

DAILY CURRENT AFFAIRS (DCA)

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SUSPENSION OF THE INDUS WATERS TREATY BY INDIA: IMPLICATIONS FOR PAKISTAN AND INDIA

Context

- Recently, the **Cabinet Committee on Security (CCS)**, chaired by Prime Minister of India, held the **Indus Waters Treaty (1960)** with Pakistan 'in abeyance with immediate effect' in the aftermath of the terror strike in Pahalgam.

About Cabinet Committee on Security (CCS)

- It is the apex decision-making body in India responsible for matters related to national security and defence.
- It is **chaired by the Prime Minister**, it typically includes **key ministers** such as the Home Minister, Defence Minister, Finance Minister, and External Affairs Minister.
- The **National Security Advisor (NSA)** acts as a secretary-level coordinator for issues within its purview.

Key Functions of the CCS

- Defence and Security:** Addresses internal and external security challenges, including military strategies and intelligence operations.
- Foreign Affairs:** Deals with diplomatic policies and international security collaborations.
- Nuclear and Space Policy:** Oversees critical decisions related to nuclear energy and space exploration.
- Major Appointments:** Approves high-level appointments in defence and intelligence agencies.

About the Indus Waters Treaty (IWT)

- It was signed in 1960 by India's Prime Minister Jawaharlal Nehru and Pakistan's President Ayub Khan to regulate water-sharing between the two countries.
 - It was brokered by the World Bank.
- According to IWT:**
 - India** controls the Eastern Rivers (Beas, Ravi, Sutlej).
 - Pakistan** controls the Western Rivers (Indus, Chenab, Jhelum).
- Under the IWT, **India** received rights **over 20%** of the system's water, while **Pakistan received 80%**.

- India is allowed **limited use of western rivers** for non-consumptive purposes like hydropower, but cannot block or significantly alter flows.

Implications for Pakistan of IWT Suspension

- Water Security Threat:** Pakistan is highly dependent on the Indus River system for agriculture, drinking water, and hydropower.
 - Suspension would leave Pakistan vulnerable to upstream control by India, especially over the eastern rivers (Ravi, Beas, Sutlej), potentially disrupting water availability.
- Agricultural Impact:** Punjab and Sindh, the key agricultural regions, rely heavily on Indus waters.
 - A reduction or delay in water flows could devastate crop cycles, threatening food security and livelihoods.
- Energy Crisis:** A significant portion of Pakistan's power comes from hydroelectric dams on the Indus.
 - Disruption in water flow could reduce energy generation, worsening the power crisis, especially in summer.
- Geopolitical Fallout:** Suspension would escalate tensions with India, possibly leading to military posturing, cross-border skirmishes, or further diplomatic isolation.
- International Repercussions:** Pakistan could appeal to the UN, World Bank, or ICJ, framing India as violating a binding treaty.
 - Suspension may invite international pressure on India to reinstate the treaty, possibly straining India's global relations.
- Domestic Unrest:** Water shortages and crop failures could fuel domestic discontent, protests, and political instability.
- Dependence on China or Other Allies:** Pakistan may look for alternative water management partnerships or increase strategic alignment with China.

Do You Know?

- Nearly **25% of Pakistan's GDP** is contributed by the Indus River System.
- About 80% of Pakistan's cultivated land relies on water from the Indus system.
- It supports over 237 million people, with Pakistan accounting for 61% of the Indus Basin population.
- Major urban centres like Karachi, Lahore, Multan draw their water directly from these rivers.

Feasibility of Suspension of the IWT by India

- **Strategic Leverage:** India's move signals a strong diplomatic stance, reinforcing its position against terrorism.
 - ♦ It could serve as a negotiation tool to pressure Pakistan into policy changes.
- **Treaty Framework and International Law:** IWT lacks an exit clause, meaning **neither India nor Pakistan** can legally abrogate it unilaterally. The **Treaty has no end date**, and any modification requires the consent of both parties.

IWT & Dispute Resolution Mechanism

- Article IX of IWT, along with Annexures F and G, lays out procedures for raising grievances — first before the **Permanent Indus Commission**, then a **Neutral Expert**, and eventually, a **Forum of Arbitrators**.
 - ♦ However, under **Article 62 of the Vienna Convention** on the Law of Treaties, a fundamental change in circumstances can justify withdrawal.
 - ♦ The United Nations and World Bank could push for negotiations to prevent regional instability.
- **India's Water Management Challenges:** Diverting water from the Western Rivers **requires major infrastructure projects**, including dams and reservoirs.
 - ♦ Environmental concerns, such as river ecosystem disruptions, must be addressed.
- **Pressure on Pakistan's Internal Stability:** Water scarcity could exacerbate inter-provincial disputes within Pakistan, particularly between Punjab and Sindh.
 - ♦ Political instability may lead to increased militant activity along the border.

Source: IE

NATIONAL PANCHAYATI RAJ DAY

Context

- The Ministry of Panchayati Raj on the occasion of National Panchayati Raj Day 2025, presented the **Special Category National Panchayat Awards-2025**.

About

- These awards include the **Climate Action Special Panchayat Award (CASPA)**, **Atma Nirbhar Panchayat Special Award (ANPSA)**,

and Panchayat Kshamta Nirman Sarvottam Sansthan Puraskar (PKNSSP).

- The awards aim to recognize Gram Panchayats and institutions that have **demonstrated exemplary performance** in areas such as **climate resilience, fiscal self-reliance, and capacity building**.
- Awardees have been selected from States including Bihar, Maharashtra, Odisha, Karnataka, Andhra Pradesh, Telangana, Kerala, and Assam.

National Panchayati Raj Day

- India celebrates National Panchayati Raj Day **on April 24 every year** to mark the **foundation of the Panchayati Raj System, when the Constitution (73rd Amendment) Act, 1992, came into force**.
- It celebrates the **importance of grassroots democracy**, strengthens local governance and helps empower rural communities.

Panchayati Raj System

- The word Panchayat comes from two words – “**Panch**” meaning **five** and “**Ayat**” meaning **assembly**.
 - ♦ It refers to a traditional system where a group of elders from a village would come together to solve problems or settle disputes.
- **The Balwant Rai Mehta Committee**, appointed in 1957, recommended the establishment of the Panchayati Raj system in India.
- The Panchayati Raj system has three levels – Village Panchayat, Panchayat Samiti and Zilla Parishad.
 - ♦ **The Village Panchayat:** It has around five members that includes a Sarpanch.
 - ♦ **The Panchayat Samiti:** It usually covers 20 to 60 villages. Its head is called the Pradhan and the deputy is the Up-Pradhan.
 - ♦ **The Zilla Parishad:** It includes members from Panchayat Samitis and government officials. Its main job is to guide and check the work done in the district.
- **The Ministry of Panchayati Raj was created in 2004** which handles all matters related to Panchayati Raj and is led by a cabinet minister.
- **Panchayat elections** are held **every five years** to choose new members.
- **Reservation: Article 243D** of the Constitution provides for reservation of seats in Panchayats for Scheduled Tribes, Scheduled Castes, Backward Class of citizens and women.

Need for the Panchayati Raj Institutions in India

- **Decentralization of Power:** PRIs bring governance closer to the grassroots level, empowering local communities to take decisions tailored to their specific needs.
- **Democratic Participation:** Ensures people's direct involvement in decision-making processes, thereby strengthening democracy at the village level.
- **Efficient Implementation of Schemes:** Local self-governments can effectively implement and monitor development schemes based on local conditions and requirements.
- **Better Utilization of Resources:** Local bodies can ensure optimal use of resources like land, water, and manpower due to better understanding of regional dynamics.
- **Inclusive Development:** Encourages participation from marginalized communities, including women, Scheduled Castes (SCs), and Scheduled Tribes (STs), fostering inclusive growth.
- **Employment Generation:** Through rural development programs like MGNREGA, PRIs play a critical role in providing employment and reducing rural poverty.

Challenges of Panchayati Raj Institutions

- **Lack of Infrastructure and Digital Literacy:** Insufficient computer skills hinder efficient working.
 - ♦ Digital divide limits effective implementation.
- **Inadequate Financial Resources:** Panchayats often lack adequate funds for development activities, it leads to delays, poor execution, and increased risk of corruption.
- **Poor Coordination Among Administrative Bodies:** Poor inter-departmental coordination affects developmental work and fund utilization.
 - ♦ Issues include politicization, inadequate incentives, and bureaucratic inefficiencies.
- **Male Dominance in Decision-Making:** Women's political participation is hindered by patriarchal norms.
 - ♦ Even if elected, women may not have real power due to dominance by male officials.
- **Low Literacy and Awareness:** Many representatives, especially women, are unaware of their powers and responsibilities due to low education levels.

- ♦ The general public, especially at the grassroots, lacks understanding of Panchayati Raj's role and benefits.
- **Irregular Elections and Tenure Issues:** Delay in conducting elections affects continuity and planning.

Government Initiatives to Strengthen PRIs

- **Rashtriya Gram Swaraj Abhiyan (RGSA):** Focuses on strengthening governance capabilities of PRIs.
 - ♦ Supports training, e-governance, infrastructure, and capacity building.
- **e-Panchayat Mission Mode Project:** Aims to digitalize Panchayati Raj functioning.
 - ♦ Provides web-based applications for budgeting, accounting, and planning (like PRIASoft, PlanPlus, etc.).
- **Financial Incentives and Performance Grants:** States and the Finance Commission provide performance-based grants to reward efficient and transparent PRIs.
- **e-Gram Swaraj Portal:** Launched in 2020, it provides a unified digital platform for Panchayat planning, accounting, monitoring, and reporting.
 - ♦ Since 2021, all payments under Central Finance Commission funds are done only online through the eGramSwaraj - PFMS Interface (eGSPI) system.
- **Gram Manchitra – Spatial Development Planning:** Launched in 2019 as a geospatial platform for evidence-based planning.

Conclusion

- PRIs have played a crucial role in promoting democratic values, inclusive development, and grassroots-level decision-making.
- For PRIs to reach their full potential, sustained efforts are needed to enhance their autonomy, build institutional capacity, ensure adequate funding, and promote active citizen participation.
- Strengthening PRIs is not just about rural governance—it's a powerful step toward achieving participatory democracy, sustainable development, and an empowered rural India.

Source: IE

INDIA'S DBT SYSTEM YIELDS

In News

- **India's Direct Benefit Transfer (DBT) framework** is offering valuable insights for governments worldwide revising their social protection systems.

The Direct Benefit Transfer (DBT) system

- It was launched on January 1, 2013, to reform government welfare delivery by simplifying processes, ensuring accurate targeting of beneficiaries, reducing fraud, and facilitating faster flow of information and funds.
 - The DBT Mission, originally in the Planning Commission, was transferred to the **Cabinet Secretariat in 2015 for better coordination.**
- Jan Dhan, Aadhaar, and Mobile (JAM) form** the backbone of the system, enabling efficient and transparent transfers.
 - It aims to ensure **maximum governance with minimum government**, enhancing transparency and accountability.
- It covers schemes like scholarships, subsidies, wages, pensions, and cash for food grains.
- Its scope continues to grow rapidly with the adoption of new programs and digital technologies under the **Digital India Programme.**



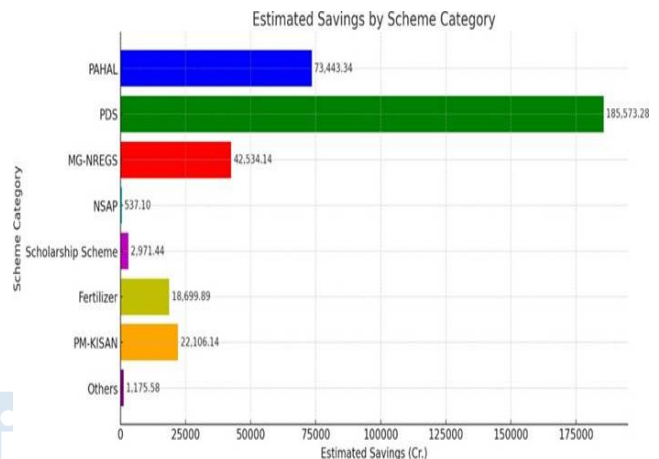
Progress

- India's Direct Benefit Transfer (DBT) system has greatly improved welfare delivery, **cutting fiscal leakages by ₹3.48 lakh crore** and making subsidies more targeted.
- The rise in the **Welfare Efficiency Index (WEI)** highlights DBT's success in optimizing fiscal resources while expanding beneficiary coverage.
- Savings in sectors like food subsidies, **MGNREGS, and PM-KISAN** demonstrate the effectiveness of **Aadhaar** and **mobile-based transfers** in reducing inefficiencies and misuse.

Sectoral Analysis: DBT has particularly benefited high-leakage programme

- Food Subsidies (PDS):** ₹1.85 lakh crore saved, accounting for 53% of total DBT savings. This was largely due to Aadhaar-linked ration card authentication.

- MGNREGS:** 98% of wages were transferred timely, saving ₹42,534 crore through DBT-driven accountability.
- PM-KISAN:** ₹22,106 crore saved by deleting 2.1 crore ineligible beneficiaries from the scheme.
- Fertilizer Subsidies:** Sales of 158 lakh MT of fertiliser were reduced, saving ₹18,699.8 crore through targeted disbursement.
- Subsidies dropped** from 16% to 9% of government expenditure, while beneficiaries increased from 11 crore to 176 crore.



Challenges

- Issues with identifying real beneficiaries
- Aadhaar mismatches and biometric failures
- Poor banking access and digital infrastructure in rural areas
- Low digital literacy among beneficiaries
- Overlapping and complex subsidy structures

Suggestions and Way Forward

- India's Direct Benefit Transfer (DBT) system successfully balances fiscal prudence with social inclusion.
- It offers a global model for efficient, transparent, and inclusive welfare delivery, demonstrating how direct transfers can drive both economic and social development.
- However, challenges like beneficiary identification issues, Aadhaar errors, limited banking access in rural areas, and low digital literacy remain.
- To address these, India should focus on improving data accuracy, expanding rural banking, enhancing digital infrastructure, promoting awareness, and customizing DBT models for specific regions.

Source: TH

MEITY LAUNCHES 'I AM CIRCULAR' COFFEE TABLE BOOK

Context

- The Ministry of Electronics and Information Technology (MeitY), hosted the release of the '**I Am Circular**' Coffee Table Book, curated by the **International Council for Circular Economy (ICCE)**.

About

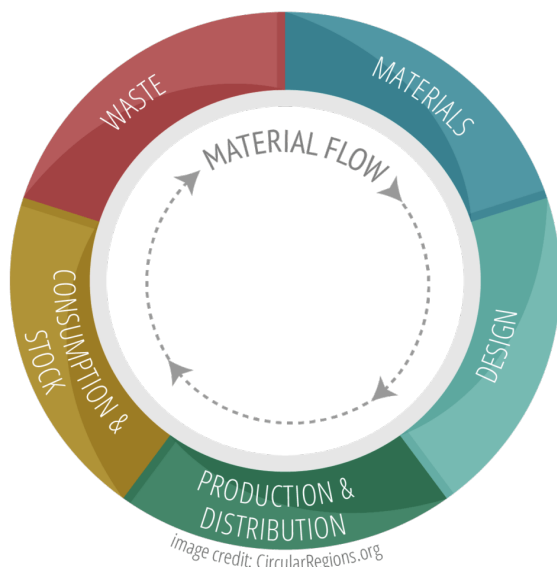
- The 'I Am Circular' Coffee Table Book **features 30 of India's most promising innovations** identified through the nationwide '**I Am Circular**' Challenge.
 - It is an initiative designed to **discover and amplify breakthrough solutions rooted in the principles of the circular economy**.

International Council for Circular Economy (ICCE)

- It is a non-profit organization launched in **2020 by India**.
- It is dedicated to promoting and accelerating the transition to a circular economy both nationally and globally.
- ICCE acts as a think tank, networking platform, and policy influencer, fostering collaboration across industries, governments, academia, and civil society.

What is Circular Economy?

- The circular economy (CE) is a model of production that **prioritises waste reduction or elimination at all stages of the product life cycle**, from raw materials extraction and manufacturing to disposal and reuse.



Core Principles of the Circular Economy:

- Products and systems are designed to reduce or eliminate waste from the beginning.
- Through reuse, repair, remanufacture, and recycling, products are kept in circulation for as long as possible.
- The system supports and restores natural resources rather than depleting them—like composting food waste to enrich soil.

Benefits:

- Reduces environmental impact and pollution.
- Conserves finite resources.
- Stimulates innovation and new business models.
- Can create new jobs and economic opportunities.

India's Circular Economy Vision and Potential

- India's circular economy could generate over **\$2 trillion in market value and create up to 10 million jobs by 2050**.
- Globally, the circular economy could unlock **\$4.5 trillion in economic output by 2030**.
- India has proposed to host the **World Circular Economy Forum in 2026**. The 2025 forum will be held in São Paulo, Brazil.

Opportunities for India

- High Economic Potential:** The growth of India's circular economy has the potential to drive economic growth, job creation, and innovation focused on sustainability.
- Environmental and Resource Efficiency:** It reduces resource extraction and environmental degradation and also aligns with UN Sustainable Development Goals (SDGs), the Paris Agreement, and the UN Decade on Ecosystem Restoration (2021-2030).
- Macro and Industry-Level Gains:** Transition to the circular economy will enhance systemic efficiency.
 - It will also support government and industry performance in sustainability benchmarks.

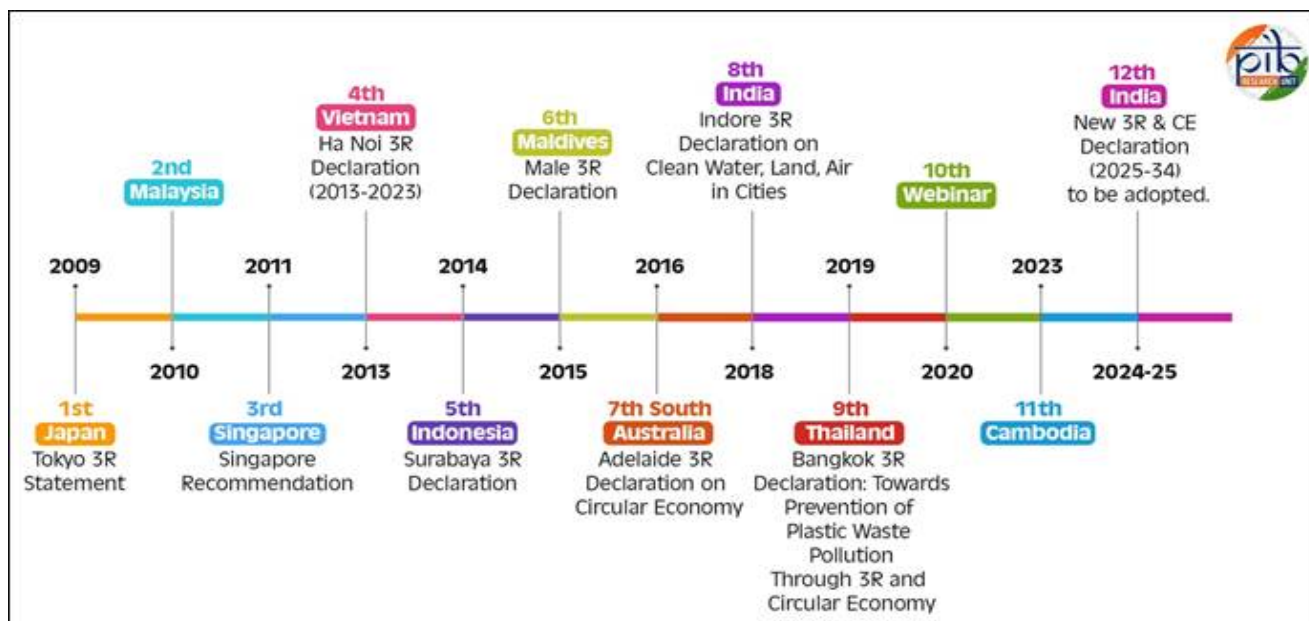
Challenges

- Fragmented and Inefficient Waste Infrastructure:** India lags behind in capacity across supply chains for waste collection, material recovery, and (re)processing.

- **Limited Private Sector Incentives:** There is a lack of business incentives for the private sector for moving towards a circular economy.
- **Underutilized Informal Sector:** Informal waste workers are not integrated into formal systems this leads to inefficiencies, resource leakages, and health risks.

India's Key Steps and Commitments

- **Swachh Bharat Mission (SBM-U):** It strengthens urban waste management, under SBM-U, India has achieved 108.62% success in household toilet construction and 80.29% of solid waste in India is being processed successfully.
- **GOBAR-Dhan Scheme:** Promoting waste-to-wealth initiatives through biogas and organic waste processing.
 - ♦ This scheme currently covers 67.8% of the total number of districts in India, with 1008 biogas plants being fully operational.
- **E-Waste Management Rules (2022):** Strengthening circular economy practices in electronic waste disposal.
 - ♦ For FY 2024-25, the quantity of e-waste collected and recycled stood at 5,82,769 MT and 5,18,240 MT respectively.
- **Extended Producer Responsibility (EPR) for Plastic:** Encouraging industries to take accountability for plastic waste. India banned single use plastic in 2022.
- **Circular Economy Cell (CE Cell)** was constituted in NITI Aayog in 2022 as a dedicated unit to work in the area of Circular Economy.
- **Regional 3R and Circular Economy Forum in Asia and the Pacific:** India is a part of the forum and hosted the 12th Regional 3R and Circular Economy Forum in March 2025.
 - ♦ It was launched in 2009 to promote sustainable waste management, resource efficiency, and circular economy principles.



Conclusion

- India stands at a critical juncture where the shift from a linear to a circular economy is not just a sustainability imperative but also a powerful economic opportunity.
- With its growing population, rapid urbanization, and rising consumption, embracing circularity can help India reduce environmental degradation, create jobs, and unlock economic value.
- However, this transition demands a comprehensive approach—integrating policy reforms, infrastructure development,

technological innovation, and inclusive practices that recognize the role of the informal sector.

Source: PIB

IMF PROJECTS INDIA'S ECONOMY TO GROW AT 6.2% IN 2025

Context

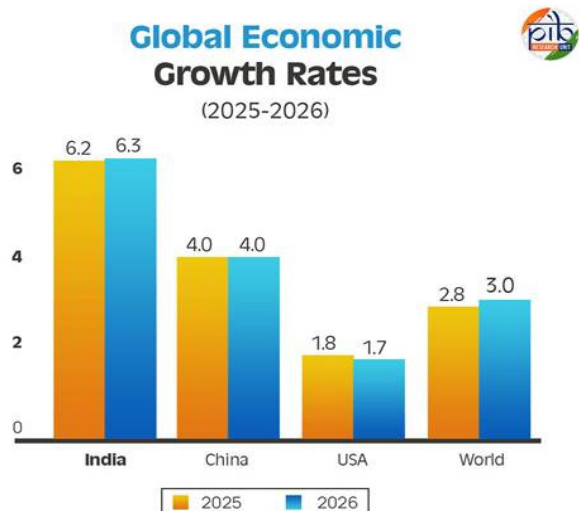
- According to the April 2025 edition of the IMF's World Economic Outlook, India will remain the fastest growing major economy over the next two years.

World Economic Outlook Report

- The World Economic Outlook (WEO) is the **International Monetary Fund's** key report on global economic trends and policy challenges.
- **Published twice a year** it provides projections for the near and medium term, covering advanced, emerging, and developing economies.

Key highlights

- **India's Growth outlook:** India is projected to remain the fastest-growing large economy and is expected to grow by **6.2 percent in 2025** and **6.3 percent in 2026**.
- **Global Growth outlook:** The global economic growth will be much lower, at **2.8 percent** in 2025 and **3.0 percent** in 2026.
- **Emerging Asia:** The region is also expected to grow strongly, led by India, but faces downward revisions due to global trade disruptions.



Reasons for slowdown in world economy

- **Tariff War 2.0:** Since early 2025, new tariffs by the US on imports, coupled with retaliatory measures, have triggered a fresh wave of trade tensions.
- **Slowing Consumer Confidence:** As new tariffs increase costs and lower disposable incomes, consumer spending has weakened, especially in the US and Europe.
- **Inflation:** While headline inflation has cooled from its peak, core inflation remains sticky, particularly in services.
- **Diminished Policy Space:** High public debt and rising interest rates have limited the ability of governments to respond with countercyclical policies.

- **Aging populations** in countries like Japan, Germany, and China are reducing the available workforce, constraining long-term growth.

Reasons for India's Resilience

- **Domestic Demand:** India's growth remains largely driven by robust domestic consumption and investment, particularly in infrastructure and services.
 - ♦ This has weakened global investor sentiment, triggered financial market volatility, and elevated policy uncertainty to unprecedented levels
- **Structural Strengths:**
 - ♦ A young population and expanding digital economy.
 - ♦ A growing middle class with increasing consumption power.
 - ♦ Government-led capex push and PLI schemes that bolster industrial activity.

Way Ahead

- **Structural reforms:** Durable structural reforms across several areas, including labor markets, education, regulation and competition, and financial sector policies, can jointly lift productivity and potential growth and support job creation.
- **Technological Integration:** Technological progress, related to digitalization and AI, can enhance productivity and potential growth.
- **Fiscal Prudence:** Maintaining fiscal sustainability amid high global debt and rising interest rates is critical.

International Monetary Fund (IMF)

- The IMF was established in **1944** in the aftermath of the Great Depression of the 1930s.
- The organization is currently composed of **190 member** countries.
 - ♦ Each member has representation on the IMF's executive board in proportion to its financial importance.
- The primary goal of the IMF back then was to bring about international economic coordination to prevent competing currency devaluation by countries trying to promote their own exports.
- Eventually, the IMF evolved to be a lender of last resort to governments of countries that had to deal with severe currency crises.

Source: PIB

NEWS IN SHORT

DAVIS STRAIT

Context

- A hidden landmass has been found beneath the **icy waters of the Davis Strait**.

About

- The discovery was made by a team of scientists from the **UK and Sweden during a study of the ocean floor in the region**.
- The landmass is now named the **Davis Strait proto-microcontinent**.
 - It is made up of **unusually thick continental crust** and measures between 12 and 15 miles (around 19 to 24 kilometres).
 - It lies submerged beneath **Greenland's western offshore waters** and has been identified as a **primitive microcontinent** which is an ancient fragment of crust that never fully separated when Greenland and North America drifted apart.

Davis Strait

- Davis Strait, the body of water that **separates Canada's Baffin Island from Greenland**.
- The Strait connects the **Labrador Sea (Atlantic Ocean) in the south with Baffin Bay to the north**.
- Straits are usually defined as a **narrow passage or a waterway** that lies between two land masses and connects two oceans or large bodies of water.
 - They are formed by natural geological phenomena such as tectonic shifts.



Source: TOI

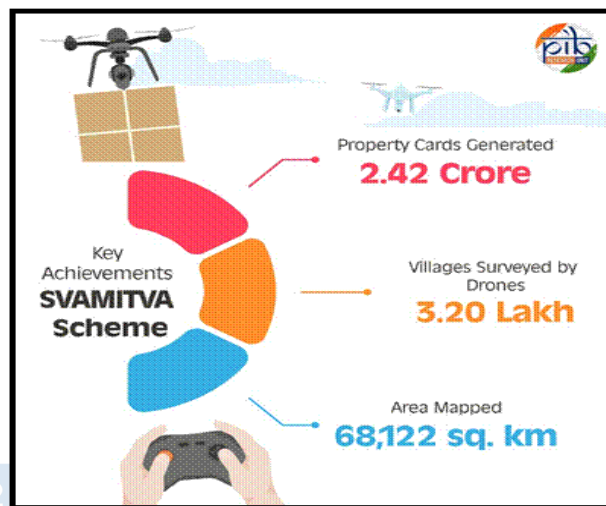
5 YEARS OF SVAMITVA SCHEME

In News

- Recently, SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) Scheme completed 5 Years.

About SVAMITVA Scheme

- SVAMITVA Scheme was launched on April 24, 2020 on National Panchayati Raj Day.



- It is a **Central Sector scheme** of the Ministry of Panchayati Raj.
- It aims to provide **legal ownership papers** for houses and land in villages using drones and mapping technology.
- This helps villagers **access loans, resolve disputes, and support better planning**.
- It is being implemented by the Survey of India with National Informatics Centre Services Inc. (NICSI) as the tech partner
- It has a budget of ₹566.23 crores from FY 2020-21 to 2024-25, with an extension to FY 2025-26.

Objectives of the Scheme

1. Creation of accurate land records for rural planning and reduce property related disputes.

1. To bring financial stability to the citizens in rural India by enabling them to use their property as a financial asset for taking loans and other financial benefits.

1. Determination of property tax, which would accrue to the GPs directly in States where it is devolved or else, add to the State exchequer.

1. Creation of survey infrastructure and GIS maps that can be leveraged by any department for their use.

1. To support in preparation of better-quality Gram Panchayat Development Plan (GPDP) by making use of GIS maps.

Progress

- Over 2.42 crore property cards have been created for 1.61 lakh villages under the scheme.
- Drone surveys completed in 3.20 lakh villages, covering 68,122 sq. km of the area.

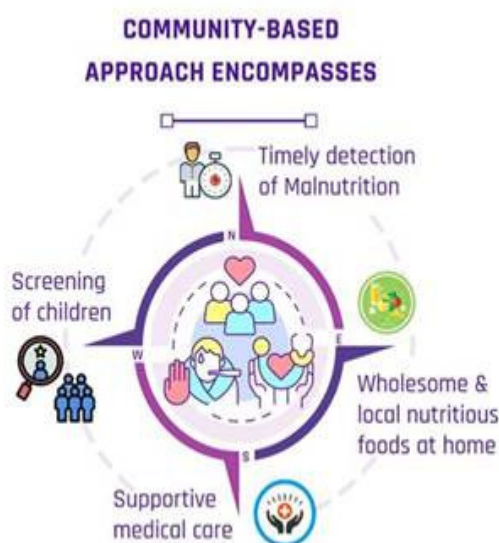
Source :PIB

POSHANTRACKER APPLICATION**Context**

- The PoshanTracker Application of the Ministry of Women and Child Development, received the Prime Minister's Award for Excellence in Public Administration 2024 under the Innovation category.

About

- **The Poshan Tracker** is a mobile-based, ICT-enabled application used by **Anganwadi Workers (AWWs)** to capture and monitor the delivery of nutrition and childcare services in real-time.
- It aims to ensure **accurate tracking, assessment, and monitoring** of key indicators related to maternal and child nutrition.
- It covers all Anganwadi Centres (AWCs), their workers, and beneficiaries, thereby creating a unified digital ecosystem for the **Integrated Child Development Services (ICDS)**.
- It seeks to digitize data **near-real time monitoring and enabling policies** for targeted intervention.



Source: PIB

TOBACCO FARMING**Context**

- **Andhra Pradesh Social Welfare Minister** assures support to tobacco farmers facing issues with low bids and delayed procurement.

Tobacco Farming

- Tobacco cultivation in India was introduced by the **Portuguese in 1605**.
- India is the **2nd largest producer** of tobacco in the world after China.
- **India is the 2nd largest exporter** of unmanufactured tobacco (quantity terms) after Brazil.
- In India tobacco is **predominantly cultivated in Andhra Pradesh, Gujarat, Karnataka, UP and Bihar**.
 - ♦ Gujarat accounts for 45 per cent of the area and 30 per cent of production. Productivity is also highest in Gujarat followed by AP.

Climatic Conditions

- In India, tobacco is grown when the mean temperature is **20° to 27°C**.
- It is **not usually grown where rainfall exceeds 1200 mm** during the season.
- In India, **cigar and binder tobacco are grown on sandy to loamy red soils**.
- It needs larger quantities of nitrogen, potassium, calcium and magnesium.

The Tobacco Board

- The Tobacco Board was established in **1976 by the Tobacco Board Act, 1975**.
- The Board's primary role is to ensure the smooth functioning of the farming system and to ensure fair and remunerative prices for tobacco farmers and the promotion of exports.

Source: TH

SAFEGUARD DUTY**Context**

- India has imposed a 12% provisional safeguard duty for 200 days on five categories of steel products to protect domestic producers from a surge in low-cost imports.

Safeguard Duty

- A safeguard duty is a **temporary measure** used to **limit the import of a specific good** to prevent serious harm to a domestic industry.
 - It is permitted under **World Trade Organization (WTO) rules**.
- These duties typically **have a deadline** and are **applicable against all the countries** with uniform rate of duty unlike the anti-dumping duties.
- These are considered an emergency action and are deemed necessary only when certain imports present serious injury or damage to domestic industries.

Source: TH

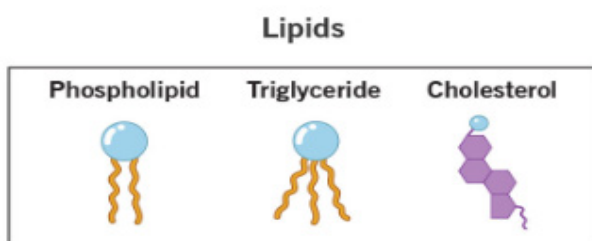
LIPIDS & RC1 COMPLEX

Context

- A new study challenges the traditional view that lipids are merely structural components, revealing their active role in cellular evolution and mitochondrial function.

What are Lipids?

- Lipids are fatty compounds that make up **30%** of the dry weight of living cells.
- It plays critical roles in the body which includes; **Energy storage, Hormone production, transport of fat-soluble vitamins like A, D, E, and K.**



- There are two types of cholesterol;
 - LDL (low-density lipoprotein)**, often referred to as 'bad' cholesterol because it can accumulate in the walls of arteries and contribute to severe diseases, and
 - HDL (high-density lipoprotein)**, known as 'good' cholesterol.

RC1 Complex

- The **RC1 (Respiratory Complex I)** is a group of proteins embedded in the inner mitochondrial membrane of all aerobic eukaryotic cells.

- It is **vital for cellular respiration**, the process of converting oxygen and nutrients into energy.
- In humans, RC1 comprises **44 proteins**, some encoded by **nuclear DNA** and others by **mitochondrial DNA**.
 - These proteins must assemble accurately in the lipid-rich mitochondrial membrane for efficient function.

Optical sensing platform for cholesterol detection

- An optical sensing platform developed by the Institute of Advanced Study in Science and Technology (IASST), Guwahati allows early detection of cholesterol, a key lipid based on **phosphorene quantum dots** functionalized on silk fibre.
- It detects cholesterol in trace amounts, including in human blood serum.
- It can be developed as a **Point-of-Care (POC) device** for personalized health monitoring.

Source: TH, PIB

NANO-SULPHUR

Context

- The Energy and Resources Institute (TERI) scientists claim that the **nano sulphur developed by them increases the yield of mustard by 30-40%.**

About

- DMH-11**, the genetically-modified mustard, **increases average per hectare yield by 10-40 per cent** in various multi-site trials conducted so far.
 - Existing mustard varieties** give an average per hectare yield of around 1-1.8 tonne.
- Significance of Nano Sulphur:**
 - It is a **completely green product** that uses biological agents like plant promoting bacteria that secrete enzymes and metabolites.
 - It also **replaces up to 50% of traditional sulphur fertilisers** and can lead to an additional earning of up to 12,000 per acre for farmers.
 - Cost Effective:** A 500 millilitre bottle of nano sulphur will cost a farmer around 450 while a bag of conventional sulphur in different grades varies from 900-1,800.

Sulphur

- Sulphur is a key component of amino acids like cysteine and methionine, which are building blocks of proteins.
- This is especially important in legumes, oilseeds (like mustard), and cereals.
- Sulphur **boosts oil content in oilseeds** (e.g., canola, sunflower).
- It improves **grain quality in cereals** like wheat and enhances flavor in onions, garlic, and other alliums.

Source: BS

GALAXY NGC 1052-DF2

In News

- Astronomers at the Indian Institute of Astrophysics (IIA) have investigated the unusual lack of **dark matter** in the galaxy NGC 1052-DF2, which challenges standard galaxy formation theories.

Dark matter

- It makes up about **27% of the universe** but doesn't interact with light, making it invisible and detectable only through its gravitational effects.
- Dark matter and dark energy are mysterious components of the universe, making up about 95% of it.
 - The remaining less than 5% includes everything we can see and understand, like Earth and observable matter.

NGC 1052-DF2

- It is an **ultra-diffuse galaxy** the size of the **Milky Way** but with far fewer stars and only 1/400th the expected **dark matter**.
- It is unique for its extreme dark matter deficiency, making it a rare anomaly even among ultra-diffuse galaxies.
- It has a total mass of around **340 million solar masses**—mostly from stars—indicating very little dark matter compared to typical galaxies like the Milky Way.

Latest Developments

- Researcher K. Aditya modeled the galaxy using stellar density data and found that mass models with a “cuspy” dark matter halo (dense in the center) did not match observed data.

- These findings suggest that the galaxy may either lack dark matter or contain it in a very diffuse form, prompting new questions about galaxy formation and the nature of dark matter.

Do you know ?

- Ultra-diffuse galaxies (UDGs) are a type of low-surface-brightness galaxy that have a large size but very few stars, making them appear extremely faint and spread out compared to galaxies like the Milky Way.

Source :TH

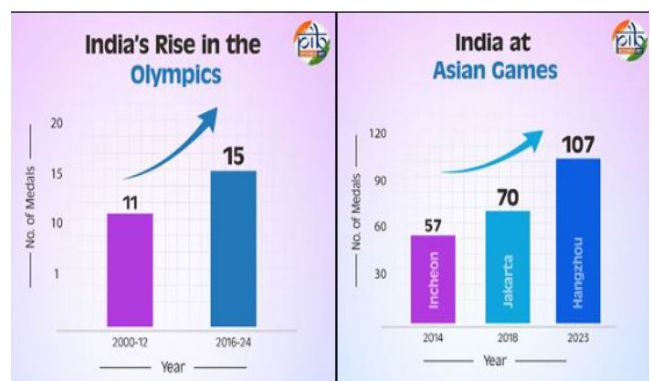
SCHEMES FOR SPORTSPERSONS IN INDIA

In News

- The GOI has demonstrated a strong commitment to elevating sports across the nation by creating a comprehensive framework of support for athletes at every stage of their journey.

Present Status

- India has made remarkable strides in sports, driven by strong government support through various schemes and initiatives.
- The Khelo India Programme, launched in 2016-17, is at the heart of this effort, aiming to build a sporting culture at the grassroots and support athletes across all levels.
- With a record budget of 3,794 crore for FY 2025–26, major investments are going into athlete training, infrastructure, and talent development.



At Tokyo 2020, Neeraj Chopra became the first Indian track and field athlete to win a gold medal at the Olympics for men's javelin throw.

After a 41-year wait, the Indian men's hockey team won an Olympic medal at Tokyo 2020 Olympics since the gold at the 1980 Moscow Olympics.

At Paris 2024 Olympics, Manu Bhaker became the first Indian woman ever to win a medal in Olympic shooting.

Rising to Glory			
India's Paralympic Journey (2012-2024)			
2012 London		2016 Rio	
Gold	0	Gold	2
Silver	1	Silver	1
Bronze	0	Bronze	1
Total	1	Total	4
2020 Tokyo		2024 Paris	
Gold	5	Gold	7
Silver	8	Silver	9
Bronze	6	Bronze	13
Total	19	Total	29

Major schemes

- **RESET Programme (2024)** empowers retired athletes through education and job opportunities.
- **Pandit Deendayal Upadhyay National Welfare Fund** for Sportspersons offers one-time ex-gratia aid of up to 5 lakh, a monthly pension of 5,000, medical assistance up to 10 lakh, and support up to 10 lakh for injuries sustained during training or competitions.
 - ♦ Families of deceased sportspersons and support personnel like coaches, referees, and physiotherapists may also receive financial aid, with a maximum of 5 lakh and 2 lakh respectively.
- **Human Resources Development in Sports** promotes research, global exposure, and skill upgrades in sports science and coaching.
- **Scheme for Sports & Games for the Disabled** promotes inclusive sports at the grassroots for persons with disabilities.
- **Panchayat Yuva Krida aur Khel Abhiyan (PYKKA)** strengthens sports infrastructure and events at village/block levels.



- **Assistance to National Sports Federations (ANSF)** funds training, coaching, and participation in international events.
- **National Sports Development Fund (NSDF)** bridges gaps in athlete support and infrastructure with public-private funding.
- **Pension for Meritorious Sportspersons** offers life-long financial security to decorated athletes.
- **National Sports Awards** honor outstanding athletes, reinforcing motivation and recognition.

Source :TH