rs. 36,014 crores in FY25, compared to Rs. 12,230 crores in the previous year.
 - Frauds occurred predominantly in the **category of digital payments (card/internet)** in terms of the **number** and primarily in the **loan portfolio (advances) in terms of value.**

Amended BharatNet Program (ABP)

News- Gujarat became the first state to implement the Amended BharatNet Program (ABP) under a state led model.

About Amended BharatNet Program





Background

- The Government of India initiated the BharatNet project in October 2011 under the *Ministry of* Communications.
- This ambitious initiative seeks to deliver affordable high-speed internet connectivity to all Gram Panchayats across the country.
- The Union Cabinet approved the Amended BharatNet Program (ABP) on 4th August 2023, to be funded by the Digital Bharat Nidhi (DBN).
 - DBN is a fund created to enhance the quality and reach of telecommunications services across India. It was introduced by the Government of India as a successor to the *Universal Service* Obligation Fund (USOF).
- This updated plan aims to provide optical fiber connectivity using MPLS technology to 2.64 lakh Gram Panchayats in a ring topology.
- It will also extend internet access to about 3.8 lakh non-GP villages based on demand.

Key features of the Program

- IP-MPLS (Internet Protocol Multi-Protocol Label Switching) network with routers at Blocks and GPs.
- *Operation and maintenance* for 10 years.
- *Minimum 25 Mbps download speed* for each FTTH subscriber.
- o Last-Mile Network to be implemented through BharatNet Udyami model.

Weight Loss Drug - Wegovy

News: Danish drugmaker Novo Nordisk has launched its weight loss drug Wegovy as a once-a-week injection in India.

About Weight Loss Drug - Wegovy



Figure 6. Source - ABC News

- It is a **prescription** weight loss drug developed by Danish pharmaceutical company Novo Nordisk.
- It contains **semaglutide**, **GLP-1** receptor agonist originally developed for type 2 diabetes but found to be highly effective for weight loss.
- It is administered as a once-weekly injection using a convenient pen device (FlexiPen or FlexTouch).
- The drug is **approved by** Central Drugs Standard Control Organisation, (CDSCO) in India

strictly for **obesity management** and **not for diabetes**.

Working



- It is made of semaglutide, a GLP 1A receptor agonist, which mimics the naturally occurring hormone GLP-1, responsible for regulating blood sugar, reducing appetite and slowing down gastric emptying.
- It makes a person feel fuller for longer and eat less.

Other Weight Loss Drugs

- **Ozempic** is used more for **diabetes management**. The main **difference** between the two is the **dose**.
- **Rybelsus** is an **oral pill** for the same.
- Mounjaro is made up of tirzepatide, which mimics the function of natural hormones GIP and GLP 1.
 - It has a **double effect**, of increasing **insulin secretion** in response **to** food intake and improving **glucose control and weight loss**.

International Potato Centre (CIP)

News: India to set up a regional wing of the Peru-based International Potato Center (CIP) with a focus on the potato and sweet potato.

About International Potato Centre (CIP)

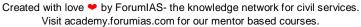


Source - CIP

- It was founded in 1971 with a focus on the potato, sweet potato and Andean roots and tubers.
- It primarily works in **South America**, **Africa and Asia**.
- It commenced its **work in India in 1975**, signing an initial **agreement** with the Indian Council of Agricultural Research (ICAR).
- **Headquarters**: Lima, Peru.
- A **new regional centre** of CIP is going to be set up in **India** to be known as the CIP-South Asia Regional Center (CSARC).
 - It will come up at Singna in Agra district of Uttar Pradesh.
 - O It will cater to **farmers in India's potato belt states**, like Uttar Pradesh, Bihar and West Bengal and also to **South Asian countries**.

About Potato and Sweet Potato Crops

- The potato crop is **native to the Peruvian-Bolivian Andes** in Latin America, spread across the globe by the Spaniards and the Portuguese who colonised the continent.
 - Potatoes **reached India in the 17th century**.
- It is the **third** most available **food crop** in the world, after rice and wheat, while **sweet potato** is in the **6th position** after maize and cassava.
- Top producers: India is its second-largest producer and consumer after China.





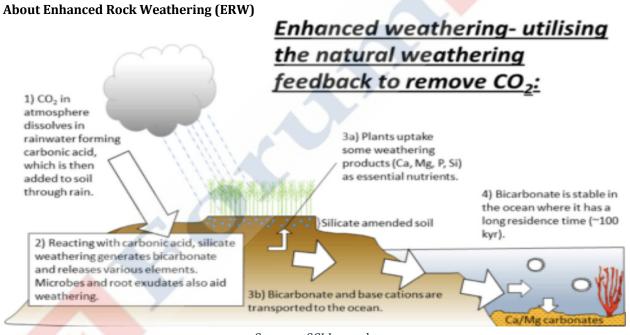
• In **2020**, **China's** production was recorded at **24 mt**, while India produced **51.30 mt**, accounting for over **one-third of the global** potato production (359.07 mt).

• Indian scenario

- Top producing states: Uttar Pradesh (15 mt), West Bengal (15 mt) and Bihar (9 mt) were the top three potato producers in 2020-21 with Gujarat, Madhya Pradesh and Punjab also have significant production.
- Issue of Low average yield:
 - Potato: India's average yield of potato crop is 25 tonnes per hectare about half
 of its potential of over 50 tonnes per hectare due to lack of availability of highquality seeds.
 - Sweet potato: India's sweet potato yield is just 5 tonnes per hectare, which is much less than the potential of 30 tonnes per hectare.

Enhanced Rock Weathering (ERW)

News: Tech giants, airlines and fast fashion firms lining up to buy carbon credits from ERW projects to "offset" or cancel out their own emissions.



- Source SCI Journals
- It is an innovative, nature-based carbon dioxide removal (CDR) technology designed to combat climate change by accelerating the earth's natural rock weathering process.
- ERW **speeds** the process up by using **quick-weathering rocks** like **basalt** that are ground finely to increase their surface area.
- Aim: It aims to turbocharge a natural geological process called weathering.
 - **Weathering** is the **breakdown of rocks by carbonic acid**, which forms when carbon dioxide in the air or soil dissolves into water.
 - Weathering occurs naturally when rain falls on rocks, and the process can lock away carbon dioxide from the air or soil as bicarbonate, and eventually limestone.



Effectiveness of ERW

- **Debatable:** ERW is still a fairly **new technology** and there are **questions about how much carbon it** can remove.
- **Difficult to measure: Rates** depend on variables including **rock type and size**, how **wet and hot** the climate is, **soil type** and **land management**.
- **Miscalculation:** The most popular technique **measures "cations**", positively charged ions that are released from the rock during weathering.
 - If there are **stronger acids than carbonic**, then it will react with those, so measurable cations are produced even when **carbon dioxide is not captured**.

Benefits

- The added rock increases soil alkalinity, which can boost crop growth, soil nutrients and soil formation.
- Basalt is both naturally abundant and often available as a byproduct of quarrying, lowering the costs
 of the process.

Cancer Drugs

News: A significant investigation uncovered that several cancer medications distributed to more than 100 countries have not met quality standards. This revelation prompts critical questions about the identity and usage of these drugs.

About Cancer Drugs

Cancer drugs are medications used to destroy or inhibit the growth of cancer cells, playing a crucial role in chemotherapy and targeted cancer therapies.

About Cisplatin

- Type: Platinum-based chemotherapy drug
- How It Works: Binds to DNA in cancer cells, preventing their replication and division
- Uses: Commonly used to treat testicular, ovarian, bladder, and certain lung cancers
- **Benefits**: Has significantly improved survival rates in several cancers, either on its own or combined with other therapies
- **Side Effects**: Nausea and vomiting, Kidney damage, Hearing loss and Bone marrow suppression, leading to reduced immunity

About Oxaliplatin

- Type: Platinum-based chemotherapy drug
- How It Works: Similar to cisplatin; binds to and damages cancer cell DNA to inhibit growth
- Uses: Mainly used for advanced colorectal cancer and post-surgical treatment of colon cancer
- Side Effects: Comparable to those of cisplatin, including risk of immune suppression and nausea

About Cyclophosphamide

- **Type**: Alkylating chemotherapy agent
- How It Works: Damages DNA in cancer cells, reducing their ability to multiply
- **Uses**: Breast cancer, Leukemia, Sarcoma and Advanced lymphoma
- **Side Effects**: Suppressed white blood cell production, Increased risk of infection and Bladder inflammation, causing painful urination

About Doxorubicin



- Nickname: Known as the "red devil" due to its color and potent side effects
- How It Works: Disrupts cancer cell DNA and hinders their ability to reproduce
- Uses: Breast cancer, Leukemia, Lymphoma and Sarcoma
- Side Effects: Potential heart damage, Hair loss, Skin changes and Increased infection risk

About Methotrexate

- **Type**: Antimetabolite chemotherapy drug
- How It Works: Inhibits an enzyme needed for DNA synthesis, stopping cancer cell growth
- Uses: Leukemia, Lymphoma and Various solid tumors
- Administration: Often used in high doses followed by leucovorin to reduce toxicity
- **Side Effects**: It can be toxic to normal cells without supportive care and Liver and kidney function monitoring required

About Leucovorin (Folinic Acid)

- Type: Supportive chemotherapy agent (not a direct anti-cancer drug)
- How It Works: A form of vitamin B9 used to protect healthy cells during chemotherapy
- **Uses**: It reduces toxic effects of high-dose methotrexate and it enhances effectiveness of certain other chemotherapy drugs (e.g., 5-FU)
- **Side Effects**: Generally mild, since it helps protect healthy tissue

Operation Deep Manifest

News: DRI seizes 39 containers carrying 1,115 metric tonne worth of goods around ₹9 crore of Pakistan-origin under 'Operation Deep Manifest'.

About Operation Deep Manifest

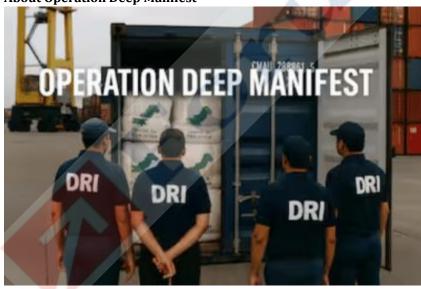


Figure 7. Source - Asianet

- It is an operation targeting the illegal import of Pakistani-origin goods routed through third countries, primarily via Dubai, UAE.
- Launched by:
 Directorate of Revenue
 Intelligence (DRI) under the
 Central Board of Indirect Taxes
 and Customs (CBIC), Ministry of
 Finance
- Context of operation:
 The Government of India banned import of Pakistani-origin goods routed through third countries, primarily via Dubai,
 UAE, post Pahalgam terror

attacks.

• Previously, such goods were subject to **200% customs duty**.



- Violation of import policy: Import of Pakistani-origin goods routed through third countries is in blatant violation of import policy conditions and prohibitions on direct or indirect import or transit of such goods.
- Significance: The operation exemplifies DRI's steadfast commitment to upholding Government's
 policy, customs and other relevant laws; safeguarding national and economic security of country; and
 preventing the misuse of trade channels for import of Pakistani-origin goods.

First Maritime NBFC - Sagarmala Finance Corporation Limited

News: The Union Ministry of Ports, Shipping & Waterways (MoPSW) inaugurated Sagarmala Finance Corporation Limited (SMFCL), India's first Non-Banking Financial Company (NBFC) in the maritime sector.

About India's First Maritime NBFC - Sagarmala Finance Corporation Limited



Figure 8. Source - PIB

- diverse range of stakeholders such as
 - port authorities
 - shipping companies
 - MSMEs, startups
 - maritime educational institutions
- **Policy alignment:** It **aims** to play a transformative role in India's maritime infrastructure development, in alignment with the **Amrit Kaal Vision 2047**.

Official Language

News: Union Home Minister addressed the 'Golden Jubilee Celebration' of the Department of Official Language in New Delhi as the Chief Guest.

About Official Language

• It is a Mini Ratna, Category-I, Central Public Sector Enterprise which has been formally registered as a Non-Banking Financial Company (NBFC) with the Reserve Bank of India (RBI).

- It was formerly known as Sagarmala Development Company Ltd.
- Nodal Ministry: Ministry of Ports, Shipping and Waterways
- **Objective:** It will offer tailored financial products including **short**, **medium**, **and long-term funding**, to a





Source - PIB

Constitutional Provisions

- **Part XVII** of the Constitution **(Articles 343–351)** governs language use in the Union, States, Parliament, judiciary, and inter-state communication.
 - So, the official language policy of India is enshrined in Articles 343 to 351 of the Constitution.
- **Article 343: Hindi in Devanagari script** is the official language of the Union.
- Article 343(3) & Article 348: English is to be used for all official purposes of the Union, including
 parliamentary proceedings, judiciary, and communication between the Centre and non-Hindispeaking states, until otherwise decided by Parliament.
- **Article 344**: A **committee of parliament** is to be constituted to **examine the recommendation** of the **commission** and to report its views on them to the **President**.
 - Official Languages Act 1963: Continued use of English without time limit (amended in 1967

 use of English in addition to Hindi, compulsory in certain cases).
 - Official Commissions:
 - O G. Kher Commission (1955)
 - Parliament committee under G. B. Pant (1957).
- Article 345: official languages or languages of the state
 - State Language Provisions: The Constitution does not specify the official language of different states. In this regard, it makes the following provisions:
 - The **legislature of the state** may adopt any **one or more of the languages** in use in the state **or Hindi** as the official language of the state.
 - Until that is done, **English** is to continue as the official language of that state.
 - States are not confined to selecting languages listed in the Eighth Schedule of the Constitution.
- Article 346: The official language of Union (i.e., English) shall be the link language for communications between the Union and states.
 - However, **two or more states** have the freedom to **mutually decide to utilize Hindi**, rather than English, for communication among themselves.



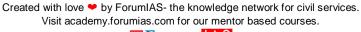
- Article 347: Recognition of Language
 - When the President (on a demand being made) is satisfied that a substantial proportion of the population of a state desires the use of any language spoken by them to be recognised by the state, then he may direct to officially recognize the same to protect the linguistic interest of the minority of state.
- Article 348: Language of the Judiciary and Legal Texts
 - English shall be used in the Supreme Court, High Courts, and for authoritative texts of laws, bills, acts, ordinances, and orders.
 - Special Directives for Linguistic Minorities
- **Article 350:** Language to be used in representations for redress of grievances
- Article 350A: Facilities for instruction in mother-tongue at primary stage
- **Article 350B:** Provides for a Special Officer for Linguistic Minorities, appointed by the President, to investigate all matters relating to the safeguards for linguistic minorities.
- **Article 351:** Directive for development of the **Hindi language**.
- Schedule Languages: Eighth Schedule of the Constitution consists of the following 22 languages:
 - (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.

Manasarovar Lake

News: The Kailash-Manasarovar Yatra has officially resumed after a five-year hiatus, with the first group of 36 Indian pilgrims reaching Manasarovar Lake in the Tibet Autonomous Region of China.

About Manasarovar Lake

- Location: Manasarovar Lake (also called **Mapam Yum Tso** in Tibetan) is located in the **Tibet** Autonomous Region (Xizang) of China.
- It lies at an altitude of **4,590 metres (15,060 feet)**, near **Mount Kailash (Gang Renpoche)** in the **Ngari Prefecture** of western Tibet.
- It is one of the highest freshwater lakes in the world.
- The lake is situated near the source of major rivers such as the **Indus, Sutlej, Brahmaputra (Yarlung Tsangpo)**, and **Karnali (Ghaghara)**.
- The name "Manasarovar" derives from **Sanskrit words** *Manas* (mind) and *Sarovar* (lake), meaning "Lake of the Mind".
- **Route of the Yatra (2025 Resumption):** The **first batch** of pilgrims entered via **Lhasa**, capital of **Tibet, under** the old traditional route facilitated by the Chinese authorities. The **second batch** is **scheduled** to travel via the **Nathu La Pass** in Sikkim—a motorable route that was part of the bilateral protocol established before the 2020 suspension.
- Cultural and Religious Significance (Hinduism):
 - In **Hinduism**, **Mount Kailash** is revered as the **abode of Lord Shiva**, and Manasarovar is believed to have been created by **Lord Brahma**.
 - Bathing in the lake and performing a **parikrama (circumambulation)** of Mount Kailash is considered to cleanse sins and bring spiritual merit.





- Buddhist and Jain Beliefs: Buddhists regard the lake as a place where Queen Maya conceived Lord Buddha. Jains believe that Rishabhdev, their first Tirthankara, attained Nirvana here.
- **Bilateral Significance:** The Yatra is a **symbol of India-China cultural diplomacy**, governed by agreements allowing Indian pilgrims to visit the sacred sites inside Tibet.

Litchi Cultivation

News: India dispatches its first consignment of rose-scented litchis to Qatar.

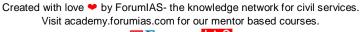
About Litchi Cultivation

- It is a tropical fruit popular for its sweet taste and juicy texture.
- Litchi requires a moist sub-tropical climate for optimal growth. The crop is highly sensitive to winter frost and cannot tolerate dry heat during summer.
- **Temperature:** The general temperature range for litchi cultivation varies from around 10°C during the winter months (December to February) to as high as 38°C in the summer months (April to June). The optimum temperature for healthy growth and productivity is up to 32°C.
- **Climatic Condition:** While litchi trees require moist conditions during the growing season, they should not be exposed to waterlogging.
- **Soil type:** Deep, well drained loamy soil, rich in organic matter and having pH in the range of 5.0 to 7.0 is ideal for the crop.
- Production:
 - India is the second largest producer of litchi in the World after China. Other major producing countries are Thailand, Australia, South Africa, Madagascar and Florida in US.
 - It is now widely grown in India, especially in Bihar, West Bengal, Uttar Pradesh, Jharkhand, and Assam.
- Health benefits.
 - It is rich in Vitamin C, which helps boost immunity and fight infections. The fruit is also high in antioxidants, aiding in skin rejuvenation and anti-ageing.
 - Its dietary fiber supports digestion, while its low calorie and fat content make it ideal for weight management. The B-complex vitamins in litchi help reduce stress and improve energy levels.

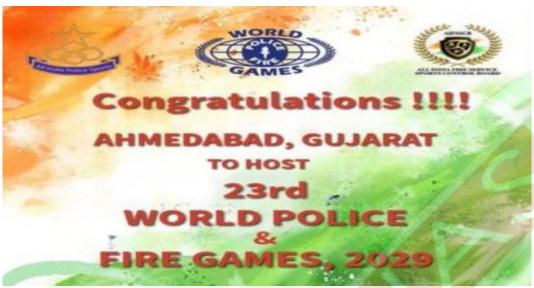
World Police and Fire Games (WPFG) 2025

News: India to host the prestigious World Police and Fire Games (WPFG) in 2029, a monumental achievement sparked by the visionary leadership of Rashtriya Raksha University (RRU).

About World Police and Fire Games (WPFG)







Source - DD News

- The WPFG are an **Olympic-style competition** with thousands of athletes representing **First** Responders from different countries across the world.
- This includes law enforcement, firefighters, & officers from corrections, probation, border protection, immigration, & customs.
- The Games are held **biennially**.
- The first WPFG were held in 1985 in San Jose, California.
- The Games typically have **60+ sports** in the Official Games program.
- Governed by: The Games are governed by the California Police Athletic Federation (CPAF), the Host City, and the WPFG Board of Directors.
- Aim: The Games aim to offer the same variety of sports, & the same high caliber of venues, officials, & athletic achievement as the original California Police Games, but on a global scale.

World Police & Fire Games 2025

• The Games are going to be held in Birmingham, Alabama (U.S.A.) from June 27 to July 6, 2025.

World Police & Fire Games 2029

- India is set to host the World Police and Fire Games (WPFG) for the first time in 2029.
 - India has become the first South Asian country to win the bid to host these games.
 - The Games are set to be held **Ahmedabad**, **Gandhinagar**, and **Ekta Nagar in Gujarat**.
- Representatives from more than 70 countries are expected to join this international event in India.

Registered Unrecognised Political Parties (RUPPs)

News: The ECI has initiated steps to de-list 345 Registered Unrecognised Political Parties (RUPPs) that have not contested elections in the last six years.

About Registered Unrecognised Political Parties (RUPPs)





Source - ET

RUPPs are political parties registered with the Election Commission of India (ECI) under Section 29A
of the Representation of the People Act, 1951 but have not yet qualified as State or National
Parties.

Features

- These are either newly-registered parties or
- These are parties which have not secured enough percentage of votes in the Assembly or general election to become a State party or
- Those parties that have **never contested elections** after being registered.
- Symbol: Common symbols are provided to RUPPs based upon an undertaking that they would put up "at least 5% of total candidates with regard to said Legislative Assembly election of a State".
 - The symbols are provided under Provisions of Para 10B of the Election Symbols (Reservation & Allotment) Order, 1968.

Conditions for RUPPS

- They are required to maintain the details of individual donors who have donated above
 ₹20,000 in a financial year and submit these details to the ECI every year.
 - As per Section 29C of the RP Act, failure to furnish these details will result in losing income tax exemption.
- The RUPPs are required to accept donations in excess of ₹2000 only through cheque or bank transfers.
- RUPPs are required to furnish audited accounts for the last three fiscal years.
- They are mandated to **submit expenditure reports** for the **two preceding elections**.
- Benefits: The RUPPs enjoy the following benefits
 - o tax exemption for donations received under Section 13A of the Income Tax Act, 1961
 - o a **common symbol** for contesting general elections to the Lok Sabha/State Assemblies
 - 20 'star campaigners' during election campaigns

De-listing of RUPPS by ECI

- 'Letter pad parties': As per ECI notification, there are more than 2,800 RUPPs in India as of May 2025.
 - However, **only around 750** of them contested the 2024 general elections.



- Issue: The RP Act does not confer explicit powers on the ECI to de-register any political party if it fails to contest elections, conduct inner-party elections or lodge requisite returns.
- The Supreme Court in Indian National Congress versus Institute of Social Welfare & Ors
 (2002) had held that the ECI does not have the power to de-register any political party
 under the RP Act.
 - It may de-register only under exceptional circumstances such as the registration being obtained by fraud or the political party ceasing to have allegiance to the Indian Constitution or if it is declared unlawful by the Government.

Axiom-4 mission: Myogenesis Experiment

News: Indian member of Axiom-4 mission, Shubhanshu Shukla takes up experiment on skeletal muscle degradation (myogenesis) at ISS.

About Axiom-4 mission

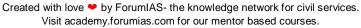


Source - The Hindu

- It is a private spaceflight to the International Space Station (ISS).
- The mission aims to continue Axiom Space's pioneering efforts to establish a sustainable human presence in Low Earth Orbit (LEO).
- To know all about the Axiom-4 mission, please click here.

About Myogenesis Experiment

- Myogenesis is the biological process through which skeletal muscle tissue develops, primarily during embryonic development.
- The human skeletal muscle cells **deterioration is very common** in space due to various reasons.
- Aim of experiment: It aims to uncover the biological pathways behind skeletal muscle degradation in space which has been a major challenge for astronauts.
 - Under this experiment, research explores how blood circulates in the brain under microgravity conditions, using ultrasound technology.
- Benefits





- By identifying these mechanisms, researchers hope to develop targeted therapies that to
 protect space travelers and aid people suffering from muscle-degenerative diseases on
 Earth.
- It could improve our **understanding of cardiovascular adaptation** in space and inform medical diagnostics and treatments for conditions like stroke and hypertension on Earth.



