



TELEGRAM CHANNEL: <https://t.me/patrioticIAS>
YOUTUBE CHANNEL: <https://www.youtube.com/@PatrioticIAS>
CONTACT: 9971932488



PATRIOTIC IAS

DAILY CURRENT AFFAIRS

THE HINDU NEWSPAPER

06 JULY 2026

YouTube link: <https://www.youtube.com/@PatrioticIAS>

Telegram Channel: <https://t.me/patrioticIAS>

PCS Special:		06 July
06J7	Madhya Pradesh CM lays foundation stone for Adani Group's defence factory in Shivpuri मध्य प्रदेश के मुख्यमंत्री ने शिवपुरी में अडानी समूह की रक्षा फैक्ट्री की आधारशिला रखी	
06J7	Questioning the hype around U.P.'s 'revenue surplus' उत्तर प्रदेश के 'राजस्व अधिशेष' को लेकर प्रचार पर सवाल	



Madhya Pradesh CM lays foundation stone for Adani Group's defence factory in Shivpuri

PCS
The Hindu Bureau
BHOPAL

Madhya Pradesh Chief Minister Mohan Yadav and Union Minister Jyotiraditya Scindia on Sunday laid the foundation stone for a defence manufacturing plant of the Adani Group being built in Shivpuri district.

The unit, a missile and propellant manufacturing facility, is being set up by the Adani Defence and Aerospace, a subsidiary of the Adani Group, at a cost of



Adani Defence and Aerospace is setting up the missile and propellant manufacturing unit.

₹2,500 crore. Addressing a public event for the ceremony, Mr. Yadav said that the unit will provide

employment to more than 4,000 people in the region.

"This land of Chambal has been demonstrating its strength for centuries. I am delighted that a new chapter of history is being written today. The missiles manufactured here will travel long distances to strike enemy territory, thereby enhancing India's honour and prestige," Mr. Yadav said.

Mr. Yadav also announced various develop-

ment projects in the area, including a road connecting Shivpuri to a national highway at ₹120 crore and a cardiology unit in Shri-mant Rajmata Vijayaraje Scindia Medical College.

Mr. Scindia said that the Bharatiya Janata Party (BJP) government led by Mr. Yadav has won the trust of investors. "This investment is not merely in a specific project but is an investment in the people of Madhya Pradesh and their future," he said.

06J7. Madhya Pradesh CM lays foundation stone for Adani Group's defence factory in Shivpuri
मध्य प्रदेश के मुख्यमंत्री ने शिवपुरी में

अडानी समूह की रक्षा फैक्ट्री की आधारशिला रखी

- Madhya Pradesh Chief Minister Mohan Yadav and Union Minister Jyotiraditya Scindia on Sunday laid the foundation stone for a **defence manufacturing plant of the Adani Group being built in Shivpuri district.**

मध्य प्रदेश के मुख्यमंत्री मोहन यादव और केंद्रीय मंत्री ज्योतिरादित्य सिंधिया ने रविवार को शिवपुरी जिले में बन रहे अडानी समूह के रक्षा विनिर्माण संयंत्र की आधारशिला रखी।

- The unit, **a missile and propellant manufacturing facility**, is being set up by **Adani Defence and Aerospace**, a subsidiary of the **Adani Group**, at a cost of **₹2,500 crore.**

यह इकाई, एक मिसाइल और प्रणोदक (प्रोपेलेंट) निर्माण सुविधा, अडानी समूह की सहायक कंपनी अडानी

Questioning the hype around U.P.'s 'revenue surplus'

Data shows that the so-called surplus stems from the State's persistent inability to spend its own budget

Pon Vasanth B.A.
DATA POINT

Uttar Pradesh Chief Minister Yogi Adityanath, who spoke about the State's growth at his government's Industry Leaders Roadshow in Bengaluru on June 24, emphasised how U.P. has had a "revenue surplus in the last six years". The Comptroller and Auditor General (CAG)'s 2024-25 State Finances Report released on June 16 said that U.P. not only reported revenue surpluses in 2024-25, but its ₹59,327 crore surplus was the highest, accounting for nearly 50% of the total revenue surplus of ₹1.27 lakh crore reported by 13 States.

Yet an analysis of CAG and RBI data shows that this surplus stems from U.P.'s persistent inability to spend its own budget. Over the past decade, it has consistently underspent its budgeted expenditure, by at least 15% every year since 2019-20 (Chart 1).

A revenue surplus is merely the gap between total receipts and revenue expenditure. In 2024-25, U.P.'s revenue realisation fell about 16% short of budget, yet it still reported a surplus because its revenue expenditure fell short by a larger 15.4%. Maharashtra, by contrast, nearly met its revenue targets and spent more than budgeted, thereby reporting a deficit (Chart 2). Had U.P. spent at the efficiency of Maharashtra, its surplus would have shrunk sharply or turned into deficits (Chart 3).

In 2024-25, U.P. spent only ₹1.13 lakh crore of its ₹1.55 lakh crore capital outlay, which is a gap of 27%, suggesting that the underspending is systemic rather than mere caution towards controlling revenue expenditure (Chart 4). U.P.'s revenue surplus is contributed in no small measure by Central transfers (Chart 5). Yet, U.P. underspends even the funds budgeted by the Centre, despite receiving the highest allocation.

Prudence or inefficiency?

The data for the charts and the analysis were sourced from the States Finances reports of the Comptroller and Auditor General of India and the Reserve Bank of India. The statements of Finance and Appropriation accounts of State governments submitted to the CAG were also used

CHART 1: This shows the deviation from the total budgeted expenditure of 10 States with the biggest economies in terms of Gross State Domestic Product

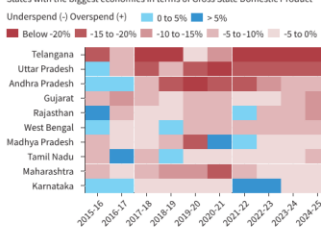


CHART 2: This shows the share of Central transfers in the total revenue of States with 10 biggest economies

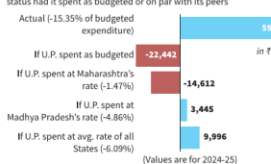


CHART 3: This shows the share of Central transfers in the total revenue of States with 10 biggest economies

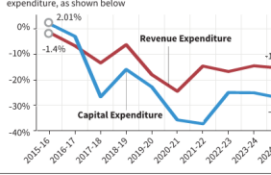


CHART 4: This shows the share of Central transfers in the total revenue of States with 10 biggest economies

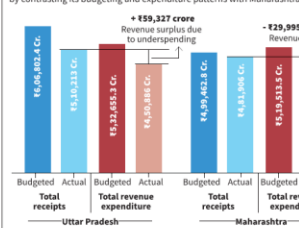
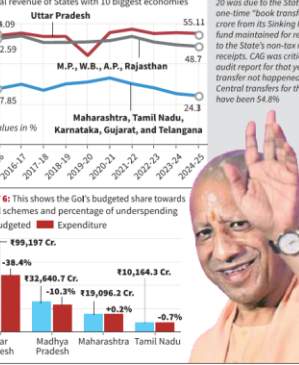


CHART 5: This shows the share of Central transfers in the total revenue of States with 10 biggest economies



डिफेंस एंड एयरोस्पेस द्वारा ₹2,500 करोड़ की लागत से स्थापित की जा रही है।

06J7. Questioning the hype around U.P.'s 'revenue surplus'

उत्तर प्रदेश के 'राजस्व अधिशेष' को लेकर प्रचार पर सवाल

Uttar Pradesh Chief Minister Yogi Adityanath, who spoke about the State's growth at his government's Industry Leaders Roadshow in Bengaluru on June 24, emphasised how U.P. has had a "revenue surplus in the last six years".

उत्तर प्रदेश के मुख्यमंत्री योगी आदित्यनाथ ने 24 जून को बेंगलुरु में अपनी सरकार के इंडस्ट्री लीडर्स रोडशो में राज्य के विकास पर बात करते हुए इस बात पर जोर दिया कि उत्तर प्रदेश में “पिछले छह वर्षों से राजस्व अधिशेष” रहा है।

- The **Comptroller and Auditor General (CAG)**'s **2024-25 State Finances Report** released on June 16 said that U.P. not only reported revenue surpluses in 2024-25, but its **₹59,327 crore surplus** was the highest, accounting for nearly **50% of the total revenue surplus of ₹1.27 lakh crore reported by 13 States**.

16 जून को जारी नियंत्रक एवं महालेखा परीक्षक (CAG) की 2024-25 राज्य वित्त रिपोर्ट में कहा गया कि उत्तर प्रदेश ने न केवल 2024-25 में राजस्व अधिशेष दर्ज किया, बल्कि उसका **₹59,327 करोड़ का अधिशेष** सबसे अधिक था, जो **13 राज्यों द्वारा दर्ज कुल ₹1.27 लाख करोड़ राजस्व अधिशेष का लगभग 50% था**।

- Yet an analysis of **CAG and RBI data** shows that this surplus stems from U.P.'s persistent inability to spend its own budget.

फिर भी CAG और RBI के आँकड़ों के विश्लेषण से पता चलता है कि यह अधिशेष उत्तर प्रदेश की अपने ही बजट को खर्च करने में लगातार अक्षमता से उत्पन्न होता है।

- Over the past decade, it has consistently underspent its **budgeted expenditure**, by at least **15% every year since 2019-20 (Chart 1)**.

पिछले एक दशक में, इसने लगातार अपने निर्धारित बजटीय व्यय से कम खर्च किया है, जिसमें **2019-20 से हर वर्ष कम से कम 15% की कमी (चार्ट 1)** रही है।

- Maharashtra**, by contrast, nearly met its revenue targets and spent more than budgeted, thereby reporting a **deficit (Chart 2)**.

इसके विपरीत, **महाराष्ट्र** ने लगभग अपने राजस्व लक्ष्यों को प्राप्त किया और बजट से अधिक खर्च किया, जिसके कारण उसने **घाटा (चार्ट 2)** दर्ज किया।

- Yet, U.P. underspends even the funds budgeted by the **Centre**, despite receiving the **highest allocation**.

फिर भी, **सबसे अधिक आवंटन** प्राप्त करने के बावजूद उत्तर प्रदेश केंद्र द्वारा निर्धारित धनराशि को भी पूरी तरह खर्च नहीं कर पाता है।

GS Paper 1: History		06 July 2026
TOPICS COVERED		
06J7	Modi hails Syama Prasad Mookerjee as 'champion of national unity' मोदी ने श्यामा प्रसाद मुखर्जी को 'राष्ट्रीय एकता का चैंपियन' बताया	
06J7	Chhattisgarh's Pandavani legend Teejan Bai dies at 70 छत्तीसगढ़ की पंडवानी दिग्गज तीजन बाई का 70 वर्ष की आयु में निधन	
06J7	The Declaration of Independence and the making of universal rights स्वतंत्रता की घोषणा और सार्वभौमिक अधिकारों का निर्माण	
06J7	QUIZ	

Modi hails Syama Prasad Mookerjee as 'champion of national unity'

SS1: History
The Hindu Bureau
NEW DELHI

Prime Minister Narendra Modi on Monday said the life of Syama Prasad Mookerjee, founder of the Bharatiya Jana Sangh, exemplified unwavering nationalism, public service, and dedication to the country's unity and development, adding that his ideals remain relevant even today.

Paying tribute to Mookerjee on his 125th birth anniversary in an op-ed article titled "A life devoted to India's unity and progress", Mr. Modi lauded him as a leader who combined intellectual achievement and integrity.

Quoting Mookerjee's call to the youth to do every task thoroughly and to the best of their ability, Mr. Modi said that as India moves towards the goal of Viksit Bharat, the greatest tribute to him would be to

strive continuously to build a strong, united, self-confident, and compassionate India. "And knowing today's youth, I am certain they will rise to the occasion and do exactly that," he said.

A life of sacrifice

Despite coming from a privileged background – his father was among the foremost educationists and intellectuals of his time – Mookerjee's conscience led him towards a life of sacrifice, public service, and national causes, Mr. Modi said. He could not remain a mute spectator to the turbulence of his times, be it "fighting colonialism, communalism, humanitarian challenges and more".

"Along this journey, he endured profound personal tragedies, including the loss of an infant child and, later, his wife... Yet, these tragedies only deepened his resolve and streng-



An artist giving final touches to a bust of Bharatiya Jana Sangh founder Syama Prasad Mookerjee, in Kolkata on Sunday. ANI

thened his unwavering commitment to serve," the Prime Minister said.

A champion of national unity, Mookerjee stood firm during the Partition to ensure that West Bengal remained an integral part of India, Mr. Modi said. "A few years later, that very conviction drew him to Jammu and Kashmir. Imprisonment did not deter him and isolation did not

diminish him. His life came to an abrupt end in detention, far from the countless people whose cause he had made his own," he added.

"Acharya Vinoba Bhave said that Dr. Mookerjee sacrificed himself for a cause in which he had faith. Years later, the revocation of Articles 370 and 35A in 2019 was the most fitting tribute to his martyrdom,"

the Prime Minister said.

As the youngest Vice-Chancellor of the University of Calcutta, Mookerjee brought a range of "patriotic and futuristic" changes, in the spirit of "India First".

'Alternative voice'

At a time when the Congress was "omnipresent", Mr. Modi said, Mookerjee founded the Bharatiya Jana Sangh in 1951 as "an alternative voice to speak up for India's progress while staying attached to our cultural roots".

His tenure as India's first Minister for Industry and Supply displayed his conception of comprehensive and humane development. He viewed industry as a means of restoring dignity, opportunity, and confidence to a newly independent country, and respect-wealth creation and value addition, Mr. Modi said.

While laying the foundations of modern industrial India via initiatives such as the Damodar Valley Corporation and the Sindri Fertilizer Plant, he ensured that the country's traditional strengths such as handlooms, cottage industries, artisans, and textile workers were given equal importance.

"The Sindri plant, which Dr. Mookerjee worked to establish with a clear vision of self-reliance, was ignored by those who ran the nation for several decades. I feel honoured that our government had the opportunity to contribute to its revival," he said.

He said Mookerjee embodied India's civilizational tradition, the democratic spirit of dialogue and discussions.

"He joined Pandit Nehru's Cabinet, believing that the task of nation-building in the early years transcended political differences...

But when he felt that questions of national importance demanded a different course, he relinquished office with dignity and devoted himself wholeheartedly to the political work he believed the nation required," he said.

Staunch critic

Terming the First Amendment to the Constitution brought by Nehru as a "direct assault on free speech", the Prime Minister said Mookerjee was among its "staunchest critics".

"He understood fully what the Congress was capable of doing. And he was proven right. Those who brought the First Amendment 75 years ago imposed the Emergency in 1975 and 50 years ago, brought in the 42nd Amendment Act, which again struck at the core of liberal democratic values," Mr. Modi said.

06J7. Modi hails Syama Prasad Mookerjee as 'champion of national unity' मोदी ने श्यामा प्रसाद मुखर्जी को 'राष्ट्रीय एकता का चैंपियन' बताया

- Paying tribute to **Mookerjee on his 125th birth anniversary** in an op-ed article titled "A life devoted to India's unity and progress", Mr. Modi lauded him as a leader who combined intellectual achievement and integrity.
- **125वीं जयंती पर** "A life devoted to India's unity and progress" शीर्षक वाले एक लेख में **मुखर्जी** को श्रद्धांजलि देते हुए श्री मोदी ने उन्हें ऐसा नेता बताया, जिसने **बौद्धिक उपलब्धि और ईमानदारी** का अद्भुत समन्वय किया।
- As the **youngest Vice-Chancellor of the University of Calcutta**, **Mookerjee** brought a range of **patriotic and futuristic** changes, in the spirit of "India First".
- **कलकत्ता विश्वविद्यालय** के सबसे युवा **कुलपति** के रूप में **मुखर्जी** ने "India First" की भावना के अनुरूप अनेक **देशभक्तिपूर्ण और भविष्य-दृष्टि** वाले परिवर्तन किए।

'Alternative voice'

'वैकल्पिक आवाज़'

- At a time when the **Congress** was **omnipresent**, Mr. Modi said, **Mookerjee founded the Bharatiya Jana Sangh in 1951** as "an **alternative voice** to speak up for **India's progress** while staying attached to our **cultural roots**".
- श्री मोदी ने कहा कि जब **कांग्रेस** का हर ओर प्रभाव था, तब **मुखर्जी** ने **1951** में **भारतीय जनसंघ** की स्थापना **भारत की प्रगति** के लिए एक **वैकल्पिक आवाज़** के रूप में की, जो हमारी **सांस्कृतिक जड़ों** से जुड़ी रही।
- His tenure as **India's first Minister for Industry and Supply** displayed his conception of **comprehensive and humane development**.
- **भारत के पहले उद्योग एवं आपूर्ति मंत्री** के रूप में उनके कार्यकाल ने **समग्र और मानवीय विकास** की उनकी अवधारणा को प्रदर्शित किया।
- Terming the **First Amendment to the Constitution brought by Nehru** as a "direct assault on **free speech**", the Prime Minister said **Mookerjee** was among its "**staunchest critics**".
- **नेहरू** द्वारा लाए गए **संविधान के प्रथम संशोधन** को **अभिव्यक्ति की स्वतंत्रता** पर "सीधा हमला" बताते हुए प्रधानमंत्री ने कहा कि **मुखर्जी** इसके "**सबसे प्रखर आलोचकों**" में से थे।



Chhattisgarh's Pandavani legend Teejan Bai dies at 70

GS I: History: A&C
RAIPUR

Teejan Bai, an artist who took the ancient Chhattisgarhi folk tradition of Pandavani, the musical narration of the Mahabharata, to the world, died at 70 at the All India Institute of Medical Sciences (AIIMS) in Raipur on Sunday after a prolonged illness.

Teejan Bai shattered stereotypes by taking up an art form traditionally performed by men, and performed with her lively voice throughout India and across the globe for decades. She was conferred the Padma Shri, Padma Bhushan, and Padma Vibhushan, India's second-highest civilian honour.

The legendary singer had been keeping unwell for some time, and was undergoing treatment at the AIIMS, Raipur, from May 27, 2026. She died at about



Teejan Bai

3.15 a.m., doctors at the hospital confirmed. Teejan Bai was given the final farewell with full state honours at her native village, Ganayari, later on Sunday.

Breaking barriers

Back when she started, women traditionally performed Pandavani while sitting in the Vedamati style.

However, Teejan Bai challenged this tradition and began performing standing in the Kapalika

style of male performers, with acting, dialogues, singing, and expressions. This style later became her distinctive identity. Clad in a red saree draped in the Chhattisgarhi pattern, and holding the *tanpura* (stringed instrument), she would leave audiences spellbound wherever she performed.

She brought Chhattisgarh's folk culture to the world by performing Pandavani in more than 17 countries. Her powerful voice, acting, and storytelling style introduced Indian folk traditions to foreign audiences.

President Droupadi Murmu, Prime Minister Narendra Modi, Union Home Minister Amit Shah, and Chhattisgarh Chief Minister Vishnu Deo Sai were among those who consoled Teejan Bai's death and paid their tributes to her.

06J7. Chhattisgarh's Pandavani legend Teejan Bai dies at 70

छत्तीसगढ़ की पंडवानी दिग्गज तीजन

बाई का 70 वर्ष की आयु में निधन

- Teejan Bai, an artist who took the ancient Chhattisgarhi folk tradition of Pandavani, the musical narration of the Mahabharata, to the world, died at 70 at the All India Institute of Medical Sciences (AIIMS) in Raipur on Sunday after a prolonged illness.

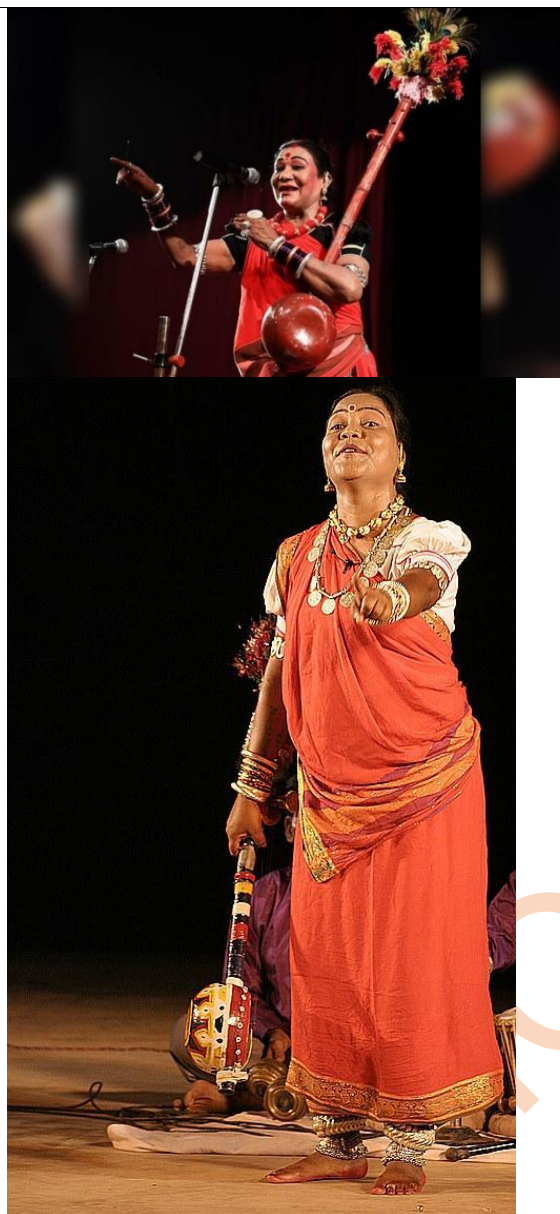
तीजन बाई, जिन्होंने महाभारत के संगीतमय वर्णन की प्राचीन छत्तीसगढ़ी लोक परंपरा पंडवानी को विश्व स्तर तक पहुँचाया, का लंबी बीमारी के बाद रविवार को रायपुर स्थित अखिल भारतीय आयुर्विज्ञान संस्थान (AIIMS) में 70 वर्ष की आयु में निधन हो गया।

- She was conferred the Padma Shri, Padma Bhushan, and Padma Vibhushan, India's second highest civilian honour.

उन्हें पद्म श्री, पद्म भूषण और पद्म विभूषण, जो भारत का दूसरा सर्वोच्च नागरिक सम्मान है, से सम्मानित किया गया था।

- Back when she started, women traditionally performed Pandavani while sitting in the Vedamati style.
जब उन्होंने शुरुआत की थी, तब महिलाएँ पारंपरिक रूप से पंडवानी को बैठकर वेदमती शैली में प्रस्तुत करती थीं।
- However, Teejan Bai challenged this tradition and began performing standing in the Kapalika style of male performers, with acting, dialogues, singing, and expressions.
हालाँकि, तीजन बाई ने इस परंपरा को चुनौती दी और पुरुष कलाकारों की कपालिक शैली में खड़े होकर अभिनय, संवाद, गायन और भावों के साथ प्रस्तुति देना शुरू किया।
- This style later became her distinctive identity.
यह शैली बाद में उनकी विशिष्ट पहचान बन गई।
- Clad in a red saree draped in the Chhattisgarhi pattern, and holding the tanpura (stringed instrument), she would leave audiences spellbound wherever she performed.
छत्तीसगढ़ी शैली में पहनी हुई लाल साड़ी और हाथ में तानपुरा (तार वाद्य यंत्र) लेकर वे जहाँ भी प्रस्तुति देती थीं, दर्शकों को मंत्रमुग्ध कर देती थीं।

Pandavani



- **Pandavani** is a traditional oral storytelling and folk singing tradition of Chhattisgarh, centered on the stories of the **Mahabharata**, particularly the lives and heroic deeds of the Pandavas.
- The word **Pandavani** literally means "the story (Vani) of the Pandavas."
- It is one of India's most celebrated forms of **folk narrative performance**, combining **music, storytelling, acting, dialogue, dance, and dramatic expression**.
- The performer narrates episodes from the **Mahabharata** in the local **Chhattisgarhi dialect**, making the epic accessible to ordinary people.
- Pandavani represents the rich oral tradition through which India's ancient epics have been transmitted across generations.

Musical Instruments Used

- Tambura (principal instrument).
- Harmonium.
- Manjira.
- Kartal.
- Dholak.
- Tabla.

Two Major Styles of Pandavani

Vedamati Style

- The performer generally remains seated.
- Greater emphasis is placed on narration.
- Singing is more restrained.
- Traditional style.
- Considered closer to the older oral tradition.

Kapalik Style

- The performer stands and moves across the stage.
- Rich use of dramatic acting.
- Dynamic body language.
- Energetic expressions.
- Greater audience interaction.
- More theatrical presentation.



The Declaration of Independence and the making of universal rights

Written to justify the American colonies' break from Britain, Declaration of Independence has inspired revolutions, independence movements and the modern human rights framework; its universal language of liberty and equality outlives the contradictions of its own creation

GS I: History: WH
Prathmesh Kher

In September 2, 1945, in Hanoi's Ba Dinh Square, Ho Chi Minh stood before a crowd of hundreds of thousands of people to proclaim the independence of the Democratic Republic of Vietnam. He was a committed Marxist-Leninist, a founding member of the French Communist Party, and the leader of a revolution the United States would spend the next two decades trying to defeat. He did not open with Marx. He did not open with Lenin. He opened with Jefferson: "All men are created equal. They are endowed by their Creator with certain inalienable rights, among them are Life, Liberty, and the pursuit of Happiness. This immortal statement was made in the Declaration of Independence of the United States of America in 1776."

Ho believed the Declaration meant what it said and that if it meant what it said, it had to apply to Vietnam. The United States spent thirty years demonstrating that it did not agree.

To understand why a Vietnamese communist reached for an 18th-century American document at the founding moment of his republic, one must understand what that document actually was: where it came from, what it cost to produce, and what, precisely, it said.

A rough draft of history

In June 1776, Thomas Jefferson, 33, sat at a portable writing desk in a rented room in Philadelphia and drafted what the Second Continental Congress had commissioned. He later said he "turned to neither book nor pamphlet while writing it," drawing only on what he called "the common sense of the subject." The resulting document went through 86 changes before adoption: 47 from John Adams and Benjamin Franklin, 39 from Congress during debate on July 3 and 4. The final text was adopted on the afternoon of July 4. Formal signing began on August 2.

The most important change was a deletion. Jefferson had included a paragraph indicting King George III for perpetuating the Atlantic slave trade, calling it "a cruel war against human nature itself, violating its most sacred rights of life and liberty in the persons of a distant people." Congress cut it entirely, reportedly at the insistence of South Carolina, Georgia, and northern delegates whose constituents profited from the trade. What replaced it was a vague reference to the King inciting "domestic insurrections" among the colonists, which recast enslaved people as a threat rather than victims. The Declaration's claim that "all men are created equal" was left to stand without any acknowledgment of the 5,00,000 people held in bondage in the colonies that signed it. Jefferson called the changes "mutilations" and kept private copies of his original draft to document what had been lost.

A subtler but significant change was in the preamble. Jefferson had written: "We hold these truths to be sacred & undeniable." Someone, most likely Franklin, changed it to "self-evident." The revision moved the argument from religious authority to rational logic and made the document considerably harder to dismiss without first engaging the laws of nature on their own terms.

First principles

The Declaration's core propositions came



People watch fireworks explode during the Independence Day Celebration in South Gate, California. AFP

primarily from John Locke's *Two Treatises of Government* (1689): natural rights precede government; government derives its legitimacy from the consent of the governed; when a government systematically violates those rights, the people may overthrow it. Jefferson borrowed this framework wholesale but made one consequential substitution. Locke's three natural rights were life, liberty, and property. Jefferson changed the third to "the pursuit of happiness."

Property is a legal category with defined contents. The pursuit of happiness is an open-ended aspiration that every subsequent generation has filled with different content: economic freedom, personal autonomy, religious practice, and the welfare state. That elasticity has become the document's most durable feature.

The *Virginia Declaration of Rights*, drafted by George Mason and adopted June 12, 1776, weeks before Jefferson began writing, had already declared that "all men are by nature equally free and independent, and have certain inherent rights." Jefferson knew it intimately and drew on it directly. Thomas Paine's *Common Sense*, published in January 1776, had made similar arguments in the popular idiom that shaped the mood Jefferson then addressed in a more formal register. The Scottish philosopher Francis Hutcheson had argued that certain moral truths were felt directly by any rational person without philosophical demonstration, which is the epistemological basis for calling truths "self-evident." What Jefferson did was synthesise an existing tradition into a document designed to justify revolution to an international audience, under deadline, with a specific political purpose.

Historical innovations

Magna Carta (1215) and the *English Bill of Rights* (1689) framed rights as concessions from a sovereign to subjects: grants from above, which could in principle be revoked by the same authority that issued them. The Declaration grounded rights in the fact of being human, prior to any government and independent of any sovereign's generosity.

More distinctively, it addressed itself not to subjects within an existing constitutional order but to "the Powers of

the Earth," asserting the right to constitute a new political order from scratch. The right to revolution followed as a logical consequence of the premises. If governments exist to secure natural rights, and a government instead systematically destroys them, the people are not merely permitted but obligated to act. The argument moves like a syllogism. That formal clarity is part of what made the document so portable across political traditions that had nothing else in common. Thirty-five American state constitutions contain the same or similar provisions on the right of revolution as in the Declaration's preamble, and comparable language appears in the constitutions of France (1793), Texas, Pennsylvania, and Tennessee, among others.

The Declaration also pioneered what might be called the audit model of political accountability. Its long middle section lists 27 specific grievances against George III, functioning less like a complaints register and more like a prosecutor's indictment. Jefferson opens the charges: "The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid World." The grievances that follow are concrete and particular: quartering troops among the civilian population; allowing British soldiers who murdered colonists to face trial in England rather than in the colonies; cutting off colonial trade with the rest of the world; taxing the colonists without their consent; and depriving them of trial by jury through the use of Admiralty courts. Other charges struck at self-governance itself: royal governors had suspended colonial legislatures and replaced statute law with royal proclamations in New York, Virginia, Georgia, and South Carolina. The final counts escalated the indictment from civil abuse to open warfare, accusing the King of having "plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people," and of deploying Hessian mercenaries "to compleat the works of death, desolation and tyranny." The implication running through all 27 counts is that a government's conduct can be itemised,

documented, and judged against a standard. Every constitutional system that enumerates rights and governmental obligations inherits this structure.

A grammar for liberty

Karl Marx, writing in 1864 on behalf of the First International to congratulate Abraham Lincoln on his reelection, named the Declaration directly, calling it "the first Declaration of the Rights of Man" and identifying it as the event that had given "the first impulse to the European revolution of the eighteenth century." He designated the document as the origin point of an entire historical era and argued that the working class would finish what 1776 had begun.

Twelve years earlier, on July 5, 1852, Frederick Douglass perhaps explained the phenomenon of the Declaration more keenly than anyone else. Born into slavery, self-educated, and by then the most prominent Black abolitionist in America, he stood before a crowd of around 600 people in Rochester, New York, invited to speak on the Independence Day of the United States of America. His speech, "*What to the Slave is the Fourth of July?*", is one of the most deliberate engagements with the Declaration in American history:

"I have said that the Declaration of Independence is the ring-bolt to the chain of your nation's destiny; so, indeed, I regard it. The principles contained in that instrument are saving principles. Stand by those principles, be true to them on all occasions, in all places, against all foes, and at whatever cost."

Then he turned: "This Fourth of July is yours, not mine. You may rejoice, I must mourn." Douglass's argument was not that the Declaration had failed but that its inheritors had.

The Universal Declaration of Human Rights, adopted on December 10, 1948, by 48 nations with no dissenting votes, carries the architecture of Jefferson's preamble into international law: rights that are inherent, that precede states, and that no authority can grant or revoke. Its preamble opens with "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family."

Unfinished business

Jefferson owned over 600 people at the time he wrote that all men are created equal. The document he produced was, at its core, a lawyer's argument for a political purpose: to justify, to an international audience, the decision of thirteen colonies to break from Britain. Its universalist language was a rhetorical instrument, not a programme.

What it became is something else. The deletion of the slavery paragraph did not bury the contradiction; it drove it into the text's foundation, where it sat under the pressure of "all men are created equal" for ninety years.

The shift from "sacred and undeniable" to "self-evident" planted the argument on rational ground where it could not be closed by authority or tradition, only by reason. Each of these changes, deliberate or incidental, made the document harder to contain.

Jefferson died on July 4, 1826, fifty years to the day after the Declaration's adoption. Weeks before his death, he wrote that he hoped it would prove "an instrument... pregnant with our own and the fate of the world."

06J7. The Declaration of Independence and the making of universal rights स्वतंत्रता की घोषणा और सार्वभौमिक अधिकारों का निर्माण

- He opened with **Jefferson**:
उन्होंने अपनी शुरुआत जेफरसन से की:
- **"All men are created equal. They are endowed by their Creator with certain inalienable rights, among them are Life, Liberty, and the pursuit of Happiness."**
"सभी मनुष्य समान बनाए गए हैं। उन्हें उनके सृष्टिकर्ता द्वारा कुछ अविच्छेद्य अधिकार प्रदान किए गए हैं, जिनमें जीवन, स्वतंत्रता और सुख की खोज शामिल हैं।"
- This immortal statement was made in the **Declaration of Independence of the United States of America in 1776.**
यह अमर कथन 1776 में संयुक्त राज्य अमेरिका की स्वतंत्रता की घोषणा में किया गया था।"

A rough draft of history

इतिहास का एक प्रारंभिक मसौदा

- In **June 1776**, **Thomas Jefferson**, 33, sat at a portable writing desk in a rented room in Philadelphia and drafted what the **Second Continental Congress** had commissioned.
जून 1776 में, 33 वर्षीय थॉमस जेफरसन ने फिलाडेल्फिया के एक किराए के कमरे में एक पोर्टेबल लेखन मेज पर बैठकर वह मसौदा तैयार किया, जिसे **द्वितीय महाद्वीपीय कांग्रेस** ने तैयार करने का कार्य सौंपा था।
- He later said he "turned to neither book nor pamphlet while writing it," drawing only on what he called "the **common sense of the subject**."
उन्होंने बाद में कहा कि उन्होंने "इसे लिखते समय न किसी पुस्तक और न ही किसी पुस्तिका का सहारा लिया," बल्कि केवल उस पर आधारित रहे जिसे उन्होंने "विषय की सामान्य समझ" कहा।
- The **Declaration's** core propositions came primarily from **John Locke's Two Treatises of Government (1689)**.
इस घोषणा के मुख्य सिद्धांत मुख्य रूप से **जॉन लॉक की पुस्तक Two Treatises of Government (1689)** से लिए गए थे।
- **Natural rights** precede government; government derives its legitimacy from the **consent of the governed**; when a government systematically violates those rights, the people may overthrow it.
प्राकृतिक अधिकार सरकार से पहले आते हैं; सरकार अपनी वैधता शासित लोगों की सहमति से प्राप्त करती है; जब कोई सरकार व्यवस्थित रूप से इन अधिकारों का उल्लंघन करती है, तो जनता उसे हटा सकती है।
- **Locke's three natural rights were life, liberty, and property.**
लॉक के तीन प्राकृतिक अधिकार थे — **जीवन, स्वतंत्रता और संपत्ति**।
- **Jefferson changed the third to "the pursuit of happiness."**
जेफरसन ने तीसरे अधिकार को बदलकर "सुख की खोज" कर दिया।
- **Property** is a legal category with defined contents.
संपत्ति स्पष्ट परिभाषित तत्वों वाली एक कानूनी श्रेणी है।
- The **pursuit of happiness** is an open-ended aspiration that every subsequent generation has filled with different content: economic freedom, personal autonomy, religious practice, and the welfare state.
सुख की खोज एक व्यापक आकांक्षा है, जिसे प्रत्येक अगली पीढ़ी ने अलग-अलग अर्थों से भरा है: आर्थिक स्वतंत्रता, व्यक्तिगत स्वायत्तता, धार्मिक अभ्यास और कल्याणकारी राज्य।
- That **elasticity** has become the document's most durable feature.
यही लचीलापन इस दस्तावेज़ की सबसे स्थायी विशेषता बन गया है।



- The **Virginia Declaration of Rights**, drafted by **George Mason** and adopted June 12, 1776, weeks before Jefferson began writing, had already declared that “all men are by nature equally free and independent, and have certain inherent rights.”
जॉर्ज मेसन द्वारा तैयार और 12 जून 1776 को स्वीकृत **वर्जीनिया अधिकार घोषणा**, जिसे जेफरसन के लेखन शुरू करने से कुछ सप्ताह पहले अपनाया गया था, पहले ही घोषित कर चुकी थी कि “सभी मनुष्य प्रकृति से समान रूप से स्वतंत्र हैं और उनके कुछ जन्मजात अधिकार हैं।”
- Jefferson knew it intimately and drew on it directly.
जेफरसन इसे गहराई से जानते थे और इससे सीधे प्रेरित हुए।
- Thomas Paine’s Common Sense**, published in January 1776, had made similar arguments in the popular idiom that shaped the mood Jefferson then addressed in a more formal register.
थॉमस पेन की Common Sense, जनवरी 1776 में प्रकाशित हुई, ने सरल भाषा में समान तर्क प्रस्तुत किए, जिसने उस जनभावना को आकार दिया जिसे जेफरसन ने अधिक औपचारिक रूप में व्यक्त किया।
- Magna Carta (1215) and the English Bill of Rights (1689)** framed rights as concessions from a sovereign to subjects: grants from above, which could in principle be revoked by the same authority that issued them.
मैग्ना कार्टा (1215) और इंग्लिश बिल ऑफ राइट्स (1689) ने अधिकारों को शासक द्वारा प्रजा को दी गई रियायतों के रूप में प्रस्तुत किया: अर्थात् ऊपर से दिए गए ऐसे अधिकार, जिन्हें सिद्धांत रूप से वही सत्ता वापस ले सकती थी जिसने उन्हें प्रदान किया था।
- The **Declaration** grounded rights in the fact of being human, prior to any government and independent of any sovereign’s generosity.
घोषणा ने अधिकारों को मानव होने के तथ्य पर आधारित किया, जो किसी भी सरकार से पहले और किसी भी शासक की उदारता से स्वतंत्र थे।
- More distinctively, it addressed itself not to subjects within an existing constitutional order but to “**the Powers of the Earth**,” asserting the right to constitute a new **political order** from scratch.
अधिक विशिष्ट रूप से, इसने स्वयं को मौजूदा संवैधानिक व्यवस्था के अंतर्गत आने वाली प्रजा तक सीमित नहीं रखा, बल्कि “**पृथ्वी की शक्तियों**” को संबोधित करते हुए एक नई **राजनीतिक व्यवस्था** को आरंभ से स्थापित करने के अधिकार का दावा किया।
- The **right to revolution** followed as a logical consequence of the premises.
क्रांति का अधिकार इन आधारों के तार्किक परिणाम के रूप में सामने आया।
- The argument moves like a **sylogism**.
यह तर्क एक **न्यायवाक्य** की तरह आगे बढ़ता है।
- Thirty-five **American state constitutions** contain the same or similar provisions on the **right of revolution** as in the Declaration’s preamble, and comparable language appears in the constitutions of **France (1793), Texas, Pennsylvania, and Tennessee**, among others.
पैंतीस अमेरिकी राज्य संविधानों में **क्रांति के अधिकार** से जुड़े वही या समान प्रावधान शामिल हैं जो घोषणा की प्रस्तावना में हैं, और इसी प्रकार की भाषा **फ्रांस (1793), टेक्सास, पेंसिल्वेनिया और टेनेसी** सहित अन्य संविधानों में दिखाई देती है।
- Other charges struck at **self-governance** itself: royal governors had suspended colonial legislatures and replaced statute law with royal proclamations in **New York, Virginia, Georgia, and South Carolina**.
अन्य आरोप सीधे **स्वशासन** पर प्रहार करते थे: शाही गवर्नरों ने **न्यूयॉर्क, वर्जीनिया, जॉर्जिया और साउथ कैरोलिना** में औपनिवेशिक विधानसभाओं को निलंबित कर दिया था और विधि-निर्मित कानूनों को शाही घोषणाओं से बदल दिया था।
- The implication running through all **27 counts** is that a government’s conduct can be itemised, documented, and judged against a standard.

इन सभी 27 आरोपों में निहित अर्थ यह है कि किसी सरकार के आचरण को सूचीबद्ध, प्रलेखित और एक मानक के आधार पर परखा जा सकता है।

- Every constitutional system that enumerates rights and governmental obligations inherits this structure.
प्रत्येक संवैधानिक व्यवस्था जो अधिकारों और सरकारी दायित्वों को सूचीबद्ध करती है, इसी संरचना को अपनाती है।

A grammar for liberty स्वतंत्रता का एक व्याकरण

- **Karl Marx**, writing in 1864 on behalf of the **First International** to congratulate **Abraham Lincoln** on his reelection, named the Declaration directly.
कार्ल मार्क्स ने 1864 में फर्स्ट इंटरनेशनल की ओर से अब्राहम लिंकन को उनके पुनर्निर्वाचन पर बधाई देते हुए इस घोषणा का प्रत्यक्ष रूप से उल्लेख किया।
- Calling it “the **first Declaration of the Rights of Man**” and identifying it as the event that had given “the first impulse to the **European revolution of the eighteenth century**.”
उन्होंने इसे “मनुष्य के अधिकारों की पहली घोषणा” कहा और इसे वह घटना बताया जिसने “अठारहवीं शताब्दी की यूरोपीय क्रांति को पहली प्रेरणा दी।”
- He designated the document as the **origin point of an entire historical era** and argued that the working class would finish what 1776 had begun.
उन्होंने इस दस्तावेज़ को एक पूरे ऐतिहासिक युग का प्रारंभिक बिंदु बताया और तर्क दिया कि मजदूर वर्ग उस कार्य को पूरा करेगा जिसे 1776 ने शुरू किया था।
- Twelve years earlier, on **July 5, 1852**, **Frederick Douglass** perhaps explained the phenomenon of the Declaration more keenly than anyone else.
बारह वर्ष पहले, 5 जुलाई, 1852 को फ्रेडरिक डग्लस ने संभवतः इस घोषणा की घटना को किसी भी अन्य व्यक्ति की तुलना में अधिक गहराई से समझाया।
- Born into **slavery**, self-educated, and by then the most prominent **Black abolitionist in America**, he stood before a crowd of around 600 people in Rochester, New York, invited to speak on the Independence Day of the United States of America.
दासता में जन्मे, स्व-शिक्षित और उस समय तक अमेरिका के सबसे प्रमुख अश्वेत दासता-विरोधी कार्यकर्ता बन चुके डग्लस, न्यूयॉर्क के रोचेस्टर में लगभग 600 लोगों की भीड़ के सामने खड़े हुए, जहाँ उन्हें अमेरिका के स्वतंत्रता दिवस पर बोलने के लिए आमंत्रित किया गया था।
- His speech, “**What to the Slave is the Fourth of July?**”, is one of the most deliberate engagements with the Declaration in American history.
उनका भाषण, “एक दास के लिए चार जुलाई का क्या अर्थ है?”, अमेरिकी इतिहास में इस घोषणा के साथ सबसे गंभीर संवादों में से एक है।
- “I have said that the **Declaration of Independence** is the ring-bolt to the chain of your nation’s destiny; so, indeed, I regard it.”
“मैंने कहा है कि स्वतंत्रता की घोषणा आपके राष्ट्र की नियति की श्रृंखला की मुख्य कड़ी है; वास्तव में, मैं इसे ऐसा ही मानता हूँ।”
- “The principles contained in that instrument are **saving principles**.”
“उस दस्तावेज़ में निहित सिद्धांत उद्धार करने वाले सिद्धांत हैं।”
- “Stand by those principles, be true to them on all occasions, in all places, against all foes, and at whatever cost.”
“उन सिद्धांतों के साथ खड़े रहें, हर अवसर पर, हर स्थान पर, सभी विरोधियों के विरुद्ध और किसी भी कीमत पर उनके प्रति सच्चे रहें।”
- The **Universal Declaration of Human Rights**, adopted on **December 10, 1948**, by 48 nations with no dissenting votes, carries the architecture of Jefferson’s preamble into **international law**.

मानवाधिकारों की सार्वभौमिक घोषणा, जिसे 10 दिसंबर, 1948 को 48 देशों द्वारा बिना किसी विरोधी मत के अपनाया गया, जेफरसन की प्रस्तावना की संरचना को अंतरराष्ट्रीय कानून में ले जाती है।

- **Jefferson died on July 4, 1826, fifty years to the day after the Declaration's adoption.**
जेफरसन की मृत्यु 4 जुलाई, 1826 को हुई, ठीक उस दिन जब घोषणा को अपनाए हुए पचास वर्ष पूरे हुए थे।

Questions and Answers to the previous day's daily quiz: 1. This newspaper opposed the Age of Consent Act, passed in 1891 after the death of a child bride, Phoolmoni, resulting in the first sedition trial under Section 124A of the Indian Penal Code. **Ans: Bangabasi**
2. This lawyer successfully defended Tilak in his 1916 sedition case. He later became a leading proponent of the two-nation theory. **Ans: Muhammad Ali Jinnah**
3. This lawyer, charged under sedition, famously said, "Affection [towards the government] could not be manufactured". **Ans: Mahatma Gandhi**
4. This person was arrested on October 31, 1984, for allegedly shouting pro-Khalistan slogans near Neelam cinema in Chandigarh. In his case, the Supreme Court famously ruled that merely shouting slogans, without incitement to violence or public disorder, does not amount to sedition. Name him. **Ans: Balwant Singh**
5. Which famous leader, who is almost always in the news these days, termed the sedition law "highly objectionable and obnoxious", adding that it should have "no place both for practical and historical reasons"? **Ans: Jawaharlal Nehru**
Visual: Name this cartoonist who was charged with sedition a few years ago. **Ans: Aseem Trivedi**
Early Birds: Tom Alan Faith | K.N. Viswanathan | Sonali Das | Erfanally Oosmany | Lalchand Bhutani

06J7. QUIZ

1. Bangabasi and the First Sedition Trial under Section 124A IPC

- **Bangabasi** was a prominent Bengali newspaper published from **Calcutta (now Kolkata)** during the late nineteenth century.
- It strongly opposed the **Age of Consent Act, 1891**, which increased the minimum age of consent for girls in marriage from **10 years to 12 years**. The newspaper argued that the legislation represented excessive colonial interference in Hindu personal laws.
- The Act was enacted following the tragic death of **Phoolmoni (Phulmoni) Dasi**, an **11-year-old child bride**, who died in **1889** due to injuries caused by forced marital intercourse. The incident generated widespread public debate and prompted legal reform.
- In **1891**, the colonial government prosecuted the **editors of Bangabasi under Section 124A (Sedition) of the Indian Penal Code**, making it the **first major sedition prosecution** under this provision. The case marked the beginning of the extensive use of sedition law against newspapers and political critics during British rule.

Bangabasi

• **Bangabasi** (also spelled **Banga Basi**) was an influential **Bengali-language newspaper** published during the late nineteenth century from **Calcutta**.

• It played an important role in shaping **public opinion**, promoting **Indian nationalism**, and criticizing several policies of the British colonial government.

• The latter half of the nineteenth century witnessed the rapid growth of the **vernacular press** in India.

• Newspapers published in Indian languages became an important medium for spreading ideas about:

- Political rights.
- Social reforms.
- National consciousness.
- Education.



- Economic exploitation under colonial rule.
- **Bangabasi** was founded in **1880** by **Jogendra Chandra Bose** in **Calcutta**.
- It soon emerged as one of the leading Bengali newspapers alongside newspapers such as **Amrita Bazar Patrika**, **The Bengalee**, and **Sanjibani**.

Founder: Jogendra Chandra Bose (1854–1905)

- Founder of **Bangabasi**.
- Eminent journalist and nationalist.
- Strong advocate of Indian interests under colonial rule.
- Encouraged political awareness through journalism.

2. Lawyer Who Defended Bal Gangadhar Tilak in the 1916 Sedition Case

- **Muhammad Ali Jinnah** was one of the leading barristers of British India before entering full-time politics.

3. Lawyer Who Said, "Affection Could Not Be Manufactured"

- **Mahatma Gandhi**, though primarily remembered as the leader of India's freedom struggle, was also a trained barrister.
- During his **1922 sedition trial** before the **District and Sessions Court at Ahmedabad**, Gandhi pleaded guilty to charges under **Section 124A IPC**.
- In his famous statement before the court, he declared that "**Affection cannot be manufactured or regulated by law.**"

5. Leader Who Called the Sedition Law "Highly Objectionable and Obnoxious"

- **Jawaharlal Nehru**, India's first **Prime Minister**, strongly opposed the colonial offence of sedition.
- During discussions in **Parliament in 1951**, Nehru described **Section 124A IPC** as "**highly objectionable and obnoxious**", stating that it should have "**no place both for practical and historical reasons.**"
- In **2023**, **Section 124A of the Indian Penal Code** was repealed with the enactment of the **Bharatiya Nyaya Sanhita, 2023**.

GS Paper II: Polity		06 July 2026
TOPICS COVERED		
06J7	Shah to launch several projects as Cooperation Ministry completes 5 years सहकारिता मंत्रालय के 5 वर्ष पूरे होने पर शाह कई परियोजनाओं का शुभारंभ करेंगे	

Shah to launch several projects as Cooperation Ministry completes 5 years

GS II: Polity

The Hindu Bureau
NEW DELHI

Union Home and Cooperation Minister Amit Shah will lay the foundation stone for 47 grain storage godowns and inaugurate several major projects on Monday to mark the completion of five years since the formation of the Cooperation Ministry, a government statement said.

The Minister, among other initiatives, would also launch a centralised core banking platform, and Sahakar Sahyogi, a conversational AI-powered platform, for Urban Cooperative Banks.

The Ministry emphasised cooperation with States as a key pillar of implementing its initiatives over the past five years, a Ministry official said on Sunday.

White Revolution 2.0

The Ministry of Coopera-



Amit Shah

tion aimed to increase milk procurement in the country by 50% over the next five years by expanding cooperative coverage, generating employment and empowering women under White Revolution 2.0, the official said. As part of the programme, more than 25,282 Dairy Cooperative Societies (DCSs) had been registered across 31 States and Union Territories.

The Ministry further launched sustainability initiatives in the dairy sector,

including the registration of new multi-State cooperatives for dairy inputs and manure management, alongside the creation of the Sardar Patel Cooperative Dairy Federation Limited (SPCDF), which aimed to connect over 20 lakh dairy farmers to an organised cooperative structure, the official said.

The official added that Urban Cooperative Banks (UCBs) could now open additional branches without prior Reserve Bank of India (RBI) approval, offer doorstep banking services and provide higher-value housing loans. Cooperative banks had also been brought under the Credit Guarantee Fund Trust for Micro and Small Enterprises framework.

The official added that the Primary Agricultural Credit Societies had been strengthened by transforming them into multi-purpose rural institutions.

06J7. Shah to launch several projects as Cooperation Ministry completes 5 years

सहकारिता मंत्रालय के 5 वर्ष पूरे होने पर शाह कई परियोजनाओं का शुभारंभ करेंगे

• Union Home and Cooperation Minister Amit Shah will lay the foundation stone for 47 grain storage godowns and inaugurate several major projects on Monday to mark the completion of five years since the formation of the Cooperation Ministry, a government statement said.

केंद्रीय गृह एवं सहकारिता मंत्री अमित शाह 47 अनाज भंडारण गोदामों की आधारशिला रखेंगे और सोमवार को सहकारिता मंत्रालय के गठन के पाँच वर्ष पूरे होने के अवसर पर कई प्रमुख परियोजनाओं का उद्घाटन करेंगे, ऐसा एक सरकारी बयान में कहा गया।

• The Minister,

among other initiatives, would also launch a centralised core banking platform, and Sahakar Sahyogi, a conversational AI-powered platform, for Urban Cooperative Banks.

मंत्री अन्य पहलों के साथ केंद्रीकृत कोर बैंकिंग प्लेटफॉर्म तथा शहरी सहकारी बैंकों के लिए सहकार सहयोगी, एक संवादात्मक एआई-संचालित प्लेटफॉर्म, का भी शुभारंभ करेंगे।

• White Revolution 2.0 श्वेत क्रांति 2.0

- The Ministry of Cooperation aimed to increase milk procurement in the country by 50% over the next five years by expanding cooperative coverage, generating employment and empowering women under White Revolution 2.0, the official said.

अधिकारी ने कहा कि सहकारिता मंत्रालय का लक्ष्य श्वेत क्रांति 2.0 के तहत सहकारी कवरेज का विस्तार करके, रोजगार सृजित करके और महिलाओं को सशक्त बनाकर अगले पाँच वर्षों में देश में दूध खरीद (मिल्क प्रोक्योरमेंट) को 50% तक बढ़ाना है।

- As part of the programme, more than 25,282 Dairy Cooperative Societies (DCSs) had been registered across 31 States and Union Territories.

इस कार्यक्रम के तहत 31 राज्यों और केंद्र शासित प्रदेशों में 25,282 से अधिक डेयरी सहकारी समितियाँ (DCSs) पंजीकृत की जा चुकी हैं।



- The Ministry further launched sustainability initiatives in the dairy sector. **मंत्रालय ने डेयरी क्षेत्र में स्थिरता (सस्टेनेबिलिटी) संबंधी पहलें भी शुरू की हैं।**
- Sardar Patel Cooperative Dairy Federation Limited (SPCDF), which aimed to connect over 20 lakh dairy farmers to an organised cooperative structure, the official said.**
- नई बहु-राज्य सहकारी समितियों के डेयरी इनपुट्स और गोबर प्रबंधन के लिए पंजीकरण सहित, सरदार पटेल कोऑपरेटिव डेयरी फेडरेशन लिमिटेड (SPCDF) के गठन के साथ, जिसका उद्देश्य 20 लाख से अधिक डेयरी किसानों को एक संगठित सहकारी ढांचे से जोड़ना था, अधिकारी ने कहा।**
- The official added that **Urban Cooperative Banks (UCBs) could now open additional branches without prior Reserve Bank of India (RBI) approval, offer doorstep banking services and provide higher-value housing loans.**
- अधिकारी ने आगे कहा कि **अर्बन कोऑपरेटिव बैंक (UCBs) अब भारतीय रिज़र्व बैंक (RBI) की पूर्व अनुमति के बिना अतिरिक्त शाखाएँ खोल सकते हैं, डोरस्टेप बैंकिंग सेवाएँ प्रदान कर सकते हैं और उच्च मूल्य के आवास ऋण उपलब्ध करा सकते हैं।**
- Cooperative banks had also been brought under the Credit Guarantee Fund Trust for Micro and Small Enterprises framework.**
- सहकारी बैंकों को भी क्रेडिट गारंटी फंड ट्रस्ट फॉर माइक्रो एंड स्मॉल एंटरप्राइजेज के ढांचे के अंतर्गत लाया गया था।**

GS Paper II: Governance		06 July 2026
TOPICS COVERED		
06J7	The missing link in India's maternal health story भारत की मातृ स्वास्थ्य कहानी की गुम कड़ी	
06J7	Bengal CM announces ₹313 cr. for tea workers' scheme बंगाल के मुख्यमंत्री ने चाय श्रमिकों की योजना के लिए ₹313 करोड़ की घोषणा की	

SPOTLIGHT

Bindu Shajan Perappadan

Saritha, 27, could not manage to exclusively breastfeed her sons – now aged four and eight – for the recommended first six months despite having normal institutional deliveries. She works as a domestic help in central Delhi's Rajendra Nagar. Her husband drives for a ride-hailing platform and takes up odd jobs such as washing cars and serving at weddings to support the family. "I returned to work within two months of my delivery and had no option but to introduce infant formula before my sons turned six months old. If I do not work, we cannot pay rent or meet our living expenses," she said.

Saritha is among a growing number of mothers in India unable to exclusively breastfeed (EBF) their infants for the recommended six months.

Why EBF matters

EBF is considered one of the most effective interventions for ensuring the survival and healthy development of the child. Breast milk contains antibodies that protect an infant against common illnesses such as diarrhoea and respiratory infections, supports healthy growth and brain development, and lowers the risk of malnutrition and infant mortality. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend initiating breastfeeding within one hour of birth and continuing it for the first six months.

Trends in EBF are closely monitored in National Family Health Survey (NFHS) because they are important indicators of child health, nutrition and overall public health progress. The latest NFHS-6 indicates worrying trends.

A worrying decline

Despite 90.6% of deliveries in the country now being institutional, fewer infants are exclusively breastfed during the first six months. Although early initiation of breastfeeding has improved from 41.8% to 50.1%, EBF declined from 63.7% in NFHS-5 to 55.8% over the same period, as per NFHS-6 (2023-24).

NFHS-6 data show some of the sharpest declines in exclusive breastfeeding in some of the largest States. In Uttar Pradesh, EBF fell from 59.7% to 34.6% while in Haryana it fell from 69.5% to 41.2%. Delhi witnessed a drop from 64.3% to 54% as well. Rajasthan and Madhya Pradesh also recorded declines. In contrast, Kerala, Gujarat and West Bengal registered improvements in EBF rates.

What is also worrying is that, as per the survey, the decline in EBF was steeper in rural areas. Data show that EBF among infants below six months fell from 65.1% to 56.2% in rural

The missing link in India's maternal health story

Despite improvements in institutional deliveries and maternity programmes, exclusive breastfeeding rates have declined, according to NFHS-6 data

SS II: Governance



Healthy start: The World Health Organization and UNICEF recommend exclusive breastfeeding during the first six months to support healthy growth and protect infants from common illnesses. FILE PHOTO

areas. In urban areas, it fell from 59.6% to 54.5%.

A paradox

What makes the decline particularly striking is that it comes at a time when India has made significant gains in maternal and child health.

Early initiation of breastfeeding has improved, maternity benefits have expanded, and women are more financially and digitally empowered than ever before. Nearly 89% of women now participate in key household decisions while a similar proportion operate their own bank accounts. Digital inclusion has expanded rapidly, with Internet use among women rising from 33.3% in NFHS-5 to 64.3% in NFHS-6. Yet fewer infants are being exclusively breastfed during the first six months.

"The decline in EBF despite these improvements indicates that empowerment alone may not be sufficient. Growing economic pressures, informal employment, lack of maternity protection, inadequate workplace support and limited postnatal assistance

continue to constrain many mothers' ability to exclusively breastfeed their infants for the recommended first six months," said Arun Gupta, paediatrician and public health advocate recognised for his decades-long drive to promote breastfeeding.

Obstacles to EBF

Health experts attribute the decline, particularly in rural India, to increased migration and seasonal labour, early return to agricultural and informal work, changing family structures, erosion of tra-

ditional support networks, greater penetration of packaged foods and formula products, weak postnatal counselling and rising caesarean deliveries.

The sharp rise in C-section rates, from 21.5% to 27.2%, is also cited as a contributing factor. Breastfeeding advocates say surgical deliveries can make early initiation and continuation of breastfeeding challenging, especially in absence of adequate postnatal lactation support.

"Common medical reasons for not being able to exclusively breastfeed include delayed initiation of breastfeeding after delivery, especially following a C-section; perceived or actual low milk supply; lack of breastfeeding counselling and family support; maternal illness or complications; and difficulties faced by premature or low birth weight infants," said Delhi Medical Association member Anil Bansal.

Vandana, 32, became a mother four years ago. An HR consultant at a private firm, she was unable to exclusively breastfeed her child for the recommended six months.

"After my C-section, despite skin-to-skin contact, lactation support and frequent feeding attempts, I could not produce enough milk to meet my baby's nutritional needs. Supplementation became necessary," she said, adding that early counselling may have helped her. When breastfeeding is

not possible, the WHO recommends infant formula as an alternative. Some hospitals also provide pasteurised donor human milk, particularly for pre-term and unwell newborns. However, public health experts stress that formula is intended as a substitute when breastfeeding cannot be sustained, not as a replacement for breast milk.

Policy measures

India promotes breastfeeding through programmes such as Pradhan Mantri Matru Vandana Yojana and Integrated Child Development Services. Comprehensive Lactation Management Centres and Lactation Management Units provide lactation support and donor human milk when the mother's milk is unavailable.

The Infant Milk Substitutes Act, restricts the promotion of infant formula and protects breastfeeding from commercial marketing pressure. However, Dr. Gupta said aggressive marketing of infant formula and substitutes could still undermine breastfeeding and should be strictly regulated. According to Dr. Gupta, breastfeeding is among the most cost-effective public health interventions, even as data expose a gap between policy success and lived reality.

The informal sector

Women employed in the organised sector are entitled to 26 weeks of paid ma-

ternity leave under the Maternity Benefit Act, 1961, amended in 2017. Unfortunately, these protections are largely confined to the organised sector.

According to e-Shram portal, a national database of unorganised workers, more than 16.69 crore women were registered as workers in the unorganised sector as of 2025.

Health experts say this disconnect raises a fundamental policy question: can India expect mothers to exclusively breastfeed for six months when most receive neither income support nor workplace protection during that period?

Shweta, 25, the mother of a five-year-old girl, said many women working alongside her in a garment factory in Noida could not exclusively breastfeed their children. "Rising inflation and the fact that we work on contracts do not allow us the luxury of taking long breaks," said Shweta.

Dr. Gupta says that maternity benefits and breastfeeding support systems, particularly for women employed in the informal sector, need to be strengthened. "For the vast majority working in informal occupations, breastfeeding recommendations often collide with economic reality, and these women, who are most in need of support, are often the least likely to receive it," said Dr. Bansal.

bindu.p@thehindu.co.in

06J7. The missing link in India's maternal health story

भारत की मातृ स्वास्थ्य कहानी की गुम कड़ी

- Despite improvements in **institutional deliveries** and **maternity programmes**, **exclusive breastfeeding** rates have declined, according to **NFHS-6** data.
संस्थागत प्रसव और मातृत्व कार्यक्रमों में सुधार के बावजूद, **NFHS-6** के अनुसार विशेष स्तनपान (Exclusive Breastfeeding) की दरों में गिरावट आई है।
- Breast milk** contains antibodies that protects an infant against common illnesses such as **diarrhoea** and **respiratory infections**, supports healthy growth and brain development, and lowers the risk of **malnutrition** and **infant mortality**.
माँ के दूध में ऐसे प्रतिरक्षी (एंटीबॉडी) होते हैं जो शिशु को दस्त और श्वसन संक्रमण जैसी सामान्य बीमारियों से बचाते हैं, स्वस्थ वृद्धि और मस्तिष्क विकास में सहायता करते हैं तथा कुपोषण और शिशु मृत्यु के जोखिम को कम करते हैं।
- The **World Health Organization (WHO)** and the **United Nations Children's Fund (UNICEF)** recommend **initiating breastfeeding within one hour of birth and continuing it for the first six months**.
विश्व स्वास्थ्य संगठन (WHO) और संयुक्त राष्ट्र बाल कोष (UNICEF) जन्म के एक घंटे के भीतर स्तनपान शुरू करने तथा पहले छह महीनों तक इसे जारी रखने की अनुशंसा करते हैं।
- Trends in **EBF** are closely monitored in **National Family Health Survey (NFHS)** because they are important indicators of child health, nutrition and overall public health progress.
राष्ट्रीय परिवार स्वास्थ्य सर्वेक्षण (NFHS) में EBF के रुझानों की बारीकी से निगरानी की जाती है क्योंकि वे बाल स्वास्थ्य, पोषण और समग्र सार्वजनिक स्वास्थ्य प्रगति के महत्वपूर्ण संकेतक हैं।
- Despite **90.6%** of deliveries in the country now being **institutional**, fewer infants are **exclusively breastfed during the first six months**.
देश में अब **90.6%** प्रसव संस्थागत होने के बावजूद पहले छह महीनों में कम शिशुओं को विशेष स्तनपान कराया जा रहा है।
- Although early initiation of breastfeeding has improved from **41.8%** to **50.1%**, **EBF** declined from **63.7%** in **NFHS-5** to **55.8%** over the same period, as per **NFHS-6 (2023-24)**.
हालाँकि स्तनपान की शीघ्र शुरुआत **41.8%** से बढ़कर **50.1%** हो गई है, लेकिन **NFHS-6 (2023-24)** के अनुसार **EBF** **NFHS-5** के **63.7%** से घटकर **55.8%** रह गया।
- NFHS-6** data show some of the sharpest declines in **exclusive breastfeeding** in some of the largest States.
NFHS-6 के आँकड़े बताते हैं कि कुछ बड़े राज्यों में विशेष स्तनपान की दर में सबसे तेज गिरावट दर्ज की गई है।
- In **Uttar Pradesh**, **EBF** fell from **59.7%** to **34.6%** while in **Haryana** it fell from **69.5%** to **41.2%**.
उत्तर प्रदेश में **EBF** **59.7%** से घटकर **34.6%** हो गया, जबकि हरियाणा में यह **69.5%** से घटकर **41.2%** रह गया।
- Delhi** witnessed a drop from **64.3%** to **54%** as well.
दिल्ली में भी यह दर **64.3%** से घटकर **54%** हो गई।
- Rajasthan** and **Madhya Pradesh** also recorded declines.
राजस्थान और मध्य प्रदेश में भी गिरावट दर्ज की गई।
- In contrast, **Kerala**, **Gujarat** and **West Bengal** registered improvements in **EBF** rates.
इसके विपरीत केरल, गुजरात और पश्चिम बंगाल में **EBF** की दरों में सुधार दर्ज किया गया।
- What is also worrying is that, as per the survey, the decline in **EBF** was steeper in **rural areas**.
चिंता की बात यह भी है कि सर्वेक्षण के अनुसार ग्रामीण क्षेत्रों में **EBF** की गिरावट अधिक तेज रही।

- Data show that **EBF** among infants below six months fell from **65.1% to 56.2%** in rural areas. आँकड़े बताते हैं कि ग्रामीण क्षेत्रों में छह महीने से कम आयु के शिशुओं में **EBF 65.1%** से घटकर **56.2%** रह गया।
- In urban areas, it fell from **59.6% to 54.5%**. शहरी क्षेत्रों में यह **59.6%** से घटकर **54.5%** हो गया।

A paradox

एक विरोधाभास

- Nearly **89%** of women now participate in key household decisions while a similar proportion operate their own bank accounts. अब लगभग **89%** महिलाएँ परिवार के प्रमुख निर्णयों में भाग लेती हैं, जबकि लगभग इतनी ही महिलाएँ अपने स्वयं के बैंक खाते संचालित करती हैं।
- Digital inclusion** has expanded rapidly, with **Internet** use among women rising from **33.3%** in **NFHS-5** to **64.3%** in **NFHS-6**. डिजिटल समावेशन तेजी से बढ़ा है, जिसमें महिलाओं के बीच इंटरनेट का उपयोग **NFHS-5** के **33.3%** से बढ़कर **NFHS-6** में **64.3%** हो गया है।
- Growing **economic pressures**, **informal employment**, lack of **maternity protection**, inadequate **workplace support** and limited **postnatal assistance** continue to constrain many mothers' ability to exclusively breastfeed their infants for the recommended first six months," said **Arun Gupta**, paediatrician and public health advocate recognised for his decades-long drive to promote breastfeeding. बढ़ते आर्थिक दबाव, असंगठित रोजगार, मातृत्व सुरक्षा की कमी, अपर्याप्त कार्यस्थल सहयोग और सीमित प्रसवोत्तर सहायता अब भी अनेक माताओं की अपने शिशुओं को अनुशंसित पहले छह महीनों तक विशेष स्तनपान कराने की क्षमता को सीमित करते हैं," यह बात **बाल रोग विशेषज्ञ** एवं जनस्वास्थ्य विशेषज्ञ **अरुण गुप्ता** ने कही, जिन्हें स्तनपान को बढ़ावा देने के लिए दशकों से किए जा रहे प्रयासों के लिए जाना जाता है।

Obstacles to EBF

EBF में बाधाएँ

- Health experts** attribute the decline, particularly in **rural India**, to increased **migration** and **seasonal labour**, early return to **agricultural** and **informal work**, changing **family structures**, erosion of traditional support networks, greater penetration of **packaged foods** and **formula products**, weak **postnatal counselling** and rising **caesarean deliveries**. स्वास्थ्य विशेषज्ञ विशेष रूप से ग्रामीण भारत में इस गिरावट का कारण बढ़ता प्रवास, मौसमी श्रम, कृषि एवं असंगठित कार्य में शीघ्र वापसी, बदलती पारिवारिक संरचनाएँ, पारंपरिक सहयोग तंत्र का कमजोर होना, पैकेज्ड खाद्य पदार्थों और फॉर्मूला उत्पादों की बढ़ती पहुँच, कमजोर प्रसवोत्तर परामर्श तथा बढ़ती सीज़ेरियन डिलीवरी को मानते हैं।
- The sharp rise in **C-section** rates, from **21.5% to 27.2%**, is also cited as a contributing factor. सी-सेक्शन की दर **21.5%** से बढ़कर **27.2%** होना भी एक प्रमुख योगदान देने वाला कारण माना गया है।
- Breastfeeding** advocates say surgical deliveries can make early initiation and continuation of breastfeeding challenging, especially in absence of adequate **postnatal lactation support**. स्तनपान के समर्थकों का कहना है कि शल्य प्रसव के कारण स्तनपान की शीघ्र शुरुआत और उसे जारी रखना कठिन हो सकता है, विशेषकर पर्याप्त प्रसवोत्तर स्तनपान सहायता के अभाव में।
- "Common medical reasons for not being able to exclusively breastfeed include delayed initiation of breastfeeding after delivery, especially following a **C-section**; perceived or actual **low milk supply**; lack of **breastfeeding counselling** and **family support**; maternal illness or complications; and difficulties faced by **premature** or **low birth weight infants**," said **Delhi Medical Association** member **Anil Bansal**.

“विशेष स्तनपान न करा पाने के सामान्य चिकित्सीय कारणों में प्रसव के बाद स्तनपान शुरू करने में देरी, विशेषकर सी-सेक्शन के बाद; वास्तविक या अनुमानित दूध की कमी; स्तनपान परामर्श और पारिवारिक सहयोग का अभाव; माँ की बीमारी या जटिलताएँ; तथा समय से पहले जन्मे या कम जन्म वजन वाले शिशुओं की कठिनाइयाँ शामिल हैं,” दिल्ली मेडिकल एसोसिएशन के सदस्य अनिल बंसल ने कहा।

- When **breastfeeding** is not possible, the **WHO** recommends **infant formula** as an alternative.
जब स्तनपान संभव नहीं होता, तो **WHO** शिशु फ़ॉर्मूला को एक वैकल्पिक विकल्प के रूप में सुझाता है।
- Some hospitals also provide **pasteurised donor human milk**, particularly for **preterm** and **unwell newborns**.
कुछ अस्पताल पाश्चुरीकृत दाता मानव दूध भी उपलब्ध कराते हैं, विशेष रूप से समय से पहले जन्मे और अस्वस्थ नवजात शिशुओं के लिए।
- However, **public health experts** stress that **formula** is intended as a substitute when **breastfeeding** cannot be sustained, not as a replacement for **breast milk**.
हालाँकि, जनस्वास्थ्य विशेषज्ञ इस बात पर जोर देते हैं कि फ़ॉर्मूला केवल तब विकल्प है जब स्तनपान जारी रखना संभव न हो, यह माँ के दूध का प्रतिस्थापन नहीं है।

Policy measures नीतिगत उपाय

- **India promotes breastfeeding** through programmes such as **Pradhan Mantri Matru Vandana Yojana** and **Integrated Child Development Services**.
भारत प्रधानमंत्री मातृ वंदना योजना तथा एकीकृत बाल विकास सेवाओं (ICDS) जैसे कार्यक्रमों के माध्यम से स्तनपान को बढ़ावा देता है।
- **Comprehensive Lactation Management Centres** and **Lactation Management Units** provide lactation support and donor human milk when the mother's milk is unavailable.
कॉम्प्रेहेंसिव लैक्टेशन मैनेजमेंट सेंटर तथा लैक्टेशन मैनेजमेंट यूनिट माँ का दूध उपलब्ध न होने पर स्तनपान सहायता और दाता मानव दूध उपलब्ध कराते हैं।
- **The Infant Milk Substitutes Act**, restricts the promotion of **infant formula** and protects **breastfeeding** from commercial marketing pressure.
इन्फैंट मिल्क सब्स्टीट्यूट्स अधिनियम शिशु फ़ॉर्मूला के प्रचार-प्रसार पर प्रतिबंध लगाता है तथा स्तनपान को व्यावसायिक विपणन के दबाव से सुरक्षित रखता है।
- However, **Dr. Gupta** said **aggressive marketing of infant formula** and substitutes could still undermine **breastfeeding** and should be strictly regulated.
हालाँकि, डॉ. गुप्ता ने कहा कि शिशु फ़ॉर्मूला और उसके विकल्पों का आक्रामक विपणन अब भी स्तनपान को प्रभावित कर सकता है और इस पर कड़ा नियमन होना चाहिए।
- **Women employed in the organised sector** are entitled to **26 weeks** of paid maternity leave under the **Maternity Benefit Act, 1961**, amended in **2017**.
संगठित क्षेत्र में कार्यरत महिलाओं को 2017 में संशोधित मातृत्व लाभ अधिनियम, 1961 के तहत 26 सप्ताह का सवैतनिक मातृत्व अवकाश प्राप्त है।
- Unfortunately, these protections are largely confined to the **organised sector**.
दुर्भाग्यवश, ये सुरक्षा प्रावधान मुख्यतः संगठित क्षेत्र तक ही सीमित हैं।
- According to **e-Shram portal**, a national database of **unorganised workers**, more than **16.69 crore women** were registered as workers in the **unorganised sector** as of **2025**.
ई-श्रम पोर्टल, जो असंगठित श्रमिकों का राष्ट्रीय डेटाबेस है, के अनुसार 2025 तक 16.69 करोड़ से अधिक महिलाएँ असंगठित क्षेत्र में श्रमिक के रूप में पंजीकृत थीं।
- **Health experts** say this disconnect raises a fundamental policy question.
स्वास्थ्य विशेषज्ञों का कहना है कि यह असंगति एक बुनियादी नीतिगत प्रश्न खड़ा करती है।



GS II: Governance

Bengal CM announces ₹313 cr. for tea workers' scheme

West Bengal Chief Minister Suvendu Adhikari on Sunday said the State Government had decided to implement the **Pradhan Mantri Cha Shramik Protsahan Yojana (PMCSKY)** and announced an allocation of ₹313.30 crore for the scheme. Finance Minister Swapan Dasgupta said the West Bengal government would implement the scheme in collaboration with the Government of India, and the focus would be on improving the living standards of tea garden workers and their families. The Central scheme, with a total outlay of ₹1,000 crore, aims to provide more than 10 lakh workers across 1,210 tea gardens in Assam and West Bengal access to better facilities.

06J7. Bengal CM announces ₹313 cr. for tea workers' scheme

बंगाल के मुख्यमंत्री ने चाय श्रमिकों की योजना के लिए ₹313 करोड़ की घोषणा की

• West Bengal Chief Minister Suvendu Adhikari on Sunday said the State Government had decided to implement the **Pradhan Mantri Cha Shramik Protsahan Yojana (PMCSKY)** and announced an allocation of ₹313.30 crore for the scheme.

पश्चिम बंगाल के मुख्यमंत्री सुवेंदु अधिकारी ने रविवार को कहा कि राज्य सरकार ने प्रधानमंत्री चाय श्रमिक प्रोत्साहन योजना (PMCSKY) को लागू करने का निर्णय लिया है और इस योजना के लिए ₹313.30 करोड़ के

आवंटन की घोषणा की है।

- Finance Minister Swapan Dasgupta said the West Bengal government would implement the scheme in collaboration with the Government of India.

वित्त मंत्री स्वपन दासगुप्ता ने कहा कि पश्चिम बंगाल सरकार इस योजना को भारत सरकार के सहयोग से लागू करेगी।

- And the focus would be on improving the living standards of tea garden workers and their families.

और इसका मुख्य उद्देश्य चाय बागान श्रमिकों और उनके परिवारों के जीवन स्तर में सुधार करना होगा।

- The Central scheme, with a total outlay of ₹1,000 crore, aims to provide more than 10 lakh workers across 1,210 tea gardens in Assam and West Bengal access to better facilities.

₹1,000 करोड़ के कुल व्यय वाली यह केंद्रीय योजना असम और पश्चिम बंगाल के 1,210 चाय बागानों में 10 लाख से अधिक श्रमिकों को बेहतर सुविधाएँ उपलब्ध कराने का लक्ष्य रखती है।

GS Paper II: International Relations		06 July 2026
TOPICS COVERED		
06J7	India to host BRICS anti-drugs meet today भारत आज ब्रिक्स मादक पदार्थ विरोधी बैठक की मेजबानी करेगा	
06J7	Two together एक साथ आगे बढ़ते हुए	

India to host BRICS anti-drugs meet today

GS II: IR
The Hindu Bureau
NEW DELHI

India will host the two-day BRICS Heads of Anti-Drug Agencies meeting in Guwahati from Monday.

Organised by the Narcotics Control Bureau, the meeting will focus on issues such as combating synthetic drugs, strengthening intelligence sharing and operational coordination, and capacity building and institutional cooperation.

"India envisions this meeting as a pivotal step in transforming BRICS cooperation from dialogue-centric engagement to structured and action-oriented collaboration, with a focus on strengthening operational coordination, intelligence sharing, capacity building, and collective responses to emerging drug-related threats," the Union Home Ministry said in a statement.

"As chair, New Delhi will seek to strengthen cooperation through information sharing on clandestine laboratories and emerging synthetic drug trends, enhanced monitoring of precursor chemicals and pharmaceuticals, intelligence exchange, sharing of best practices, joint training programmes and expert exchanges," it said.

06J7. India to host BRICS anti-drugs meet today

भारत आज ब्रिक्स मादक पदार्थ विरोधी बैठक की मेजबानी करेगा

• India will host the two-day **BRICS Heads of Anti-Drug Agencies meeting** in **Guwahati** from Monday.

भारत सोमवार से गुवाहाटी में दो दिवसीय ब्रिक्स मादक पदार्थ विरोधी एजेंसियों के प्रमुखों की बैठक की मेजबानी करेगा।

• Organised by the **Narcotics Control Bureau**, the meeting will focus on issues such as combating **synthetic drugs**, strengthening **intelligence sharing and operational coordination**, and **capacity building and institutional cooperation**.

नारकोटिक्स कंट्रोल ब्यूरो द्वारा आयोजित यह बैठक सिंथेटिक मादक पदार्थों से निपटने, खुफिया जानकारी साझा करने और परिचालन समन्वय को मजबूत करने तथा क्षमता निर्माण और संस्थागत सहयोग जैसे मुद्दों पर केंद्रित होगी।

• "India envisions this meeting as a pivotal step in transforming **BRICS cooperation** from dialogue-centric engagement to structured and **action-oriented collaboration**, with a focus on strengthening operational coordination, intelligence sharing, capacity building, and collective responses to emerging **drug-related threats**," the **Union Home Ministry** said in a statement.

केंद्रीय गृह मंत्रालय ने एक बयान में कहा, "भारत इस बैठक को **ब्रिक्स सहयोग** को संवाद-केंद्रित भागीदारी से संरचित और **कार्य-उन्मुख सहयोग** में बदलने की दिशा में एक महत्वपूर्ण कदम के रूप में देखता है, जिसमें परिचालन समन्वय, खुफिया जानकारी साझा करने, क्षमता निर्माण और उभरते हुए **मादक पदार्थ संबंधी खतरों** के विरुद्ध सामूहिक प्रतिक्रिया को मजबूत करने पर ध्यान केंद्रित किया जाएगा।"

06J7. Two together

एक साथ आगे बढ़ते हुए

- Ms. Takaichi signed at least **16 agreements and documents**, including a joint statement on **energy resilience** to support bilateral cooperation along the 'maritime energy transport value chain'.

सुश्री ताकाइची ने कम से कम **16 समझौतों और दस्तावेजों** पर हस्ताक्षर किए, जिनमें 'समुद्री ऊर्जा परिवहन मूल्य श्रृंखला' के साथ द्विपक्षीय सहयोग को समर्थन देने के लिए **ऊर्जा लचीलापन** पर एक संयुक्त वक्तव्य भी शामिल था।

- This concern was also linked with the problems both sides faced regarding the **safety of energy-carrying ships and**

Two together

India and Japan did well to ring-fence their ties from multilateral accords

Japanese Prime Minister Sanae Takaichi's first official visit to India turned out to be an occasion to signal enhanced bilateral coordination in the face of global uncertainties. Rapid changes in geopolitics and technological advances are forcing all countries into fresh thinking, most consequentially with regard to China. The U.S. appears less enthusiastic about the Quad grouping (with India, Japan and Australia) and is unsure of the nomenclature "Indo-Pacific" in its strategy. Against this backdrop, India and Japan declared a joint intent to continue with an 'updated' Free and Open Indo-Pacific (FOIP) posture, ring-fencing bilateral ties from multilateral arrangements. Ms. Takaichi signed at least 16 agreements and documents, including a joint statement on energy resilience to support bilateral cooperation along the 'maritime energy transport value chain'. The commitments to energy cooperation were supported by the awareness that to play lead roles in the FOIP, the two sides should cooperate in the energy domain from South Asia to the Indo-Pacific. This concern was also linked with the problems both sides faced regarding the safety of energy-carrying ships and sailors during the U.S.-Israel war against Iran. The two major Asian economies have a shared interest in ensuring that the nearest energy sources in the Gulf remain accessible. They have agreed to build naval platforms to enhance maritime domain awareness and surveillance.

A joint statement issued during the visit mentioned "serious concerns" about the prevailing situation in the South China Sea and East China Seas, and Japanese officials spoke to the media frankly about the need to address the Taiwan issue peacefully. Though a planned visit to Guwahati was dropped, Ms. Takaichi underscored Japan's attention to the northeastern regions of India by connecting them with "relevant partners and regional organisations" of the Bay of Bengal region. BIMSTEC was mentioned as a partner organisation for Japan. Japan has major investments in Bangladesh and Thailand, and connecting these projects, including the Matarbari port in Cox's Bazar, through an 'industrial value chain' with India's northeast can boost regional prosperity and security. Ms. Takaichi has painted a vast canvas of cooperation stretching from India's neighbourhood to the Pacific Ocean to protect the India-Japan relationship from the uncertainties of the current world order, but both sides have to manage multiple other relations effectively to ensure optimal outcomes. They have to manage their relations with China and the U.S. in such a manner that their strategic interests are protected and conflicts avoided. It can be a path of mutual learning and cooperation for India and Japan as they seek to navigate the global turbulence.



sailors during the U.S.-Israel war against Iran.

यह चिंता ईरान के विरुद्ध अमेरिका-इजरायल युद्ध के दौरान ऊर्जा ले जाने वाले जहाजों और नाविकों की सुरक्षा से जुड़ी दोनों पक्षों की समस्याओं से भी संबंधित थी।

- They have agreed to build **naval platforms** to enhance **maritime domain awareness and surveillance**.

उन्होंने समुद्री क्षेत्र की जागरूकता और निगरानी बढ़ाने के लिए नौसैनिक प्लेटफॉर्म विकसित करने पर सहमति व्यक्त की।

- **BIMSTEC** was mentioned as a partner organisation for Japan.

बिम्स्टेक (BIMSTEC) को जापान के लिए एक साझेदार संगठन के रूप में उल्लेखित किया गया।

- Japan has major investments in **Bangladesh and Thailand**, and connecting these projects, including the **Matarbari port in Cox's Bazar**, through an 'industrial value chain' with India's northeast can boost **regional prosperity and security**.

जापान का बांग्लादेश और थाईलैंड में बड़ा निवेश है और इन परियोजनाओं को, जिनमें **कॉक्स बाजार का मातरबारी बंदरगाह** शामिल है, भारत के पूर्वोत्तर के साथ 'औद्योगिक मूल्य श्रृंखला' के माध्यम से जोड़ना क्षेत्रीय समृद्धि और सुरक्षा को बढ़ावा दे सकता है।

GS Paper III: Economy		06 July 2026
TOPICS COVERED		
06J7	Old wine, new bottle पुरानी व्यवस्था, नया स्वरूप	
06J7	The real crisis in India's fisheries भारत के मत्स्य क्षेत्र का वास्तविक संकट	
06J7	Open-ended mutual fund ओपन-एंडेड म्यूचुअल फंड	
06J7	What new NPS withdrawal rules mean for retirement सेवानिवृत्ति के लिए NPS निकासी के नए नियमों का क्या अर्थ है	
06J7	Gold, silver hammered सोना, चाँदी में भारी गिरावट	
06J7	Explained: can the ED attach a firm's assets after it enters insolvency? व्याख्या: क्या किसी कंपनी के दिवालियापन प्रक्रिया में प्रवेश करने के बाद भी ED उसकी संपत्तियाँ कुर्क कर सकता है?	
06J7	If reachable, you're breachable: Zscaler chief यदि आप पहुँच योग्य हैं, तो आपके साथ संधि लगाई जा सकती है: ज़ीस्केलर प्रमुख	



GS III: Economy

Old wine, new bottle

EPFO's recent changes signal continuity, not radical reform

The Union Labour and Employment Ministry's notification of fresh rules for the Employees' Provident Fund (EPF), Employees' Pension Scheme (EPS), and Employees' Deposit Linked Insurance (EDLI) is a procedural formality following the enforcement of the Code on Social Security, 2020, since November last year. Four months ago, the Central Board of Trustees (CBT) of the Employees' Provident Fund Organisation (EPFO) approved the implementation of social security measures framed as a sequel to the Code that subsumes nine laws, including the Employees' State Insurance Act, 1948, and the Employees' Provident Funds and Miscellaneous Provisions Act, 1952. With around eight crore subscribers, changes to the PF legal framework have wide implications for members and their families. Viewed from this angle, the notification signalled continuity and sought to make the framework align with the Code. Even the feature of PF contributions being made voluntary in excess of the statutory wage ceiling of ₹15,000 is not new. The practice of allowing contributions up to 12% of the basic pay, regardless of the wage ceiling, was the norm till the COVID-19 pandemic hit. It was only then that many establishments, while experiencing the shortage of funds, had begun limiting their contributions to the wage ceiling. However, pensioners and members had hoped that the notification would revise the minimum monthly pension of ₹1,000 and the monthly wage ceiling for contribution to the PF beyond ₹15,000, both of which were determined 12 years ago. But they have been left disappointed. According to the EPFO's 2024-25 annual report, about 36.8 lakh of its 81.5 lakh pensioners receive a monthly pension of ₹1,000 or less.

Yet, the government has taken no decision on either issue despite repeated demands from pensioners and other stakeholders. Even if financial implications are a concern, the government's grant-in-aid for the minimum pension, benefiting about 20.6 lakh pensioners, is only around ₹1,000 crore annually. Of the government's outlay of ₹11,000-odd crore towards the EPS for the current year, most of its provision goes for the component of its contribution at 1.16% of the monthly pay (limited to the wage ceiling of ₹15,000) of EPS members. The government should restore the applicability of the EPS to all workers, regardless of pay. If the government feels that the EPFO is getting overburdened with its work, it can formulate a tailored scheme with the Pension Fund Regulatory and Development Authority. Efforts to expedite and simplify claim settlements should continue. The government must remember that substantive EPFO decisions affect crores of employees.

06J7. Old wine, new bottle

पुरानी व्यवस्था, नया स्वरूप

• EPFO's recent changes signal continuity, not radical reform

ईपीएफओ के हालिया बदलाव निरंतरता का संकेत देते हैं, न कि मौलिक सुधार का

• The Union Labour and Employment Ministry's notification of fresh rules for the Employees' Provident Fund (EPF), Employees' Pension Scheme (EPS), and Employees' Deposit Linked Insurance (EDLI) is a procedural formality following the enforcement of the Code on Social Security, 2020, since November last year.

केंद्रीय श्रम और रोजगार मंत्रालय द्वारा कर्मचारी भविष्य निधि (EPF), कर्मचारी पेंशन योजना (EPS) और कर्मचारी जमा संबद्ध बीमा (EDLI) के लिए नए नियमों की अधिसूचना, पिछले वर्ष नवंबर से लागू सामाजिक सुरक्षा संहिता, 2020 के बाद एक प्रक्रियात्मक औपचारिकता है।

• Four months ago, the Central Board of Trustees (CBT) of the Employees' Provident Fund Organisation (EPFO) approved the implementation of social security measures framed as a sequel to the Code that subsumes nine laws, including the Employees' State Insurance Act, 1948, and the Employees' Provident Funds and Miscellaneous Provisions Act, 1952.

चार महीने पहले, कर्मचारी भविष्य निधि संगठन (EPFO) के केंद्रीय न्यासी बोर्ड (CBT) ने सामाजिक सुरक्षा उपायों के कार्यान्वयन को मंजूरी दी थी, जिन्हें उस संहिता के अनुरूप तैयार किया गया था, जिसमें कर्मचारी राज्य बीमा अधिनियम, 1948 और कर्मचारी भविष्य निधि एवं विविध प्रावधान अधिनियम, 1952 सहित नौ कानूनों को सम्मिलित किया गया है।

• Even the feature of PF contributions being made voluntary in excess of the statutory wage ceiling of ₹15,000 is not new.

यहाँ तक कि ₹15,000 की वैधानिक वेतन सीमा से अधिक पीएफ योगदान को स्वैच्छिक बनाए जाने की व्यवस्था भी नई नहीं है।

• The practice of allowing contributions up to 12% of the basic pay, regardless of the wage ceiling, was the norm till the COVID-19 pandemic hit.

वेतन सीमा की परवाह किए बिना मूल वेतन के 12% तक योगदान की अनुमति देने की व्यवस्था कोविड-19 महामारी आने तक सामान्य प्रथा थी।

- According to the EPFO's 2024-25 annual report, about 36.8 lakh of its 81.5 lakh pensioners receive a monthly pension of ₹1,000 or less.

ईपीएफओ की 2024-25 वार्षिक रिपोर्ट के अनुसार, इसके 81.5 लाख पेंशनभोगियों में से लगभग 36.8 लाख को ₹1,000 या उससे कम मासिक पेंशन प्राप्त होती है।

- Of the government's outlay of ₹11,000-odd crore towards the EPS for the current year, most of its provision goes for the component of its contribution at 1.16% of the monthly pay (limited to the wage ceiling of ₹15,000) of EPS members.

वर्तमान वर्ष के लिए EPS हेतु सरकार के लगभग ₹11,000 करोड़ के आवंटन में से अधिकांश प्रावधान EPS सदस्यों के मासिक वेतन के 1.16% योगदान (जो ₹15,000 की वेतन सीमा तक सीमित है) के लिए जाता है।

The real crisis in India's fisheries

Official claims that most of India's marine fish stocks are sustainable should not distract from the continuing degradation of the country's inshore fishing grounds: stronger governance of coastal waters and better management of mechanised trawling are essential for truly sustainable fisheries

ISSUE: 11th Economy
FULL CONTEXT

Maarten Bavinck

India has a very large and old marine fishing population. Every day, both small-scale and mechanised trawl fishers go out to earn a living and provide the nation with food.

The Government of India recently released its latest prognosis of the country's ocean fisheries (February 11, 2026). Its press release emphasised that Indian marine fisheries are largely sustainable, suggesting the country has avoided the bane of international fishing, namely overfishing.

Official claims

Drawing on figures compiled by the Central Marine Fisheries Research Institute (CMFRI), the government said that most commercial fish stocks "are in good health". Furthermore, it stated that "91.1% of the 135 fish stocks evaluated in different regions during 2022 were found sustainable." If this assessment is accurate, it would be good news. However, there are good reasons to doubt whether it is indeed correct.

For one, the Food and Agriculture Organization (FAO) is far more reserved in its assessment of the condition of Indian marine fisheries than the Indian government seems to be. India's country profile argues that "India's marine fisheries production reached a plateau as most major stocks are fully exploited. [...] Unregulated access to these fisheries resulted in significant overcapacity, especially of medium and small trawlers that compete over dwindling fishery resources with mostly impoverished small-scale fishers." This message is not half as buoyant as the one published by the Indian government.

I will not dispute CMFRI's conclusions or its methodology for calculating 'sustainability'. After all, most of its procedures are veiled in secrecy. What is known, however, is that compared with many other fishing nations, CMFRI continues to rely primarily on landing data rather than stock assessments.

In other words, it calculates the availability of fish stocks in India's Exclusive Economic Zone (EEZ) — which includes up to 200 nautical miles (371 km) of sea area around the country — based on what fishermen catch. Even a layperson can understand that finding a certain number of shells on the beach does not necessarily predict the quantity of shells in the sea.

Other nations, therefore, make use of stock assessments at sea itself, thereby calculating how much aquatic life is available in certain waters. This is obviously the more reliable method to determine the health of fish stocks.

The Government of India cannot be blamed for not yet adopting this more costly form of stock assessment. But it does raise suspicions that the race to catch up with China, which is also infecting the fisheries sector, may also be inducing a hidden bias in the figures.

The decline of inshore ecosystems

Among the fishers I have spoken to over thirty years along the Tamil Nadu coast, the consensus is that catches have consistently gone down and that many species that were formerly available have disappeared. The government, however, seems to continue on the path of amplifying fish production figures from one year to the next.



GETTY IMAGES

Overfishing, however, is not the central issue here. The more pressing concern is the decline, if not the destruction, of the inshore benthic environment. Over the past year, numerous fisheries scientists and policymakers have described the inshore fishing environment as "destroyed". What exactly do they mean?

India is surrounded by a relatively narrow continental shelf, where fishing is always the most productive. This continental shelf is broadest in Gujarat and a part of Maharashtra, but remains quite narrow along the rest of the sub-continent.

Generally speaking, one can assume that the territorial seas — a legal category referring to waters that lie within 12 nautical miles (or 22 km) from shore — largely overlap with the continental shelf. These waters provide favourable ecological conditions for commercially valuable species such as shrimp to feed, breed and grow.

But why do senior experts conclude this is no longer the case?

This is a complex question with many answers. Thus, one can point to the construction of dams in major rivers, which disallow land-based nutrients from entering the sea. One can also point to the ongoing destruction of mangroves, where fish breed, and to pollution that is entering the sea from various industrial, agricultural, and urbanising sources. Many scientists, and fishers too, point to such changes to explain the decline of fisheries. These factors obviously affect the inshore fishing zone more than they do distant waters.

Mechanised trawling and its cost

One of the many factors contributing to this decline is the dramatic and largely uncontrolled expansion of mechanised trawling.

It is good to remind ourselves first of all that semi-industrial trawling is not an Indian fishing method. It was introduced from abroad around 1960 and has since

expanded to gigantic proportions.

According to the same government press release, India now has 64,414 mechanised fishing vessels. These numbers are growing day by day as there are practically no restrictions on new entries. Moreover, existing vessels are continuously being extended and fitted with more powerful Chinese engines, enabling them to catch even more fish.

This oversized fleet of mechanised trawlers ploughs the inshore seabed in a continuous fashion. In heavily trawled areas, this results in a decline of all animal and plant life. It has also resulted in major conflicts with the numerous population of small-scale fishers who see their livelihoods imperilled. The problem is that regulations to protect the inshore fishing zone are almost non-existent. Yes, mechanised boat fishing is closed for two months every year, so as to allow for the rejuvenation of fish stocks. But the main tool to prevent unwanted trawling — the prohibition for mechanised boat fishers to operate within a geographic zone of 5 NM — lacks forcefulness.

There are two main reasons for this. First, coastal States lack sufficient staff or craft to patrol the inshore waters. Second, governments have precluded fishers from playing a helpful role in management. The result is that the ecology of the inshore fishing zone is continuously being degraded, and all fishers — small-scale and mechanised — are being pushed out to the offshore and the deep-sea fishing zones.

Rethinking fisheries policy

The Indian government is optimistic about the potential of deep-sea fishing and is encouraging fishers to make a shift. But the question is whether that potential, which is also being tapped by other fishing nations, is as bountiful as expected. The FAO estimates that "at best, only a marginal increase can be realised through exploitation of deep-sea resources."

More fundamentally, India's current fisheries policy is wasting the enormous potential of inshore waters. For one thing, it imposes extra expenses for fuel and technology on fishers so that they can actually travel to more distant waters. At the same time, it is closing its eyes to the dire need for proper management of inshore waters. Aside from addressing the problems of marine pollution, it also means curbing, if not reducing, mechanised boat fishing. This is more than a technical issue. Mechanised boat fishers, by way of their numbers and their political influence, now often stand in the way of proper management. This is witnessed, for example, in the case of the Palk Bay, which is located between India and Sri Lanka. There, the Indian fleet of mechanised boat fishers now pirates Sri Lankan waters to the detriment of small-scale fishers on the other side of the international border. Ownership of the island Katchatheevu does not make any difference in this respect.

The way forward

While the government's assessment paints an encouraging picture of Indian fish stocks, a more fundamental concern remains. The larger issue is that fishers, scientists and policymakers continue to decry the degradation of the inshore fishing grounds. A viable and truly sustainable fishery can only be realised if governance of the so productive inshore waters improves. For this, the government must adjust its perspective. This is in line with FAO's view that: "Strenuous efforts are needed at federal and state levels to upgrade the country's capacity to manage its marine fisheries." In this context, CMFRI might also want to devote effort to studying what the condition of the benthic environment is actually like. This would provide a basis for deliberating on the best way forward. (Maarten Bavinck is emeritus professor of coastal resource governance, University of Amsterdam)

THE GIST

Food and Agriculture Organization presents a more cautious assessment of India's marine fisheries than official claims, warning that many major fish stocks are already fully exploited.

India's fish stock estimates rely largely on landing data rather than direct stock assessments, raising questions about how sustainability is measured.

Expanding mechanised trawling and weak enforcement of coastal fishing regulations are placing increasing pressure on inshore ecosystems and small-scale fishers.

06J7. The real crisis in India's fisheries

भारत के मत्स्य क्षेत्र का वास्तविक संकट

- In other words, it calculates the availability of fish stocks in India's **Exclusive Economic Zone (EEZ)** — which includes up to **200 nautical miles (371 km)** of sea area around the country — based on what fishermen catch.

दूसरे शब्दों में, यह भारत के विशेष आर्थिक क्षेत्र (EEZ) — जिसमें देश के चारों ओर 200 समुद्री मील (371 किमी) तक का समुद्री क्षेत्र शामिल है — में मत्स्य भंडार की उपलब्धता की गणना मछुआरों द्वारा पकड़ी गई मछलियों के आधार पर करता है।

- The more pressing concern is the decline, if not the destruction, of the **inshore benthic environment**.

अधिक गंभीर चिंता तटीय समुद्री तल पारिस्थितिकी तंत्र का पतन, यदि विनाश नहीं, है।

- Generally speaking, one can assume that the **territorial seas** — a legal category referring to waters that lie within **12 nautical miles (or 22 km) from shore** — largely overlap with the



continental shelf.

सामान्य रूप से माना जा सकता है कि प्रादेशिक समुद्र — जो तट से 12 समुद्री मील (या 22 किमी) तक स्थित जल क्षेत्र की कानूनी श्रेणी है — मुख्य रूप से महाद्वीपीय शेल्फ के साथ मेल खाते हैं।

- **Ownership of the island Katchatheevu** does not make any difference in this respect.

GS III: Economy

Vaishali R. Venkat

I wish to invest in mutual funds through SIP. However, I am confused by the various schemes and plans available, such as direct versus regular plans, open- and closed-end funds, and IDCW options. Could you provide a comprehensive overview of the different schemes and plans and the available payout options?

PAUL

An open-ended mutual fund is like a metro smart card. You can enter anytime, exit anytime and reload whenever you want. There's no fixed "start or end date," and you transact (buy/sell units) at the current NAV. Most SIP investors prefer open-ended funds for flexibility and ease of access.

Remember that you need to pay an exit load, which is a small fee charged if you withdraw your money before the stipulated time (one year in most cases). Think of it like a "penalty for early exit" meant to discourage short-term trading. Once the exit load period is over, you can exit freely with no charge.

ELSS fund

Equity Linked Savings Schemes (ELSS), also open-ended in structure, come with a mandatory three-year lock-in period for claiming tax benefits. During this period, you cannot redeem or exit from your investment.

After three years, it behaves like a normal open-ended equity fund with full liquidity.

Closed-ended fund

On the other hand, a closed-ended mutual fund works similar to an IPO for stocks. It is launched through a New Fund Offer (NFO), which is usually announced via advertisements or other avenues for a limited period only. You can invest only during this offer period, just like applying for an IPO.

Subsequently, the fund is closed for new investments from the AMC side. Note, most apps or direct AMC websites offer open-ended SIPs mostly.

Direct vs. regular plans

Now, let's understand the difference between "direct vs regular" plans. Imagine buying the same product in two different ways: directly from the manufacturer or through a local shop-keeper. The product is exactly the same in both cases, but the price structure differs. Similarly, in mutual funds, a direct plan means you invest directly with the Asset Management Company (AMC), while a regular plan involves investing through an Association of Mutual Funds in India-registered (AMFI) mutual fund distributors. These brokers must have an ARN number to legally sell mutual funds.

In regular plans, the intermediary earns a commission that is built into the fund's expense ratio, which is usually higher than direct plans.

This slightly reduces your overall returns compared with direct plans, wherein there is no middle layer and therefore lower costs. As a result, a larger portion of your money remains invested and continues to grow. Therefore, most self-managed SIP investors choose direct plans, which are generally better for retail investors due to its lower expense ratio.

IDCW option

IDCW stands for Income Distribution cum Capital Withdrawal. In April 2021, SEBI renamed the 'Dividend Option' in mutual funds to IDCW to better describe how the payouts work. If you previously invested in a mutual fund under the Dividend Plan, you will now see IDCW in your account statements instead.

IDCW payments may be made from the income earned by the mutual fund, such as dividends received from stocks or capital gains from selling investments. That is, the payouts can come from the fund's profits or by returning a part of your invested capital, thereby reducing the fund's Net Asset Value (NAV).

Put simply, IDCW is not extra income or a bonus, but a portion of your investment being returned to you. Investors seeking long-term wealth creation should generally choose the Growth option. Those who need regular payouts from their investments may consider the IDCW option.

(The writer is an NISM & CRISIL-certified Wealth Manager and certified in NISM's Research Analyst module)

इस संदर्भ में कच्चातिवु द्वीप का स्वामित्व कोई अंतर उत्पन्न नहीं करता है।

06J7. Open-ended mutual fund

ओपन-एंडेड म्यूचुअल फंड

- An open-ended mutual fund is like a metro smart card.

- एक ओपन-एंडेड म्यूचुअल फंड मेट्रो स्मार्ट कार्ड की तरह होता है।

- You can enter anytime, exit anytime and reload whenever you want.

- आप इसमें कभी भी निवेश कर सकते हैं, कभी भी बाहर निकल सकते हैं और जब चाहें फिर से निवेश कर सकते हैं।

- There's no fixed "start or end date," and you transact (buy/sell units) at the current NAV.

- इसमें कोई निश्चित

शुरुआती या समाप्ति तिथि नहीं होती, और आप मौजूदा NAV पर यूनिट खरीदते या बेचते हैं।

- Most SIP investors prefer open-ended funds for flexibility and ease of access.

- अधिकांश SIP निवेशक

लचीलापन और आसान पहुँच के कारण ओपन-एंडेड फंड को पसंद करते हैं।

- Remember that you need to pay an exit load, which is a small fee charged if you withdraw your money before the stipulated time (one year in most cases).

- ध्यान रखें कि यदि आप निर्धारित समय (अधिकांश मामलों में एक वर्ष) से पहले अपना पैसा

निकालते हैं, तो आपको **एग्जिट लोड** देना पड़ता है, जो एक छोटा शुल्क होता है।

- Think of it like a “**penalty for early exit**” meant to discourage **short-term trading**.
- इसे **समय से पहले निकासी पर जुर्माना** समझें, जिसका उद्देश्य **अल्पकालिक ट्रेडिंग** को हतोत्साहित करना है।
- Once the **exit load period** is over, you can exit freely with no charge.
- **एग्जिट लोड अवधि** समाप्त होने के बाद आप बिना किसी शुल्क के निवेश से बाहर निकल सकते हैं।

ELSS fund

ईएलएसएस फंड

- **Equity Linked Savings Schemes (ELSS)**, also open-ended in structure, come with a mandatory **three-year lock-in period** for claiming **tax benefits**.
- **इक्विटी लिंक्ड सेविंग्स स्कीम (ELSS)**, जो संरचना में भी ओपन-एंडेड होती है, **कर लाभ** प्राप्त करने के लिए अनिवार्य **तीन वर्ष की लॉक-इन अवधि** के साथ आती है।
- During this period, you cannot **redeem** or **exit** from your investment.
- इस अवधि के दौरान आप अपने निवेश को **रिडीम** या **निकाल** नहीं सकते।
- After **three years**, it behaves like a normal **open-ended equity fund** with full **liquidity**.
- **तीन वर्ष** बाद यह पूर्ण तरलता वाले सामान्य **ओपन-एंडेड इक्विटी फंड** की तरह कार्य करता है।
- **Closed-ended fund**
क्लोज्ड-एंडेड फंड
- On the other hand, a **closed-ended mutual fund** works similar to an **IPO** for stocks.
- दूसरी ओर, **क्लोज्ड-एंडेड म्यूचुअल फंड** शेयरों के **IPO** की तरह कार्य करता है।
- It is launched through a **New Fund Offer (NFO)**, which is usually announced via advertisements or other avenues for a limited period only.
- इसे **न्यू फंड ऑफर (NFO)** के माध्यम से लॉन्च किया जाता है, जिसकी घोषणा सामान्यतः सीमित अवधि के लिए विज्ञापनों या अन्य माध्यमों से की जाती है।
- You can invest only during this offer period, just like applying for an **IPO**.
- आप केवल इस ऑफर अवधि के दौरान ही निवेश कर सकते हैं, ठीक वैसे ही जैसे **IPO** में आवेदन करते हैं।
- Subsequently, the fund is closed for new investments from the **AMC** side.
- इसके बाद **AMC** की ओर से यह फंड नए निवेश के लिए बंद कर दिया जाता है।
- Note, most apps or direct **AMC** websites offer **open-ended SIPs** mostly.
- ध्यान दें कि अधिकांश ऐप या **AMC** की वेबसाइटें मुख्यतः **ओपन-एंडेड SIPs** ही उपलब्ध कराती हैं।

Direct vs. regular plans

डायरेक्ट बनाम रेगुलर प्लान

- Now, let's understand the difference between “**direct vs regular**” plans.
- अब **डायरेक्ट** और **रेगुलर प्लान** के बीच का अंतर समझते हैं।
- Imagine buying the same product in two different ways: directly from the **manufacturer** or through a local **shopkeeper**.
- कल्पना कीजिए कि आप एक ही उत्पाद को दो अलग-अलग तरीकों से खरीद रहे हैं—सीधे **निर्माता** से या किसी स्थानीय **दुकानदार** के माध्यम से।
- The product is exactly the same in both cases, but the **price structure** differs.
- दोनों ही मामलों में उत्पाद बिल्कुल समान होता है, लेकिन **मूल्य संरचना** अलग होती है।
- Similarly, in **mutual funds**, a **direct plan** means you invest directly with the **Asset Management Company (AMC)**, while a **regular plan** involves investing through an **Association of Mutual Funds in India-registered (AMFI)** mutual fund distributors.

- इसी प्रकार **म्यूचुअल फंड में डायरेक्ट प्लान** का अर्थ है कि आप सीधे **एसेट मैनेजमेंट कंपनी (AMC)** में निवेश करते हैं, जबकि **रेगुलर प्लान** में आप **एसोसिएशन ऑफ म्यूचुअल फंड्स इन इंडिया (AMFI)** से पंजीकृत वितरकों के माध्यम से निवेश करते हैं।
- These brokers must have an **ARN number** to legally sell mutual funds.
- इन ब्रोकरों के पास कानूनी रूप से म्यूचुअल फंड बेचने के लिए **ARN नंबर** होना आवश्यक है।
- In **regular plans**, the intermediary earns a **commission** that is built into the fund's **expense ratio**, which is usually higher than direct plans.
- रेगुलर प्लान** में मध्यस्थ **कमीशन** प्राप्त करता है, जो फंड के **एक्सपेंस रेशियो** में शामिल होता है और यह सामान्यतः डायरेक्ट प्लान की तुलना में अधिक होता है।
- This slightly reduces your overall returns compared with **direct plans**, wherein there is no middle layer and therefore lower costs.
- इससे **डायरेक्ट प्लान** की तुलना में आपका कुल रिटर्न थोड़ा कम हो जाता है, क्योंकि डायरेक्ट प्लान में कोई मध्यस्थ नहीं होता और लागत कम रहती है।
- As a result, a larger portion of your money remains invested and continues to grow.
- परिणामस्वरूप, आपके धन का बड़ा हिस्सा निवेशित रहता है और लगातार बढ़ता रहता है।
- Therefore, most **self-managed SIP investors** choose **direct plans**, which are generally better for **retail investors** due to its lower **expense ratio**.
- इसलिए अधिकांश **स्वयं निवेश प्रबंधित करने वाले SIP निवेशक डायरेक्ट प्लान** चुनते हैं, जो कम **एक्सपेंस रेशियो** के कारण सामान्यतः **खुदरा निवेशकों** के लिए बेहतर होते हैं।

IDCW option

आईडीसीडब्ल्यू विकल्प

- IDCW** stands for **Income Distribution cum Capital Withdrawal**.
- IDCW** का पूर्ण रूप **Income Distribution cum Capital Withdrawal** है।
- In **April 2021**, **SEBI** renamed the '**Dividend Option**' in mutual funds to **IDCW** to better describe how the payouts work.
- अप्रैल 2021** में **SEBI** ने म्यूचुअल फंड के **Dividend Option** का नाम बदलकर **IDCW** कर दिया ताकि भुगतान की प्रकृति को बेहतर ढंग से समझाया जा सके।
- If you previously invested in a mutual fund under the **Dividend Plan**, you will now see **IDCW** in your account statements instead.
- यदि आपने पहले **Dividend Plan** के अंतर्गत निवेश किया था, तो अब आपके खाते के विवरण में उसकी जगह **IDCW** दिखाई देगा।
- IDCW payments** may be made from the income earned by the mutual fund, such as **dividends** received from stocks or **capital gains** from selling investments.
- IDCW भुगतान** म्यूचुअल फंड द्वारा अर्जित आय, जैसे शेयरों से प्राप्त **डिविडेंड** या निवेश बेचने से प्राप्त **पूंजीगत लाभ**, से किया जा सकता है।
- That is, the payouts can come from the fund's **profits** or by returning a part of your invested **capital**, thereby reducing the fund's **Net Asset Value (NAV)**.
- अर्थात् भुगतान फंड के **लाभ** से या आपकी निवेशित **पूंजी** का एक हिस्सा लौटाकर किया जा सकता है, जिससे फंड का **नेट एसेट वैल्यू (NAV)** कम हो जाता है।
- Put simply, **IDCW** is not extra income or a bonus, but a portion of your investment being returned to you.
- सरल शब्दों में, **IDCW** कोई अतिरिक्त आय या बोनस नहीं है, बल्कि आपके निवेश का ही एक हिस्सा आपको वापस किया जाता है।
- Investors seeking **long-term wealth creation** should generally choose the **Growth option**.
- जो निवेशक **दीर्घकालिक धन-सृजन** चाहते हैं, उन्हें सामान्यतः **Growth Option** चुनना चाहिए।
- Those who need **regular payouts** from their investments may consider the **IDCW option**.



- जिन निवेशकों को अपने निवेश से नियमित भुगतान की आवश्यकता होती है, वे IDCW विकल्प पर विचार कर सकते हैं।

What new NPS withdrawal rules mean for retirement

With new norms, the National Pension Scheme finally treats retirement money the way most actually need it treated – accessible sans being reckless and flexible sans being chaotic

GS III: Economy

NEW TEMPLATE

Joydeep Sen

For years, the one persistent complaint about the National Pension Scheme (NPS) was its rigidity at exit. You built a retirement corpus over 20-30 years and at 60, the rule-book decided you couldn't simply walk away with it. A large chunk had to go into an annuity. That has now changed. Let us understand what's on the table.

What changed

In December 2025, PFRDA substantially amended NPS exit/withdrawal norms. The mandatory annuity portion has come down from 40% to 20% of corpus viz subscribers can withdraw up to 80% as lump sum against 60% earlier. For smaller corpus, the rules are more generous. If accumulated NPS wealth is up to ₹8 lakh, you can withdraw the entire amount as lump sum. For ₹8-12 lakh, you can take out up to ₹6 lakh with the balance routed into structured withdrawal or annuity. Above ₹12 lakh, the 80:20 split applies.

However, there's a tax issue here. Section 10(12A) of the Income Tax Act exempts only 60% of withdrawn corpus. The additional 20% PFRDA permits you to withdraw, gets taxed at a slab rate unless the tax law catches up with the new pension norms. So, the extra liquidity is real, but plan for tax bill on

The mandatory annuity portion has reduced from 40% to 20% of corpus viz subscribers can withdraw up to 80% as lump sum against 60% earlier

the incremental 20% rather than assuming it's tax-free

Retirement planning

The practical upshot is, NPS now gives you more control on the day you stop earning salary. Earlier, a large slice of money was locked into an annuity that paid a modest return, with limited say in how it was structured. Now, you can keep much bigger share of corpus working for you in instruments and at a pace you choose. That's particularly useful if you already have other income sources at retirement or want to deploy a chunk into something more efficient, like paying off a loan.

The flip side is this freedom shifts the responsibility for managing market and longevity risk back on to you. The new system trusts you to manage a larger pool of money sensibly over a 20-25-year retirement. It needs more care.

RIS, variants

This is where PFRDA's newer reform comes in - the Retirement Income Scheme or RIS. Until recently, if you didn't want to take lump sum at once, the

The combination of a higher lump sum limit, slab-based withdrawal for smaller corpus and RIS as built-in drawdown mechanism gives mass investors real choice

main alternative was to defer withdrawal and take it out once a year which wasn't particularly useful for someone who needs monthly income to live on.

RIS addresses that gap. It applies to the non-annuity portion of corpus and lets you draw it down gradually instead of taking it in one shot while the balance stays invested and continues to earn market-linked returns. Within RIS, you choose between two payout methods. One is Systematic Lump Sum Withdrawal or SLW, where you withdraw a fixed amount at a chosen frequency - monthly, quarterly, half-yearly or annually - until age 75 (now 85 in some cases). So it will run until the corpus runs out. The other is Systematic Unit Redemption or SUR where you redeem a set number of units at each interval so the payout itself varies with the prevailing NAV. Either way money stays within NPS, continues compounding and pays on schedule you set.

MF SWP

RIS is structurally very close to a Systematic Withdrawal Plan of mutual fund

(MF). In both cases, you leave money invested and withdraw defined amount periodically rather than redeeming all at once.

A MF SWP gives wider choice of schemes and you can switch funds/change withdrawal amount with no curbs on moving money. RIS is more limited in fund choice and governed by PFRDA's process and timelines which means somewhat less flexibility.

NPS has historically run at a fraction of the cost MFs charge so the expense drag on retirement corpus is lower under RIS. MF SWP withdrawals are taxed as capital gains while RIS withdrawals sit within NPS tax framework where 60% is exempt and rest is taxed.

Neither is really better. If cost efficiency and staying in a regulated pension structure matter more, RIS fits. For wider choice of underlying funds and ability to move quickly between them, MF SWPs give that.

For the average subscriber, NPS treats retirement money the way most actually need it treated - accessible sans being reckless and flexible sans being chaotic. The combination of higher lump sum limit, slab-based withdrawal for smaller corpus and RIS as a built-in drawdown mechanism gives mass investors real choices at 60. The main thing to observe is discipline: more access to money is useful if you don't withdraw faster than retirement actually needs.

(Joydeep Sen is a corporate trainer (financial markets) and author)

06J7. What new NPS withdrawal rules mean for retirement

सेवानिवृत्ति के लिए NPS निकासी के नए नियमों का क्या अर्थ है

- **With new norms, the National Pension Scheme** finally treats retirement money the way most actually need it — accessible sans being reckless and flexible sans being chaotic.
नए नियमों के साथ, राष्ट्रीय पेंशन प्रणाली (NPS) अब सेवानिवृत्ति की धनराशि के साथ वैसा ही व्यवहार करती है जैसा अधिकांश लोगों को वास्तव में चाहिए — बिना लापरवाही के सुलभ और बिना अव्यवस्था के लचीली।
- **For years, the one persistent complaint about the National Pension System (NPS) was its rigidity at exit.**
वर्षों तक राष्ट्रीय पेंशन प्रणाली (NPS) को लेकर सबसे लगातार शिकायत इसकी निकासी (एग्जिट) के समय की कठोरता रही।
- You built a retirement corpus over **20-30 years** and at **60**, the rulebook decided you couldn't simply walk away with it.
आपने **20-30 वर्षों** में सेवानिवृत्ति कोष तैयार किया और **60 वर्ष** की आयु पर नियमों के अनुसार आप उसे पूरी तरह अपने साथ नहीं ले जा सकते थे।
- A large chunk had to go into an **annuity**.
उसका एक बड़ा हिस्सा **वार्षिकी (Annuity)** में लगाना अनिवार्य था।
- That has now changed.
अब यह बदल गया है।
- **What changed**
क्या बदला
- In **December 2025**, **PFRDA** substantially amended **NPS exit/withdrawal norms**.
दिसंबर 2025 में **PFRDA** ने **NPS निकासी/एग्जिट नियमों** में महत्वपूर्ण संशोधन किए।
- The **mandatory annuity** portion has come down from **40% to 20%** of corpus viz subscribers can withdraw up to **80%** as lump sum against **60%** earlier.
अनिवार्य **वार्षिकी (Annuity)** का हिस्सा कोष के **40% से घटाकर 20%** कर दिया गया है, अर्थात अब सदस्य पहले के **60%** के स्थान पर **80%** तक राशि एकमुश्त निकाल सकते हैं।
- For smaller corpus, the rules are more generous.
छोटे कोष के लिए नियम अधिक उदार बनाए गए हैं।
- **If accumulated NPS wealth is up to ₹8 lakh**, you can withdraw the entire amount as **lump sum**.
यदि संचित **NPS धनराशि ₹8 लाख** तक है, तो आप पूरी राशि **एकमुश्त** निकाल सकते हैं।
- For **₹8-12 lakh**, you can take out up to **₹6 lakh** with the balance routed into structured withdrawal or **annuity**.
यदि कोष **₹8-12 लाख** के बीच है, तो आप **₹6 लाख** तक निकाल सकते हैं और शेष राशि को **संरचित निकासी** या **वार्षिकी (Annuity)** में रखा जाएगा।
- Above **₹12 lakh**, the **80:20** split applies.
₹12 लाख से अधिक के कोष पर **80:20** का नियम लागू होगा।
- However, there's a **tax** issue here.
हालाँकि, यहाँ **कर (Tax)** से जुड़ा एक मुद्दा है।
- **Section 10(12A) of the Income Tax Act** exempts only **60%** of withdrawn corpus.
आयकर अधिनियम की धारा 10(12A) केवल निकाली गई राशि के **60%** को कर-मुक्त करती है।
- The additional **20%** **PFRDA** permits you to withdraw, gets taxed at a slab rate unless the tax law catches up with the new pension norms.
PFRDA द्वारा निकासी की अनुमति दिए गए अतिरिक्त **20%** पर आपकी **आयकर स्लैब** के अनुसार कर लगेगा, जब तक कि कर कानून नए पेंशन नियमों के अनुरूप संशोधित नहीं हो जाता।
- So, the extra liquidity is real, but plan for tax bill on the incremental **20%** rather than assuming it's tax-free.

इसलिए अतिरिक्त तरलता वास्तविक है, लेकिन अतिरिक्त 20% राशि पर कर देयता की योजना अवश्य बनाएं और इसे कर-मुक्त मानने की भूल न करें।

• Retirement planning

सेवानिवृत्ति योजना

- The practical upshot is, **NPS** now gives you more control on the day you stop earning salary. व्यावहारिक रूप से अब **NPS** आपको उस दिन अधिक नियंत्रण देता है जब आपकी नियमित वेतन आय समाप्त हो जाती है।
- Earlier, a large slice of money was locked into an **annuity** that paid a modest return, with limited say in how it was structured. पहले धन का बड़ा हिस्सा **वार्षिकी (Annuity)** में बंद हो जाता था, जो सीमित प्रतिफल देती थी और उसके ढाँचे पर आपका बहुत कम नियंत्रण होता था।
- Now, you can keep much bigger share of corpus working for you in instruments and at a pace you choose. अब आप अपने कोष का बड़ा हिस्सा अपनी पसंद के निवेश साधनों और अपनी इच्छानुसार गति से निवेशित रख सकते हैं।
- That's particularly useful if you already have other income sources at retirement or want to deploy a chunk into something more efficient, like paying off a loan. यह विशेष रूप से तब उपयोगी है जब सेवानिवृत्ति के समय आपके पास अन्य आय स्रोत हों या आप धन का कुछ हिस्सा किसी अधिक प्रभावी उद्देश्य, जैसे ऋण चुकाने, में लगाना चाहते हों।
- The flip side is this freedom shifts the responsibility for managing market and longevity risk back onto you. दूसरी ओर, यह स्वतंत्रता **बाजार जोखिम** और **दीर्घायु जोखिम** के प्रबंधन की जिम्मेदारी फिर से आपके ऊपर डाल देती है।
- The new system trusts you to manage a larger pool of money sensibly over a **20-25-year** retirement. नई व्यवस्था यह मानती है कि आप **20-25 वर्षों** की सेवानिवृत्ति अवधि में बड़े कोष का समझदारी से प्रबंधन करेंगे।
- It needs more care. इसके लिए अधिक सावधानी की आवश्यकता होगी।
- **RIS, variants**
RIS और इसके प्रकार
- This is where **PFRDA's** newer reform comes in - the **Retirement Income Scheme (RIS)**. यहीं पर **PFRDA** का नया सुधार **रिटायरमेंट इनकम स्कीम (RIS)** सामने आता है।
- Until recently, if you didn't want to take lump sum at once, the main alternative was to defer withdrawal and take it out once a year which wasn't particularly useful for someone who needs monthly income to live on. हाल तक यदि आप पूरी राशि एक साथ नहीं निकालना चाहते थे, तो मुख्य विकल्प निकासी को स्थगित करना और वर्ष में एक बार राशि निकालना था, जो मासिक आय की आवश्यकता वाले व्यक्ति के लिए अधिक उपयोगी नहीं था।
- **RIS** addresses that gap. **RIS** इस कमी को दूर करता है।
- It applies to the non-annuity portion of corpus and lets you draw it down gradually instead of taking it in one shot while the balance stays invested and continues to earn market-linked returns. यह कोष के **गैर-वार्षिकी (Non-Annuity)** हिस्से पर लागू होता है और आपको पूरी राशि एक बार में निकालने के बजाय धीरे-धीरे निकालने की सुविधा देता है, जबकि शेष राशि निवेशित रहती है और **बाजार-आधारित प्रतिफल** अर्जित करती रहती है।

- Within **RIS**, you choose between two payout methods.
RIS के अंतर्गत आप दो भुगतान विकल्पों में से एक का चयन कर सकते हैं।
- One is **Systematic Lump Sum Withdrawal (SLW)**, where you withdraw a fixed amount at a chosen frequency - monthly, quarterly, half-yearly or annually - until age **75** (now **85** in some cases).
पहला विकल्प **सिस्टेमैटिक लंप सम विदड्रॉल (SLW)** है, जिसमें आप अपनी पसंद के अनुसार **मासिक, त्रैमासिक, अर्धवार्षिक या वार्षिक** अंतराल पर एक निश्चित राशि निकालते हैं और यह व्यवस्था **75 वर्ष** (कुछ मामलों में अब **85 वर्ष**) तक चल सकती है।
- So it will run until the corpus runs out.
यह तब तक जारी रहेगा जब तक कोष समाप्त नहीं हो जाता।
- The other is **Systematic Unit Redemption (SUR)** where you redeem a set number of units at each interval so the payout itself varies with the prevailing **NAV**.
दूसरा विकल्प **सिस्टेमैटिक यूनिट रिडेम्प्शन (SUR)** है, जिसमें प्रत्येक अंतराल पर निश्चित संख्या में यूनिट भुनाई जाती हैं, इसलिए भुगतान की राशि उस समय के **NAV** के अनुसार बदलती रहती है।
- Either way money stays within **NPS**, continues compounding and pays on schedule you set. दोनों ही स्थितियों में धन **NPS** के भीतर बना रहता है, चक्रवृद्धि जारी रहती है और भुगतान आपके निर्धारित कार्यक्रम के अनुसार होता है।
- The mandatory **annuity** portion has reduced from **40% to 20%** of corpus viz subscribers can withdraw up to **80%** as lump sum against **60%** earlier.
अनिवार्य **वार्षिकी (Annuity)** का हिस्सा कोष के **40% से घटकर 20%** हो गया है, अर्थात् अब सदस्य पहले के **60%** के बजाय **80%** तक राशि एकमुश्त निकाल सकते हैं।
- The combination of a higher **lump sum** limit, slab-based withdrawal for smaller corpus and **RIS** as built-in drawdown mechanism gives mass investors real choice.
अधिक **एकमुश्त निकासी सीमा**, छोटे कोष के लिए **स्लैब-आधारित निकासी**, तथा अंतर्निहित निकासी व्यवस्था के रूप में **RIS** का संयोजन आम निवेशकों को वास्तव में अधिक विकल्प प्रदान करता है।

RIS, variants

आरआईएस (RIS), इसके प्रकार

- This is where **PFRDA's** newer reform comes in - the **Retirement Income Scheme (RIS)**.
यहीं पर **पीएफआरडीए (PFRDA)** का नया सुधार सामने आता है - **रिटायरमेंट इनकम स्कीम (RIS)**।
- Until recently, if you didn't want to take lump sum at once, the main alternative was to defer withdrawal and take it out once a year which wasn't particularly useful for someone who needs monthly income to live on.
हाल तक, यदि आप एकमुश्त राशि एक बार में नहीं निकालना चाहते थे, तो मुख्य विकल्प निकासी को टालना और वर्ष में एक बार धन निकालना था, जो उस व्यक्ति के लिए विशेष रूप से उपयोगी नहीं था जिसे जीवनयापन के लिए हर महीने आय की आवश्यकता होती है।
- **RIS** addresses that gap.
RIS इस कमी को दूर करता है।
- It applies to the **non-annuity portion** of corpus and lets you draw it down gradually instead of taking it in one shot while the balance stays invested and continues to earn **market-linked returns**.
यह कॉर्पस के **गैर-वार्षिकी (non-annuity)** हिस्से पर लागू होता है और आपको पूरी राशि एक साथ लेने के बजाय धीरे-धीरे निकालने की अनुमति देता है, जबकि शेष राशि निवेशित रहती है और **बाजार से जुड़ा प्रतिफल (market-linked returns)** अर्जित करती रहती है।
- Within **RIS**, you choose between two payout methods.
RIS के अंतर्गत, आप दो भुगतान (payout) विकल्पों में से एक का चयन करते हैं।

- One is **Systematic Lump Sum Withdrawal (SLW)** where you withdraw a fixed amount at a chosen frequency - monthly, quarterly, half-yearly or annually - until age **75 (now 85 in some cases)**.
पहला है **सिस्टेमैटिक लम्प सम विदड्रॉल (SLW)**, जिसमें आप अपनी चुनी हुई अवधि—मासिक, त्रैमासिक, अर्धवार्षिक या वार्षिक—पर एक निश्चित राशि **75 वर्ष की आयु (अब कुछ मामलों में 85 वर्ष)** तक निकालते हैं।
- So it will run until the corpus runs out.
इस प्रकार यह तब तक चलता रहेगा जब तक कॉर्पस समाप्त नहीं हो जाता।
- The other is **Systematic Unit Redemption (SUR)** where you redeem a set number of units at each interval so the payout itself varies with the prevailing **NAV**.
दूसरा विकल्प **सिस्टेमैटिक यूनिट रिडेम्प्शन (SUR)** है, जिसमें आप प्रत्येक अंतराल पर निश्चित संख्या में यूनिट रिडीम करते हैं, इसलिए भुगतान की राशि उस समय के **NAV** के अनुसार बदलती रहती है।
- Either way money stays within **NPS**, continues compounding and pays on schedule you set. दोनों ही स्थितियों में धन **NPS** के भीतर बना रहता है, चक्रवृद्धि (compounding) करता रहता है और आपके द्वारा तय किए गए कार्यक्रम के अनुसार भुगतान करता है।
- MF SWP**
- एमएफ एसडब्ल्यूपी (MF SWP)**
- RIS** is structurally very close to a **Systematic Withdrawal Plan (SWP)** of mutual fund (MF). संरचनात्मक रूप से **RIS**, **म्यूचुअल फंड (MF)** की **सिस्टेमैटिक विदड्रॉल प्लान (SWP)** के बहुत निकट है।
- In both cases, you leave money invested and withdraw a defined amount periodically rather than redeeming all at once.
दोनों ही मामलों में, आप धन को निवेशित रहने देते हैं और पूरी राशि एक साथ निकालने के बजाय समय-समय पर एक निश्चित राशि निकालते हैं।
- A **MF SWP** gives a wider choice of schemes and you can switch funds/change withdrawal amount with no curbs on moving money.
MF SWP आपको योजनाओं का व्यापक विकल्प देता है और आप धन के स्थानांतरण पर किसी प्रतिबंध के बिना फंड बदल सकते हैं या निकासी राशि में परिवर्तन कर सकते हैं।
- RIS** is more limited in fund choice and governed by **PFRDA's** process and timelines which means somewhat less flexibility.
RIS में फंड के विकल्प सीमित हैं और यह **PFRDA** की प्रक्रिया एवं समय-सीमा के अनुसार संचालित होता है, जिसका अर्थ है कि इसमें कुछ कम लचीलापन है।
- NPS** has historically run at a fraction of the cost **MFs** charge so the expense drag on retirement corpus is lower under **RIS**.
ऐतिहासिक रूप से **NPS**, **म्यूचुअल फंडों (MFs)** की तुलना में बहुत कम लागत पर संचालित होता है, इसलिए **RIS** के अंतर्गत सेवानिवृत्ति कॉर्पस पर खर्च का बोझ कम रहता है।
- MF SWP** withdrawals are taxed as **capital gains** while **RIS** withdrawals sit within **NPS** tax framework where **60%** is exempt and rest is taxed.
MF SWP से निकासी पर **पूंजीगत लाभ (capital gains)** के रूप में कर लगता है, जबकि **RIS** से निकासी **NPS** के कर ढांचे के अंतर्गत आती है, जहाँ **60%** राशि करमुक्त होती है और शेष पर कर लगता है।
- Neither is really better.
इनमें से कोई भी वास्तव में दूसरे से बेहतर नहीं है।
- If **cost efficiency** and staying in a regulated pension structure matter more, **RIS** fits.
यदि **लागत दक्षता (cost efficiency)** और विनियमित पेंशन व्यवस्था में बने रहना अधिक महत्वपूर्ण है, तो **RIS** उपयुक्त है।
- For wider choice of underlying funds and ability to move quickly between them, **MF SWPs** give that.
यदि अंतर्निहित फंडों का व्यापक विकल्प और उनके बीच शीघ्र बदलाव की क्षमता चाहिए, तो **MF SWP** यह सुविधा प्रदान करते हैं।



- For the average subscriber, **NPS** treats retirement money the way most actually need it treated - accessible sans being reckless and flexible sans being chaotic.
औसत ग्राहक के लिए **NPS** सेवानिवृत्ति की धनराशि को उसी प्रकार संचालित करता है, जैसा अधिकांश लोगों को वास्तव में चाहिए—बिना लापरवाही के सुलभ और बिना अव्यवस्था के लचीला।
- The combination of higher lump sum limit, slab-based withdrawal for smaller corpus and **RIS** as a built-in drawdown mechanism gives mass investors real choices at **60**.
उच्च एकमुश्त निकासी सीमा, छोटे कॉर्पस के लिए स्लैब-आधारित निकासी और **RIS** को अंतर्निहित ड्रॉडाउन व्यवस्था के रूप में शामिल करने का संयोजन आम निवेशकों को **60 वर्ष** की आयु में वास्तविक विकल्प प्रदान करता है।
- The main thing to observe is **discipline**: more access to money is useful if you don't withdraw faster than retirement actually needs.
सबसे महत्वपूर्ण बात **अनुशासन (discipline)** है: धन तक अधिक पहुँच तभी उपयोगी है जब आप अपनी वास्तविक सेवानिवृत्ति आवश्यकताओं से अधिक तेज़ी से धन की निकासी न करें।

Explained: can the ED attach a firm's assets after it enters insolvency?

The legal question before the National Company Law Appellate Tribunal (NCLAT) was whether the protection available under the Insolvency and Bankruptcy Code (IBC) moratorium extends to assets that are simultaneously subject of proceedings under Prevention of Money Laundering Act

GS III: Economy

NEWS ANALYSIS

Rizmi Lia M.

The story so far: The National Company Law Appellate Tribunal (NCLAT) has held that the Insolvency and Bankruptcy Code (IBC) moratorium cannot shield assets alleged to be "proceeds of crime" from attachment under Prevention of Money Laundering Act (PMLA).

The ruling came in a case concerning Siddhi Vinayak Logistics Ltd., where the Enforcement Directorate (ED) had attached assets despite the company entering insolvency proceedings. "Parliament did not legislate IBC with an intent to create a holy Ganges out of the IBC to wash the corporate debtor of its sin of criminality under the PMLA", the Principal bench of the NCLAT observed on June 30.

What is the issue?

The case arose from proceedings against Siddhi Vinayak Logistics Ltd., whose promoters were accused of bank fraud, forgery, criminal conspiracy and diversion of loan funds exceeding ₹1,600 crore.

The ED initiated proceedings under the PMLA and provisionally attached the company's assets in 2017. A few months later, the company entered the



Clear ruling: The dispute lies at the intersection of two laws with different objectives. THE HINDU

Corporate insolvency resolution process (CIRP), triggering moratorium under section 14 of the IBC.

The moratorium in terms of IBC is described as a period wherein no judicial proceedings for recovery, enforcement of security interest, sale or transfer of assets, or termination of essential contracts can be instituted or continued against the Corporate Debtor. The main purpose of declaring the moratorium is to keep the Corporate Debtor's assets intact during the CIRP, which otherwise may be attached by any competent court of law during the pendency of proceedings against the Corporate Debtor.

During the moratorium, the ED withdrew ₹2.29 crore from one of the com-



The tribunal held IBC was enacted to maximise value for creditors via sale of a firm's legitimate assets and not to legitimise wealth allegedly derived from criminal activity

pany's bank accounts. In 2019, while liquidation proceedings were under way and provisionally attached more than 6,000 vehicles belonging to the firm. The liquidator challenged these actions before the National Company Law Tribunal (NCLT), arguing that they violated the IBC moratorium by reducing the assets available for creditors. After the NCLT

rejected the plea, the matter reached the Appellate tribunal, NCLAT.

IBC, PMLA conflict?

The dispute lies at the intersection of two laws with different objectives.

The IBC seeks to resolve corporate insolvency by preserving a firm's assets and ensuring the creditors recover dues in an orderly manner. To facilitate this, Section 14 imposes a moratorium that generally bars proceedings and recovery actions against the corporate debtor once insolvency proceedings begin.

The PMLA, on the other hand, empowers the Enforcement Directorate to identify, attach and eventually confiscate the assets alleged to be the "proceeds of crime".

The legal question before the tribunal was whether the protection available under the IBC moratorium extends to assets that are simultaneously the subject of proceedings under the PMLA.

Ruling, importance

The tribunal described the dispute as one between the IBC and the PMLA rather than between the liquidator and the ED, holding that the two statutes operate in distinct fields.

It held that the IBC was enacted to maximise value for creditors through the sale of a company's legitimate assets and was not intended to legitimise wealth allegedly derived from criminal activity.

The moratorium under Section 14, therefore, pro-

tests only legitimately acquired assets and does not extend to assets alleged to be proceeds of crime under the PMLA.

The tribunal observed that while creditors routinely accept reduced recoveries during insolvency proceedings, the national interest underlying the PMLA cannot be compromised. It remarked Parliament did not enact the IBC to create a "holy Ganges" capable of washing away a corporate debtor's alleged criminality or legitimising "ill-gotten wealth".

The tribunal held that insolvency tribunals cannot examine the validity of attachment orders passed under the PMLA.

Relying on the Supreme Court's decision in Embassy Property Developments Pvt. Ltd. v. State of Karnataka, it held that any challenge to such actions must be pursued through the adjudicatory mechanism established under the PMLA.

Approach special courts

It also referred to a 2025 circular issued by the Insolvency and Bankruptcy Board of India advising insolvency professionals to approach the Special Court under the PMLA for restitution of attached assets.

The judgment clarifies that insolvency proceedings cannot be used to prevent the ED from attaching or retaining assets alleged to be proceeds of crime.

06J7. Explained: can the ED attach a firm's assets after it enters insolvency?

व्याख्या: क्या किसी कंपनी के दिवालियापन प्रक्रिया में प्रवेश करने के बाद भी ED उसकी संपत्तियाँ कुर्क कर सकता है?

- The legal question before the **National Company Law Appellate Tribunal (NCLAT)** was whether the protection available under the **Insolvency and Bankruptcy Code (IBC)** moratorium extends to assets that are simultaneously subject of proceedings under the **Prevention of Money Laundering Act (PMLA)**.
- राष्ट्रीय कंपनी विधि अपीलीय न्यायाधिकरण (NCLAT) के समक्ष कानूनी प्रश्न यह था कि क्या दिवाला एवं शोधन अक्षमता संहिता (IBC) के अंतर्गत लागू मोराटोरियम का संरक्षण उन संपत्तियों तक भी विस्तारित होता है, जो एक साथ धन शोधन निवारण अधिनियम (PMLA) के तहत कार्यवाही का विषय हैं।

The story so far:
अब तक की कहानी:

- The **National Company Law Appellate Tribunal (NCLAT)** has held that the **Insolvency and Bankruptcy Code (IBC)** moratorium cannot shield assets alleged to be “proceeds of crime” from attachment under **Prevention of Money Laundering Act (PMLA)**.
- राष्ट्रीय कंपनी विधि अपीलीय न्यायाधिकरण (NCLAT) ने कहा है कि दिवाला एवं शोधन अक्षमता संहिता (IBC) के अंतर्गत लागू मोराटोरियम “अपराध से अर्जित आय (proceeds of crime)” मानी गई संपत्तियों को धन शोधन निवारण अधिनियम (PMLA) के तहत कुर्क किए जाने से नहीं बचा सकता।
- The ruling came in a case concerning **Siddhi Vinayak Logistics Ltd.**, where the **Enforcement Directorate (ED)** had attached assets despite the company entering insolvency proceedings.
- यह निर्णय सिद्धि विनायक लॉजिस्टिक्स लिमिटेड से जुड़े मामले में आया, जहाँ प्रवर्तन निदेशालय (ED) ने कंपनी के दिवालियापन प्रक्रिया में प्रवेश करने के बावजूद उसकी संपत्तियाँ कुर्क कर ली थीं।
- “Parliament did not legislate **IBC** with an intent to create a holy Ganges out of the **IBC** to wash the corporate debtor of its sin of criminality under the **PMLA**”, the Principal Bench of the **NCLAT** observed on **June 30**.
- NCLAT** की प्रधान पीठ ने **30 जून** को टिप्पणी की, “संसद ने **IBC** इस उद्देश्य से नहीं बनाया कि यह एक पवित्र गंगा बन जाए, जो **PMLA** के तहत कॉर्पोरेट देनदार के आपराधिक कृत्यों के पापों को धो दे।”

What is the issue?
मुद्दा क्या है?

- The case arose from proceedings against **Siddhi Vinayak Logistics Ltd.**, whose promoters were accused of **bank fraud, forgery, criminal conspiracy** and **diversion of loan funds** exceeding **₹1,600 crore**.
- यह मामला सिद्धि विनायक लॉजिस्टिक्स लिमिटेड के विरुद्ध कार्यवाही से उत्पन्न हुआ, जिसके प्रमोटरों पर बैंक धोखाधड़ी, जालसाजी, आपराधिक षड्यंत्र तथा ₹1,600 करोड़ से अधिक के ऋण धन के दुरुपयोग का आरोप था।
- The **ED** initiated proceedings under the **PMLA** and provisionally attached the company's assets in **2017**.
- ED** ने **PMLA** के तहत कार्यवाही शुरू की और **2017** में कंपनी की संपत्तियों को अस्थायी रूप से कुर्क कर लिया।
- A few months later, the company entered the **Corporate Insolvency Resolution Process (CIRP)**, triggering a moratorium under **Section 14** of the **IBC**.
- कुछ महीनों बाद कंपनी कॉर्पोरेट दिवाला समाधान प्रक्रिया (CIRP) में प्रवेश कर गई, जिससे **IBC** की धारा 14 के अंतर्गत मोराटोरियम लागू हो गया।
- The moratorium in terms of **IBC** is described as a period wherein no judicial proceedings for **recovery, enforcement of security interest, sale or transfer of assets, or termination of essential contracts** can be instituted or continued against the **Corporate Debtor**.

- IBC के अंतर्गत मोराटोरियम वह अवधि होती है, जिसमें वसूली, सुरक्षा हित के प्रवर्तन, संपत्तियों की बिक्री या हस्तांतरण, अथवा आवश्यक अनुबंधों की समाप्ति से संबंधित कोई न्यायिक कार्यवाही कॉर्पोरेट देनदार के विरुद्ध प्रारंभ या जारी नहीं की जा सकती।
- The main purpose of declaring the moratorium is to keep the **Corporate Debtor's assets** intact during the **CIRP**, which otherwise may be attached by any competent court of law during the pendency of proceedings against the **Corporate Debtor**.
- मोराटोरियम घोषित करने का मुख्य उद्देश्य CIRP के दौरान कॉर्पोरेट देनदार की संपत्तियों को सुरक्षित रखना है, ताकि अन्यथा किसी सक्षम न्यायालय द्वारा लंबित कार्यवाही के दौरान उन्हें कुर्क न किया जा सके।
- During the moratorium, the **ED** withdrew **₹2.29 crore** from one of the company's bank accounts.
- मोराटोरियम के दौरान ED ने कंपनी के एक बैंक खाते से **₹2.29 करोड़** निकाल लिए।
- In **2019**, while **liquidation proceedings** were under way, it provisionally attached more than **6,000 vehicles** belonging to the firm.
- **2019** में, जब परिसमापन (Liquidation) प्रक्रिया चल रही थी, तब उसने कंपनी के **6,000 से अधिक वाहनों** को अस्थायी रूप से कुर्क कर लिया।
- The **liquidator** challenged these actions before the **National Company Law Tribunal (NCLT)**, arguing that they violated the **IBC** moratorium by reducing the assets available for **creditors**.
- **लिव्क्विडेटर** ने इन कार्रवाइयों को **राष्ट्रीय कंपनी विधि न्यायाधिकरण (NCLT)** में चुनौती दी और तर्क दिया कि इससे **IBC** के मोराटोरियम का उल्लंघन हुआ क्योंकि इससे **लेनदारों** के लिए उपलब्ध संपत्तियाँ कम हो गईं।
- After the **NCLT** rejected the plea, the matter reached the Appellate Tribunal, **NCLAT**.
- **NCLT** द्वारा याचिका खारिज किए जाने के बाद मामला अपीलीय न्यायाधिकरण **NCLAT** पहुँचा।

IBC, PMLA conflict?

IBC और PMLA के बीच टकराव?

- The dispute lies at the intersection of two laws with different objectives.
- यह विवाद दो अलग-अलग उद्देश्यों वाले कानूनों के बीच के टकराव से संबंधित है।
- The **IBC** seeks to resolve **corporate insolvency** by preserving a firm's assets and ensuring the **creditors** recover dues in an orderly manner.
- **IBC** का उद्देश्य कंपनी की संपत्तियों को सुरक्षित रखते हुए **कॉर्पोरेट दिवालियापन** का समाधान करना और **लेनदारों** को व्यवस्थित ढंग से उनका बकाया दिलाना है।
- To facilitate this, **Section 14** imposes a **moratorium** that generally bars proceedings and recovery actions against the **corporate debtor** once insolvency proceedings begin.
- इसे सुनिश्चित करने के लिए **धारा 14** के तहत **मोराटोरियम** लागू होता है, जो दिवालियापन प्रक्रिया शुरू होने के बाद सामान्यतः **कॉर्पोरेट देनदार** के विरुद्ध कार्यवाही और वसूली की कार्रवाई पर रोक लगाता है।
- The **PMLA**, on the other hand, empowers the **Enforcement Directorate** to identify, attach and eventually confiscate the assets alleged to be the "**proceeds of crime**".
- दूसरी ओर, **PMLA प्रवर्तन निदेशालय (ED)** को उन संपत्तियों की पहचान करने, उन्हें कुर्क करने और अंततः जब्त करने का अधिकार देता है, जिन्हें "**अपराध से अर्जित आय (proceeds of crime)**" माना जाता है।

The legal question before the tribunal

न्यायाधिकरण के समक्ष कानूनी प्रश्न

- The legal question before the tribunal was whether the protection available under the **IBC moratorium** extends to assets that are simultaneously the subject of proceedings under the **PMLA**.
- न्यायाधिकरण के समक्ष कानूनी प्रश्न यह था कि क्या **IBC मोराटोरियम** के तहत उपलब्ध संरक्षण उन संपत्तियों तक भी विस्तारित होता है, जो एक साथ **PMLA** के अंतर्गत कार्यवाही का विषय हैं।

Ruling, importance

निर्णय और महत्व

- The tribunal described the dispute as one between the **IBC** and the **PMLA** rather than between the **liquidator** and the **ED**, holding that the two statutes operate in distinct fields.
- न्यायाधिकरण ने इस विवाद को **लिक्विडेटर** और **ED** के बीच का नहीं, बल्कि **IBC** और **PMLA** के बीच का विवाद बताया और कहा कि दोनों कानून अलग-अलग क्षेत्रों में कार्य करते हैं।
- It held that the **IBC** was enacted to maximise value for **creditors** through the sale of a company's **legitimate assets** and was not intended to legitimise wealth allegedly derived from **criminal activity**.
- न्यायाधिकरण ने कहा कि **IBC** का उद्देश्य कंपनी की **वैध संपत्तियों** की बिक्री के माध्यम से **लेनदारों** के लिए अधिकतम मूल्य सुनिश्चित करना है, न कि **आपराधिक गतिविधियों** से कथित रूप से अर्जित संपत्ति को वैध बनाना।
- The **moratorium** under **Section 14**, therefore, protects only **legitimately acquired assets** and does not extend to assets alleged to be **proceeds of crime** under the **PMLA**.
- इसलिए धारा 14 के अंतर्गत लागू **मोराटोरियम** केवल **वैध रूप से अर्जित संपत्तियों** की रक्षा करता है और **PMLA** के तहत **अपराध से अर्जित आय (proceeds of crime)** मानी गई संपत्तियों पर लागू नहीं होता।
- The tribunal observed that while **creditors** routinely accept reduced recoveries during **insolvency proceedings**, the **national interest** underlying the **PMLA** cannot be compromised.
- न्यायाधिकरण ने कहा कि यद्यपि **दिवालियापन कार्यवाही** के दौरान **लेनदार** अक्सर कम वसूली स्वीकार करते हैं, लेकिन **PMLA** के पीछे निहित **राष्ट्रीय हित** से समझौता नहीं किया जा सकता।
- It remarked Parliament did not enact the **IBC** to create a “**holy Ganges**” capable of washing away a **corporate debtor's** alleged criminality or legitimising “**ill-gotten wealth**”.
- न्यायाधिकरण ने टिप्पणी की कि संसद ने **IBC** को ऐसी “**पवित्र गंगा**” बनाने के लिए नहीं बनाया, जो **कॉर्पोरेट देनदार** के कथित आपराधिक कृत्यों को धो दे या **अवैध रूप से अर्जित संपत्ति** को वैध बना दे।
- The tribunal held that **insolvency tribunals** cannot examine the validity of **attachment orders** passed under the **PMLA**.
- न्यायाधिकरण ने कहा कि **दिवालियापन न्यायाधिकरण PMLA** के तहत पारित **कुर्की आदेशों** की वैधता की जांच नहीं कर सकते।
- Relying on the **Supreme Court's** decision in **Embassy Property Developments Pvt. Ltd. v. State of Karnataka**, it held that any challenge to such actions must be pursued through the **adjudicatory mechanism** established under the **PMLA**.
- सर्वोच्च न्यायालय के **Embassy Property Developments Pvt. Ltd. v. State of Karnataka** मामले के निर्णय पर भरोसा करते हुए न्यायाधिकरण ने कहा कि ऐसी कार्रवाइयों को चुनौती केवल **PMLA** के तहत स्थापित **निर्णयन तंत्र (adjudicatory mechanism)** के माध्यम से ही दी जा सकती है।

Approach special courts

विशेष न्यायालयों का रुख करें

- It also referred to a **2025 circular** issued by the **Insolvency and Bankruptcy Board of India** advising **insolvency professionals** to approach the **Special Court** under the **PMLA** for restitution of attached assets.
- न्यायाधिकरण ने **दिवाला एवं शोधन अक्षमता बोर्ड (IBBI)** द्वारा जारी **2025 के परिपत्र** का भी उल्लेख किया, जिसमें **दिवालियापन पेशेवरों** को **कुर्क संपत्तियों** की वापसी के लिए **PMLA** के अंतर्गत **विशेष न्यायालय** का रुख करने की सलाह दी गई थी।
- The judgment clarifies that **insolvency proceedings** cannot be used to prevent the **ED** from attaching or retaining assets alleged to be **proceeds of crime**.

- इस निर्णय ने स्पष्ट किया कि दिवालियापन कार्यवाही का उपयोग ED को अपराध से अर्जित आय (proceeds of crime) मानी गई संपत्तियों को कुर्क करने या अपने कब्जे में रखने से रोकने के लिए नहीं किया जा सकता।

GS Paper III: Science and Technology		06 July 2026
TOPICS COVERED		
06J7	ISRO conducts test of key component for Gaganyaan mission इसरो ने गगनयान मिशन के प्रमुख घटक का परीक्षण किया	
06J7	Synthetic cell: machine that could सिंथेटिक कोशिका: ऐसी मशीन जो कर सकती है	
06J7	Japan space probe performs flyby of near-Earth asteroid जापान के अंतरिक्ष यान ने पृथ्वी के निकट स्थित क्षुद्रग्रह का फ्लाईबाय किया	



The Webb telescope's image of the FS Tau star system. FS Tau A, a pair of protostars, is slightly to the left of centre and weighs around half as much as the sun. FS Tau B, the orange protostar slightly to the right, is thought responsible for the red (molecular hydrogen) and orange (polycyclic aromatic hydrocarbons) outflows amid the dusty region. The blue ridges are light scattered by dust. NASA

The Webb telescope's image of the FS Tau star system. **FS Tau A, a pair of protostars**, is slightly to the left of centre and weighs around half as much as the sun. FS Tau B, the

The **orange protostar slightly to the right**, is thought responsible for the red (molecular hydrogen) and orange (**polycyclic aromatic hydrocarbons**) outflows amid the dusty region. The blue ridges are light scattered by dust.



ISRO conducts test of key component for Gaganyaan mission

The solid motor-based platform SOLVE will be used for parachute tests of the crew module; it has been derived from the PSLV strap-on motor

GS III: S&T

The Hindu Bureau
BENGALURU

The Indian Space Research Organisation (ISRO) has successfully carried out the first ground test of the solid motor-based Sub-Orbital Launch Vehicle for Experiments (SOLVE) at its Static Test Facility at the Satish Dhawan Space Centre in Sriharikota.

The SOLVE solid motor is a key component for conducting Gaganyaan test missions and the first ground test was carried out on July 3.

The ISRO is developing a solid motor-based SOLVE as a test platform to carry out Integrated Parachute Tests for validation of deceleration system of Gaganyaan's crew module under various test conditions.

During these test missions, the crew module will be carried to an altitude of 10 km to 17 km and separated from the vehicle.

A series of 10 parachutes will be deployed to reduce the velocity of the crew module before splashdown in the sea.



The ground test of the SOLVE solid motor being conducted at the Satish Dhawan Space Centre in Sriharikota. SPECIAL ARRANGEMENT

The solid stage of SOLVE is derived from the Polar Satellite Launch Vehicle (PSLV) Strap-on Motor with a few modifications to meet the Gaganyaan test requirements, including development of slow burn rate propellant and straight nozzle with secondary injection thrust vector control.

The ISRO said that during the test motor performance parameters were as expected. "The development of the SOLVE vehicle provides flexibility in conducting Gaganyaan test missions simulating va-

rious conditions in the actual mission," the space agency said.

Over the past few months, the ISRO has carried out key tests related to the Gaganyaan mission, which include the second Integrated Air Drop Test (IADT-02) and a behavioural study Mission MITRA (Mapping of Interoperable Traits and Response Assessment) in Leh, during which the four Indian astronauts selected for the mission along with scientists, engineers and medical teams were subjected to a week-long study.

06J7. ISRO conducts test of key component for Gaganyaan mission

इसरो ने गगनयान मिशन के प्रमुख घटक का परीक्षण किया

- The solid motor-based platform SOLVE will be used for parachute tests of the crew module; it has been derived from the PSLV strap-on motor ठोस मोटर आधारित प्लेटफॉर्म

SOLVE का उपयोग क्रू मॉड्यूल के पैराशूट परीक्षणों के लिए किया जाएगा; इसे PSLV स्ट्रैप-ऑन मोटर से विकसित किया गया है

- The Indian Space Research Organisation (ISRO) has successfully carried out the first ground test of the solid motor-based Sub-Orbital Launch Vehicle for Experiments (SOLVE) at its Static Test Facility at the Satish Dhawan Space Centre in Sriharikota.

भारतीय अंतरिक्ष अनुसंधान संगठन (ISRO) ने श्रीहरिकोटा स्थित सतीश धवन अंतरिक्ष केंद्र की स्थैतिक परीक्षण सुविधा में ठोस मोटर आधारित सब-ऑर्बिटल लॉन्च व्हीकल फॉर एक्सपेरिमेंट्स (SOLVE) का पहला जमीनी परीक्षण सफलतापूर्वक किया है।

- The SOLVE solid motor is a key component for conducting Gaganyaan test missions and the first ground test was carried out on July 3.

SOLVE ठोस मोटर गगनयान

परीक्षण मिशनों को संचालित करने के लिए एक प्रमुख घटक है और इसका पहला जमीनी परीक्षण 3 जुलाई को किया गया।

- The ISRO is developing a solid motor-based SOLVE as a test platform to carry out Integrated Parachute Tests for validation of deceleration system of Gaganyaan's crew module under various test conditions.

इसरो विभिन्न परीक्षण परिस्थितियों में गगनयान के क्रू मॉड्यूल की गति कम करने वाली प्रणाली के सत्यापन के लिए एकीकृत पैराशूट परीक्षणों को संचालित करने हेतु ठोस मोटर आधारित SOLVE को एक परीक्षण प्लेटफॉर्म के रूप में विकसित कर रहा है।

- During these test missions, the crew module will be carried to an altitude of 10 km to 17 km and separated from the vehicle.



इन परीक्षण मिशनों के दौरान क्रू मॉड्यूल को 10 किमी से 17 किमी की ऊँचाई तक ले जाया जाएगा और वाहन से अलग किया जाएगा।

- A series of **10 parachutes** will be deployed to reduce the velocity of the crew module before **splashdown in the sea**.
समुद्र में स्प्लैशडाउन से पहले क्रू मॉड्यूल की गति को कम करने के लिए **10 पैराशूटों** की एक श्रृंखला तैनात की जाएगी।
- The **solid stage of SOLVE** is derived from the **Polar Satellite Launch Vehicle (PSLV) Strap-on Motor** with a few modifications to meet the Gaganyaan test requirements, including development of **slow burn rate propellant** and **straight nozzle with secondary injection thrust vector control**.
SOLVE का ठोस चरण **पोलर सैटेलाइट लॉन्च व्हीकल (PSLV) स्ट्रैप-ऑन मोटर** से कुछ संशोधनों के साथ विकसित किया गया है, ताकि गगनयान परीक्षण आवश्यकताओं को पूरा किया जा सके, जिसमें **धीमी दहन दर वाले प्रणोदक और सेकेंडरी इंजेक्शन थ्रस्ट वेक्टर कंट्रोल** के साथ सीधे नोजल का विकास शामिल है।
- The ISRO said that during the test motor performance parameters were as expected.
इसरो ने कहा कि परीक्षण के दौरान मोटर के प्रदर्शन मानक अपेक्षा के अनुरूप रहे।
- "The development of the **SOLVE vehicle** provides flexibility in conducting Gaganyaan test missions simulating various conditions in the actual mission," the space agency said.
अंतरिक्ष एजेंसी ने कहा, "**SOLVE वाहन** का विकास वास्तविक मिशन की विभिन्न परिस्थितियों का अनुकरण करते हुए गगनयान परीक्षण मिशनों को संचालित करने में लचीलापन प्रदान करता है।"
- Over the past few months, the ISRO has carried out key tests related to the **Gaganyaan mission**, which include the second **Integrated Air Drop Test (IADT-02)** and a behavioural study Mission **MITRA (Mapping of Interoperable Traits and Response Assessment)** in Leh.
पिछले कुछ महीनों में इसरो ने गगनयान मिशन से संबंधित महत्वपूर्ण परीक्षण किए हैं, जिनमें दूसरा **इंटीग्रेटेड एयर ड्रॉप टेस्ट (IADT-02)** और लेह में व्यवहार अध्ययन मिशन **MITRA (मैपिंग ऑफ इंटरऑपरेबल ट्रेट्स एंड रिस्पॉन्स असेसमेंट)** शामिल हैं।

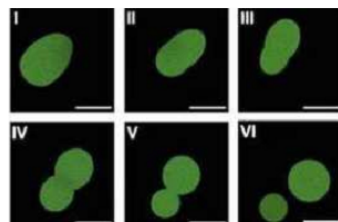
Synthetic cell: machine that could

VGSS III: S&T

Researchers from the University of Minnesota have developed a synthetic cell that can grow and divide. The team 'started' the cell as a liposome, a small bubble made of fats. Inside was a protein-making system called PURE, which contained all the necessary 'machinery' for the cell to turn DNA into proteins. The DNA consisted of 90,000 base pairs.

The synthetic cells ate by fusing with smaller feeder liposomes. The cell's DNA instructed it to produce a protein called alpha-hemolysin that becomes like a hook on the cell's surface. The hook grabbed the feeder bubbles and pulled them in, providing the lipids and nutrients the cell needs to expand.

As the cell grew, it used an enzyme called Phi29 to copy its entire genome, then it divided into daughter cells. While the researchers first used mechanical force to split the cells, they eventually engineered a biological way to do it. By making proteins crowd the surface of the cell, they created enough physical pressure to make the membrane split into two. The researchers also proved these cells could undergo selection. They introduced a mutation that



Once the cell grew and copied its DNA, it divided into daughter cells. KATE ADAMALA, ADAMALA LAB

allowed some cells to eat more efficiently. These faster-growing cells produced more offspring than others and dominated the population. "It will, perhaps, provide a compelling argument against those who think there is some immaterial substance in addition to the chemicals that breathes life into material stuff," University of Exeter professor John Dupré told *The Guardian*. "But almost no scientist now believes this."

For feedback and suggestions
for 'Science', please write to
science@thehindu.co.in with the
subject 'Daily page'

- During this, the **four Indian astronauts** selected for the mission along with scientists, engineers and medical teams were subjected to a **week-long study**.

इस दौरान मिशन के लिए चुने गए चार **भारतीय अंतरिक्ष यात्रियों** के साथ वैज्ञानिकों, इंजीनियरों और चिकित्सा दलों को **एक सप्ताह लंबे अध्ययन** में शामिल किया गया।

06J7. Synthetic cell: machine that could

कृत्रिम कोशिका: एक सक्षम जैविक मशीन

- Researchers from the **University of Minnesota** have developed a **synthetic cell that can grow and divide**.

मिनेसोटा विश्वविद्यालय के शोधकर्ताओं ने एक ऐसी **कृत्रिम कोशिका** विकसित की है जो बढ़ सकती है और विभाजित हो सकती है।

- The **team 'started' the cell as a liposome, a small bubble made of fats**.
टीम ने कोशिका की शुरुआत एक **लिपोसोम** के रूप में



की, जो वसा से बना एक छोटा बुलबुला होता है।

- Inside was a protein-making system called **PURE**, which contained all the necessary 'machinery' for the cell to turn **DNA into proteins**.
इसके अंदर **PURE** नामक प्रोटीन बनाने वाली प्रणाली थी, जिसमें कोशिका द्वारा **DNA को प्रोटीन में बदलने** के लिए आवश्यक सभी 'मशीनरी' मौजूद थी।
- The **DNA consisted of 90,000 base pairs**.
DNA में 90,000 बेस पेयर शामिल थे।
- The **synthetic cells ate by fusing with smaller feeder liposomes**.
कृत्रिम कोशिकाएँ छोटे **फीडर लिपोसोम** के साथ जुड़कर पोषण प्राप्त करती थीं।
- The cell's DNA instructed it to produce a protein called **alpha-hemolysin** that becomes like a hook on the cell's surface.
कोशिका के DNA ने उसे **अल्फा-हीमोलाइसिन** नामक प्रोटीन बनाने का निर्देश दिया, जो कोशिका की सतह पर एक हुक की तरह बन जाता है।
- The hook grabbed the feeder bubbles and pulled them in, providing the **lipids and nutrients** the cell needs to expand.
यह हुक फीडर बुलबुलों को पकड़कर अंदर खींचता था, जिससे कोशिका को बढ़ने के लिए आवश्यक **लिपिड और पोषक तत्व** मिलते थे।
- **As the cell grew, it used an enzyme called Phi29 to copy its entire genome, then it divided into daughter cells**.
जैसे-जैसे कोशिका बढ़ी, उसने अपने पूरे जीनोम की प्रतिलिपि बनाने के लिए **Phi29** नामक एंजाइम का उपयोग किया, फिर वह **संतति कोशिकाओं** में विभाजित हो गई।

Japan space probe performs flyby of near-Earth asteroid

GS III: S&T
Agence France Presse
TOKYO

A Japanese space probe performed a flyby of a near-Earth asteroid on Sunday, in a test mission for technology that could help protect the planet from space rocks.

The fridge-sized Hayabusa2 was due to fly within 800 metres of asteroid Torifune, Japan Aerospace Exploration Agency (JAXA) scientists said, a trial run to see whether such a probe could deflect a potentially dangerous space rock away from Earth. The mission comes after NASA deliberately smashed a spacecraft into the 160-metre-wide Dimorphos asteroid in 2022, successfully altering its orbit around a larger space rock.

Moving at a speed of more than 18,000 kilometres per hour, Hayabusa2 was not intended to collide with Torifune. Instead, scientists wanted to assess whether they could precisely control the trajectory of the probe, should it ever need to perform a deflection.

"At 6:35 pm (0935 GMT)... Hayabusa2 conducted a flyby of Torifune and the spacecraft is working normally," a JAXA spokeswoman told AFP.

Online footage supplied by JAXA showed scientists applauding in a control room.

If it is confirmed that the space probe indeed came within 800 metres of Torifune, the mission would be one of closest flybys of a near-Earth asteroid ever. "It's as difficult as trying to shoot through a one-yen coin somewhere within the area stretching from Okinawa to Hokkaido," Yuya Mimasu of JAXA said earlier, referring to Japan's southernmost and northernmost islands.

Cameras on board are also recording data from the asteroid's surface including geographical features, its texture and temperature – vital information for a potential planetary defence mission.

While the researchers first used **mechanical force** to split the cells, they eventually engineered a biological way to do it. हालाँकि शोधकर्ताओं ने शुरुआत में कोशिकाओं को विभाजित करने के लिए **यांत्रिक बल** का उपयोग किया, लेकिन अंततः उन्होंने इसे करने का एक जैविक तरीका विकसित किया।

By making proteins crowd the surface of the cell, they created enough **physical pressure** to make the membrane split into two.

कोशिका की सतह पर प्रोटीनों की भीड़ बनाकर उन्होंने इतना **भौतिक दबाव** उत्पन्न किया कि झिल्ली दो भागों में विभाजित हो गई।

The researchers also proved these cells could undergo **selection**.

शोधकर्ताओं ने यह भी सिद्ध किया कि ये कोशिकाएँ **चयन प्रक्रिया** से गुजर सकती हैं।

They introduced a **mutation** that allowed some cells to eat more efficiently.

उन्होंने एक **उत्परिवर्तन** शामिल किया जिसने कुछ कोशिकाओं को अधिक कुशलता से पोषण प्राप्त करने में सक्षम बनाया।

06J7. Japan space probe performs flyby of near-Earth asteroid

जापान के अंतरिक्ष यान ने पृथ्वी के निकट स्थित क्षुद्रग्रह का फ्लाईबाय किया

- A **Japanese space probe** performed a **flyby** of a **near-Earth asteroid** on Sunday, in a test mission for technology that could help protect the planet from **space rocks**.
- एक जापानी अंतरिक्ष यान ने रविवार को पृथ्वी के निकट स्थित क्षुद्रग्रह का फ्लाईबाय किया। यह ऐसी तकनीक के परीक्षण मिशन का हिस्सा था, जो भविष्य में ग्रह को अंतरिक्षीय चट्टानों (Space Rocks) से बचाने में मदद कर सकती है।
- The **fridge-sized Hayabusa2** was due to fly within **800 metres** of asteroid **Torifune, Japan Aerospace Exploration Agency (JAXA)** scientists said, a trial run to see whether such a probe could deflect a potentially dangerous **space rock** away from **Earth**.
- रेफ्रिजरेटर के आकार का हायाबुसा-2 (Hayabusa2) क्षुद्रग्रह टोरिफुने (Torifune) से 800 मीटर की दूरी के भीतर से गुजरने वाला था। जापान एयरोस्पेस एक्सप्लोरेशन एजेंसी (JAXA) के वैज्ञानिकों ने बताया कि यह परीक्षण इस बात की जांच के लिए था कि क्या ऐसा अंतरिक्ष यान किसी संभावित खतरनाक अंतरिक्षीय चट्टान को पृथ्वी से दूर मोड़ सकता है।
- The mission comes after **NASA** deliberately smashed a spacecraft into the **160-metre-wide Dimorphos asteroid in 2022**, successfully altering its orbit around a larger **space rock**.
- यह मिशन NASA द्वारा 2022 में 160 मीटर चौड़े डिमॉर्फोस (Dimorphos) क्षुद्रग्रह से जानबूझकर एक अंतरिक्ष यान टकराने के बाद आया है, जिससे उसके बड़े अंतरिक्षीय पिंड के चारों ओर की कक्षा सफलतापूर्वक बदल गई थी।
- Moving at a speed of more than **18,000 kilometres per hour**, **Hayabusa2** was not intended to collide with **Torifune**.
- 18,000 किलोमीटर प्रति घंटे से अधिक की गति से चल रहा हायाबुसा-2 टोरिफुने से टकराने के लिए नहीं भेजा गया था।

GS Paper III: Environment		06 July 2026
TOPICS COVERED		
06J7	India needs a second home for Asiatic lions भारत को एशियाई शेरों के लिए दूसरे आवास की आवश्यकता है	
06J7	It's time to segregate at source अब स्रोत पर कचरा अलग करने का समय है	



India needs a second home for Asiatic lions

CS III: Environment

India's conservation of the Asiatic lion is widely celebrated as a remarkable success story. From a population which was reduced to just a few dozen in the early 20th century, the number of Asiatic lions has increased to approx. 891 today. Yet, behind this achievement lies a persistent policy failure: the inability to establish a second, geographically separate population. Scientific institutions, government bodies, and even the Supreme Court have long warned that without such a step, the species remains vulnerable to extinction from a single catastrophic event.

A second dwelling

The need for a second home for Asiatic lions is rooted in decades of government-backed research. Multiple reports of the Wildlife Institute of India have consistently emphasised that a single population confined to one landscape is inherently vulnerable. Studies conducted since the 1980s have concluded that threats such as epidemics, forest fires, or other natural disasters could potentially wipe out the entire species if it remains geographically concentrated.

This scientific consensus was formally acknowledged in the landmark Supreme Court judgment of April 15, 2013, which directed the translocation of Asiatic lions from Gujarat's Gir forest to the Kuno National Park in Madhya Pradesh. The Court made it clear that conservation must be guided by ecological principles rather than regional considerations, stating that a second population was essential for the species' long-term survival. The judgment explicitly recognised the risk that a single calamity could eliminate the entire population if it remained confined to one location.

Despite this clear directive, the translocation project has been stalled for over a decade. Gujarat has consistently resisted the relocation of lions outside the



Richa Singh

Senior Consultant at EY India, with a focus on forest management, wildlife conservation and biodiversity assessment

Reports by the Wildlife Institute of India have consistently emphasised that a single population confined to one landscape is inherently vulnerable

State, citing its success in conserving the species and raising concerns about habitat suitability elsewhere. This has created a policy impasse between scientific recommendations, judicial mandates, and State-level political considerations. While the Kuno National Park was prepared specifically to host the lions – by relocation of villages and habitat restoration among others – no lions have been introduced there.

Meanwhile, the ecological risks identified by experts have only intensified. The concentration of the entire global population of Asiatic lions within the Gir landscape makes them uniquely vulnerable to disease outbreaks. The 2018 outbreak of the Canine Distemper Virus among the population, which killed several lions and infected many others, serves as a stark reminder of this danger. Such diseases spread more rapidly in dense, socially structured populations, and their impact is amplified by the limited genetic diversity of the lions.

Government-supported studies and conservation plans have repeatedly highlighted that geographically isolated carnivore populations face extinction risks from both biological and environmental factors. In a single-site population, even non-recurring events – such as droughts, wildfires, or sudden prey decline – can have disproportionate effects. This is why conservation science advocates for a "metapopulation

approach", where species are distributed across multiple habitats to reduce risk.

Recognising these concerns, recent policy initiatives such as Project Lion (2020) have attempted to revive the discussion on expanding lion habitats. There have been proposals to develop alternative sites such as the Barda Wildlife Sanctuary within Gujarat itself. However, experts argue that such sites, being geographically close to Gir, may not adequately address the core issue of risk diversification. A second population must be sufficiently distant to prevent the spread of disease or disaster across both populations simultaneously.

The delay in establishing a second home raises broader questions about environmental governance in India. It reflects a tension between national conservation priorities and State-level interests, where wildlife – though constitutionally recognised as a shared responsibility – can become entangled in regional identity and political considerations. The Supreme Court had clearly stated that Asiatic lions are a national heritage, not the property of any single State, yet implementation of this principle remains incomplete.

From success to security

Ultimately, the issue is whether India is willing to move from conservation success to conservation security. The current situation represents a paradox: a thriving population that remains ecologically fragile. Without establishing a second free-ranging population, the gains of decades of conservation effort remain vulnerable to reversal. The case of the Asiatic lion underscores a fundamental principle of modern conservation: numbers alone do not ensure survival; resilience does. Creating a second home is an ecological necessity; continued delay in implementing this vision risks turning a global conservation triumph into a preventable ecological vulnerability.



An Asiatic lioness with her two cubs at the Sakkarbaugh Safari breeding centre in Junagadh in 2025. VIJAY SONEJI

06J7. India needs a second home for Asiatic lions

भारत को एशियाई शेरों के लिए दूसरे आवास की आवश्यकता है

- From a population which was reduced to just a few dozen in the early 20th century, the number of **Asiatic lions has increased to approx. 891 today.**

20वीं शताब्दी की शुरुआत में जहाँ इनकी संख्या घटकर केवल कुछ दर्जन रह गई थी, वहीं आज एशियाई शेरों की संख्या बढ़कर लगभग 891 हो गई है।

- This **scientific consensus** was formally acknowledged in the landmark **Supreme Court judgment of April 15, 2013**, which directed the translocation of Asiatic lions from Gujarat's **Gir forest** to the **Kuno National Park in Madhya Pradesh.**

इस वैज्ञानिक सहमति को औपचारिक रूप से 15 अप्रैल, 2013 के सर्वोच्च न्यायालय के ऐतिहासिक निर्णय में स्वीकार किया गया, जिसमें गुजरात के गिर वन से मध्य प्रदेश के कूनों राष्ट्रीय उद्यान में एशियाई शेरों के स्थानांतरण का निर्देश दिया गया था।

- The **2018 outbreak of the Canine Distemper Virus** among the population, which killed several lions and infected many others, serves as a stark reminder of this danger.
आबादी में 2018 में कैनाइन डिस्टेंपर वायरस के प्रकोप, जिसने कई शेरों की मृत्यु की और कई अन्य को संक्रमित किया, इस खतरे की गंभीर चेतावनी के रूप में कार्य करता है।
- Such diseases spread more rapidly in dense, socially structured populations, and their impact is amplified by the limited **genetic diversity** of the lions.
ऐसी बीमारियाँ घनी और सामाजिक रूप से संरचित आबादी में तेजी से फैलती हैं, और शेरों की सीमित आनुवंशिक विविधता के कारण उनका प्रभाव और बढ़ जाता है।
- Government-supported studies and conservation plans have repeatedly highlighted that geographically isolated **carnivore populations** face extinction risks from both biological and environmental factors.
सरकार समर्थित अध्ययनों और संरक्षण योजनाओं ने बार-बार बताया है कि भौगोलिक रूप से अलग-थलग मांसाहारी जीवों की आबादी जैविक और पर्यावरणीय दोनों कारकों से विलुप्ति के जोखिम का सामना करती है।
- Recognising these concerns, recent policy initiatives such as **Project Lion (2020)** have attempted to revive the discussion on expanding lion habitats.
इन चिंताओं को स्वीकार करते हुए, प्रोजेक्ट लायन (2020) जैसी हालिया नीतिगत पहलों ने शेरों के आवास विस्तार पर चर्चा को पुनर्जीवित करने का प्रयास किया है।
- There have been proposals to develop alternative sites such as the **Barda Wildlife Sanctuary** within Gujarat itself.
गुजरात के भीतर ही बरदा वन्यजीव अभयारण्य जैसे वैकल्पिक स्थलों को विकसित करने के प्रस्ताव दिए गए हैं।
- However, experts argue that such sites, being geographically close to Gir, may not adequately address the core issue of **risk diversification**.
हालाँकि विशेषज्ञों का तर्क है कि गिर के भौगोलिक रूप से निकट होने के कारण ऐसे स्थल जोखिम विविधीकरण की मुख्य समस्या का पर्याप्त समाधान नहीं कर सकते।
- A second population must be sufficiently distant to prevent the spread of **disease or disaster** across both populations simultaneously.
दूसरी आबादी पर्याप्त दूरी पर होनी चाहिए ताकि बीमारी या आपदा दोनों आबादियों में एक साथ न फैल सके।



It's time to segregate at source

Though the new Solid Waste Management Rules kicked in on April 1, there has been little awareness among residents of this momentous change in urban solid waste management. While most parts of the world have settled into a routine of waste segregation at source, T.N. still packs a mixed garbage bag. **Aloysius Xavier Lopez** looks at how the Rules could impact source segregation in the State

CS III: Environment

In July 2, a drone camera captured unflattering visuals of the vast Kodungayur dump yard – women squelching through the mounds of trash to collect materials that could be recycled. For these women from the Perambur Assembly constituency, ragpicking has been the only source of livelihood. They claim many members of nearly 3,000 families in the area have lost their lives owing to health risks associated with ragpicking.

Chennai Corporation Councillor Dilli Babu says the women are being exposed to health risks because fresh waste continues to accumulate in the dump yard without segregation at source. This happens even as biomining of the waste yard has started for eco-restoration of the 352-acre area located in the heart of a thickly populated locality in north Chennai. "After the Solid Waste Management Rules, 2026, kicked in on April 1, officials have suggested source segregation as the solution. But 100% source segregation has been a challenging task," he said.

Speaking about the new Rules, Ward 35 Councillor S. Jeevan says there are other major issues that have worried residents. "The new Rules refer to waste-to-energy plants multiple times, along with duties and responsibilities of various departments. This shows the Union government has been exploring the possibility of setting up waste-to-energy plants. Residents who have opposed waste-to-energy plants in Chennai are worried as the risk of pollution is high," he says.

Public consultation

Federation of North Chennai Residents' Welfare Association president T.K. Shanmugham said the State government and civic agencies should ensure that public consultation is conducted in the presence of the residents of the Perambur and Dr. Radhakrishnan Nagar Assembly constituencies before implementation of any such waste management projects. "We will not accept waste-to-energy plants. They pollute our neighbourhoods. But we are ready to support source segregation. We intend to mobilise 2,000 volunteers to sensitise residents to the new Rules and the need for source segregation. We want the government to close the dump yards, complete biomining, and start eco-restoration," he said.

As urban local bodies (ULBs) are unable to implement waste management projects owing to opposition from residents, the new Rules framed by the Union government have reportedly provided a ray of hope for such waste management projects, albeit with strict pollution control norms and digital tracking. However, residents remain sceptical about the efficacy of pollution monitoring systems. The Rules have strengthened digital tracking to reduce the impact of pollution caused by such waste management projects and promote 100% source segregation. In a bid to sensitise all stakeholders and ensure successful rollout of the new Rules, training programmes will be held for Mayors and Deputy Mayors of various cities in Tamil Nadu this month. The Tamil Nadu Institute for Urban Studies, Coimbatore, is organising the programme.

Chennai Deputy Mayor M. Magesh Kumar said the Corporation Council will discuss ways to reduce the burden of penalties and taxes on residents and traders under the new Rules. "Residents and traders should never be penalised. We are against the penalty and taxes proposed by the new Rules," he said.

households should not be forced to separate the garbage themselves. The households should be encouraged to do so. This is the first aspect we are focusing on

GAGANDEEP SINGH BEDI, Secretary, Municipal Administration and Water Supply Department

L. Gopan, a resident of Avadi, a suburb in western Chennai, says, "Dumping of waste has increased in waterbodies such as Paruthipattu lake on the outskirts of Chennai. The government should strive to achieve 100% source segregation. We are ready to support the government, but some people are afraid that charges will increase for waste collection in large apartment complexes."

'Robust framework'

According to the new Rules, the Union Ministry of Housing and Urban Affairs will support the State in assessing waste management infrastructure in all urban areas and in drawing up policies and strategies for solid waste management, including waste-to-energy facilities, in consultation with stakeholders and taking into account solid waste management guidelines, by September 30, 2026. K.P. Subramanian, retired Professor of Urban Engineering at Anna University, says, "The new Rules provide a comprehensive and robust framework over their predecessors. The Rules must prioritise participation over regulation. Involvement of residents' welfare associations, NGOs, and citizens groups is the key to success."

Kurian Joseph, Professor of Environmental Engineering, Indian Institute of Technology-Madras, who is training elected representatives in the implementation of the new Rules, said, "The most important challenge to waste management in Tamil Nadu is source segregation. There are other issues too: separate collection of segregated waste, processing of separated wet waste, recycling of separated dry waste, shortage of labour, and resistance of the public to having waste-processing – particularly micro-composting centres – near their locality."

"Facilities for segregated collection are mandatory if we want to be a developed country with clean cities. It may cost around ₹10 crore for a city with 1 lakh population," he added. The actual cost will depend on the available facilities and the gaps. According to Prof. Joseph, ULBs must undertake gap assessment and prepare an action plan for at least five years with estimates. They will have to raise funds by converging different schemes and opportunities, he said.

Labour shortage remains an issue in waste

According to the Rules, the Union Ministry of Housing and Urban Affairs will support the State in assessing waste management infrastructure in all urban areas and drawing up solid waste management policies

management, Prof. Joseph said. "As the economy improves, people move away from waste-related activities, especially waste collection and handling. Thus, the dignity of such jobs must be enhanced and 'professionalised' to attract skilled workers, and such people have to be trained and retained." He added, "The implementation of the Rules will reduce the cost burden on ULBs, as source segregation becomes the responsibility of waste generators. Bulk waste generators are responsible for processing wet waste generated by them. The new Rules will reduce the waste processing load of ULBs by at least 25% in big cities. Recyclable sales will also help in cost recovery."

100% source segregation

Stressing the need for 100% source segregation, he said, "Source segregation is very critical as it will help in getting clean recyclable materials. If waste is mixed at source and later separated, the value of recyclables is lost. Further, ULBs spend on additional labour for separation. Poor source segregation will lead to failure in waste processing and poor quality of processed outputs. Composting and recycling quality will be poor, leading to dumping of waste."

According to estimates, about 55% of the waste generated by ULBs is wet waste (biodegradable), 30% comprises different types of recyclables, and the rest will be inert, sanitary, and household hazardous waste. ULBs across Tamil Nadu generate about 16,000 tonnes of solid waste each day, of which about 40% is from the Chennai Corporation. Other corporations generate about 30%, municipalities about 18%, and town panchayats 12%. Experts say that while door-to-door waste collection is very good, with almost 90% households covered, source segregation and processing are weak in Tamil Nadu, which is among the top urbanised States.



Waste sprawl: Fresh waste accumulates in the Kodungayur dump yard without segregation at source, even as the biomining of the dump has started for eco-restoration of the 352-acre area. B. JOTHI RAMALINGAM

The responsibilities of each stakeholder have been detailed in the new SWM Rules. Mandatory segregation at source; processing of wet waste; handling of dry, sanitary, and special care wastes; maintenance of reports and compliance via online portal of the Central Pollution Control Board; user charges; and environmental compensation are the key aspects of the Rules.

Environmental Compensation

The Environmental Compensation concept is new to the 2026 SWM Rules, which apply the "polluter pays" principle. Three batches of programmes to create awareness among ULB leaders have been completed in Kanniyakumari. More programmes are planned in the coming weeks. Chennai Corporation Commissioner G.S. Sameeran said the Rules require major behavioural modification campaigns and full cooperation from citizens. "The Rules are already in place from April. We are giving every stakeholder breathing space of six to seven months during this transition phase."

Other cities are also gearing up for compliance with the new Rules. In Coimbatore, the 100 wards generate over 1,200 tonnes of municipal solid waste every day. Corporation officials say the city has achieved around 87% source segregation, and is working to improve compliance.

Civic authorities in Erode say implementation will require stronger infrastructure, adequate manpower, and sustained public participation. Erode city, spread over 109.52 sq. km, with a population of 4.98 lakh across 60 wards, generates about 250 metric tonnes of municipal solid waste every day. Although the corporation has introduced door-to-door collection and source segregation, illegal dumping and open burning continue in several parts of the city.

Salem Corporation health officials say 20 of the 60 wards have been selected as pilot zones for source segregation. The Tiruchi City Corporation is strengthening its waste management infrastructure and technology-driven monitoring systems. In Nagercoil, people have been protesting for several years demanding that the government shift the dump yard in the city to another location on the National Highways.

As the issue is likely to dominate policy debates both in the State government and the local bodies in the coming months, residents are concerned about whether the local bodies are actually geared up for implementation of the new Rules. With the Tamilaga Vettri Kazhagam in power in the State and major ULBs ruled by the Dravida Munnetra Kazhagam, the campaign should move beyond local administration and politics, into popular culture, for cleaner cities and towns.

Speaking on the issue, Gagandeep Singh Bedi, Secretary, Municipal Administration and Water Supply Department, said, "The workers should not be forced to separate the garbage themselves. The households should be encouraged to do so. This is the first aspect we are focusing on."

While the successful implementation of the new Rules would help boost the waste management system in the State with focus on 'segregation, reduction, and recycling', building capacity of local bodies to do so will hold the key.

(With inputs from L. Srikrishna in Madurai, Sibi Sreevathson T.C. in Coimbatore, Sabari M. in Salem, Anny Donal Madhonna in Tiruchi, and S.P. Saravanan in Erode.)

06J7. It's time to segregate at source

अब स्रोत पर कचरा अलग करने का समय है

- Though the **new Solid Waste Management Rules** kicked in on **April 1**, there has been little awareness among residents of this momentous change in **urban solid waste management**.
- हालाँकि नए ठोस अपशिष्ट प्रबंधन नियम 1 अप्रैल से लागू हो गए हैं, लेकिन शहरी ठोस अपशिष्ट प्रबंधन में इस महत्वपूर्ण बदलाव को लेकर निवासियों में बहुत कम जागरूकता है।
- According to the new Rules, the **Union Ministry of Housing and Urban Affairs** will support the **State** in assessing **waste management infrastructure** in all urban areas and in drawing up policies and strategies for **solid waste management**, including **waste-to-energy facilities**, in consultation with stakeholders and taking into account **solid waste management guidelines**, by **September 30, 2026**.



- नए नियमों के अनुसार, केंद्रीय आवासन एवं शहरी कार्य मंत्रालय सभी शहरी क्षेत्रों में अपशिष्ट प्रबंधन अवसंरचना के आकलन तथा हितधारकों से परामर्श और ठोस अपशिष्ट प्रबंधन दिशा-निर्देशों को ध्यान में रखते हुए वेस्ट-टू-एनर्जी सुविधाओं सहित ठोस अपशिष्ट प्रबंधन की नीतियाँ और रणनीतियाँ तैयार करने में राज्य की सहायता करेगा। यह कार्य 30 सितंबर, 2026 तक किया जाएगा।
- The new Rules will reduce the waste processing load of ULBs by at least 25% in big cities.
- नए नियम बड़े शहरों में ULBs के कचरा प्रसंस्करण भार को कम से कम 25% तक घटा देंगे।
- Recyclable sales will also help in cost recovery."
- पुनर्चक्रण योग्य सामग्री की बिक्री से भी लागत की भरपाई में सहायता मिलेगी।"

100% source segregation

100% स्रोत पर कचरा पृथक्करण

- According to estimates, about 55% of the waste generated by ULBs is wet waste (biodegradable), 30% comprises different types of recyclables, and the rest will be inert, sanitary, and household hazardous waste.
- अनुमान के अनुसार ULBs द्वारा उत्पन्न कचरे का लगभग 55% गीला (जैव-अपघटनीय) कचरा, 30% विभिन्न प्रकार की पुनर्चक्रण योग्य सामग्री, और शेष निष्क्रिय (Inert), स्वच्छता संबंधी तथा घरेलू खतरनाक कचरा होता है।

Responsibilities under the new SWM Rules

नए SWM नियमों के तहत जिम्मेदारियाँ

- The responsibilities of each stakeholder have been detailed in the new SWM Rules.
- नए SWM नियमों में प्रत्येक हितधारक की जिम्मेदारियों का विस्तृत उल्लेख किया गया है।
- Mandatory segregation at source; processing of wet waste; handling of dry, sanitary, and special care wastes; maintenance of reports and compliance via the online portal of the Central Pollution Control Board; user charges; and environmental compensation are the key aspects of the Rules.
- अनिवार्य स्रोत पर कचरा पृथक्करण; गीले कचरे का प्रसंस्करण; सूखे, स्वच्छता संबंधी, और विशेष देखभाल वाले कचरे का प्रबंधन; केंद्रीय प्रदूषण नियंत्रण बोर्ड के ऑनलाइन पोर्टल के माध्यम से रिपोर्टों का रखरखाव और अनुपालन; उपयोगकर्ता शुल्क; तथा पर्यावरणीय क्षतिपूर्ति इन नियमों के प्रमुख पहलू हैं।

Environmental Compensation

पर्यावरणीय क्षतिपूर्ति

- The Environmental Compensation concept is new to the 2026 SWM Rules, which apply the "polluter pays" principle.
- पर्यावरणीय क्षतिपूर्ति की अवधारणा 2026 के SWM नियमों में नई है, जो "प्रदूषक भुगतान करेगा" (Polluter Pays Principle) के सिद्धांत पर आधारित है।
- Although the corporation has introduced door-to-door collection and source segregation, illegal dumping and open burning continue in several parts of the city.
- हालाँकि निगम ने घर-घर कचरा संग्रहण और स्रोत पर कचरा पृथक्करण शुरू किया है, फिर भी शहर के कई हिस्सों में अवैध रूप से कचरा फेंकना और खुले में कचरा जलाना जारी है।

GS Paper III: Internal Security		06 July 2026
TOPICS COVERED		
06J7	Why tanks still matter टैंक आज भी क्यों महत्वपूर्ण हैं	



Why tanks still matter

Drones, missiles and precision-guided weapons have transformed the modern battlefield but military experts argue they cannot achieve the ultimate objective of war – controlling territory. Saurabh Trivedi examines why tanks and ground forces remain indispensable despite the rapid evolution of warfare, drawing on lessons from Ukraine and insights from senior Army officers



In June this year, Prime Minister Narendra Modi visited Larsen & Toubro's Hazira manufacturing facility in Gujarat, where he reviewed the Zorawar light tank and other indigenous defence systems. SPECIAL ARRANGEMENT

Military experts and strategic think tanks believe that achieving victory in war ultimately requires a physical ground presence. While drones, missiles, air power and cyber warfare can inflict heavy damage on military assets and infrastructure, they cannot occupy territory, enforce surrender or establish political control. History consistently shows that long-term military and political success requires ground forces.

Missiles and drones can destroy targets, but they cannot capture and hold territory. Ground forces, supported by armoured vehicles, remain indispensable for achieving decisive military objectives.

The role of tanks in modern warfare has become a subject of intense debate. Critics argue that the proliferation of drones and precision-guided weapons has reduced their battlefield relevance, while supporters maintain that tanks remain indispensable as mobile armoured platforms capable of delivering overwhelming firepower, breaching enemy defences and supporting infantry.

Over the decades, tanks have evolved into highly mobile, heavily armed main battle platforms equipped with advanced protection systems, improved sensors and networked battlefield capabilities.

A senior Indian Army officer said drones can create panic and inflict damage, but they cannot achieve the ultimate objective of war.

"To enforce surrender, a ground invasion of enemy territory is essential. That is what India demonstrated during the 1965 and 1971 wars against Pakistan. Tanks remain critical for such operations," the officer said.

He added that tanks are also evolving to meet emerging threats through lighter designs, anti-drone protection, electronic warfare jammers and hard-kill active protection systems capable of intercepting incoming missiles and drones.

Lessons from the Russia-Ukraine war

The Russia-Ukraine war has highlighted both the strengths and vulnerabilities of tanks. Numerous battlefield videos have shown tanks being destroyed by inexpensive drones, exposing their susceptibility in an increasingly transparent battlefield dominated by aerial surveillance and precision strikes.

The widespread adoption of drones has transformed modern warfare. They now perform reconnaissance, anti-infantry and anti-tank roles at a fraction of the cost of traditional Anti-Tank Guided Missiles (ATGMs). Many of the early drones used in the conflict were assembled from commercially available components, making them highly cost-effective.

Although tanks can no longer spearhead assaults without support, they remain highly effective when employed as part of an integrated combined-arms operation involving infantry, artillery, air defence, electronic warfare and drones. In



Air strikes and missiles are effective for punitive action and destroying military assets, but controlling land requires boots on the ground.

LIEUTENANT GENERAL (RETD.) DIBYJYOT SINGH
Director general of the Centre for Land Warfare Studies

such formations, tanks continue to provide unmatched mobile firepower, operational flexibility and battlefield shock effect.

Recent conflicts have demonstrated that low-cost drones can impose disproportionate costs on technologically superior militaries.

During the U.S.-Iran conflict, reports indicated that U.S. Terminal High Altitude Area Defense radar sites in West Asia were targeted by inexpensive Shahed-like drones.

India witnessed a similar trend during Operation Sindoor, when Pakistan reportedly employed swarms of low-radar cross-section drones to saturate Indian airspace, overwhelm air defence systems and exhaust expensive interceptor missiles. Cheap drones costing only a few lakh rupees can force defenders to launch interceptors worth several crores of rupees. Even when intercepted, these drones create an unfavourable economic equation for the defender. Modern warfare is increasingly becoming a battle of mathematics, where defenders can lose economically despite winning tactically.

The Zorawar light tank

Recognising the changing character of warfare, India is developing the indigenous Zorawar light tank specifically for operations along the Line of Actual Control (LAC).

In June this year, Prime Minister Narendra Modi visited Larsen & Toubro's Hazira manufacturing facility in Gujarat, where he reviewed the Zorawar light tank and other indigenous defence

systems. Jointly developed by the Defence Research and Development Organisation (DRDO) and L&T Defence, the 25-tonne, air-transportable combat vehicle is designed for rapid deployment in high-altitude regions.

The Indian Army now expects to induct the Zorawar between 2028 and 2029. Now-retired Army Chief General Upendra Dwivedi recently stated that issues identified during development and testing are being addressed through routine design refinements. The Army plans to induct 354 Zorawar tanks under a programme estimated to cost around ₹17,500 crore.

One of the primary reasons for the revised induction timeline is the Army's demand for enhanced protection against enemy fire.

Developers face the difficult challenge of improving armour protection while maintaining mobility and an optimal power-to-weight ratio. Achieving both objectives simultaneously is technically demanding and has extended the development cycle.

The Zorawar has been specifically designed for operations along the LAC, where China's People's Liberation Army has already deployed Type-15 light tanks. Indian military planners view the platform as critical to narrowing the operational gap and enabling rapid reinforcement of forward positions in mountainous terrain.

India has deployed Russian-origin T-72 and T-90 tanks in Ladakh, but these platforms were originally designed for plains and desert warfare.

The T-72 Ajeya remains the Army's largest tank fleet, with approximately 2,400-2,500 tanks, many of which are over four decades old. The more capable T-90S Bhishma, numbering more than 1,200, forms the backbone of India's armoured corps.

India has also inducted 124 Arjun Mk1 tanks, while 118 upgraded Mk1A variants are on order. However, the Arjun's weight of nearly 67 tonnes has limited its operational utility because of constraints imposed by bridges, culverts and railway transporters.

Until recently, India possessed more than 4,000 medium and heavy tanks but not a single light tank. That absence became a major operational concern after the 2020 India-China border crisis.

Unique challenge

India faces a unique strategic challenge: preparing simultaneously for conventional warfare against Pakistan in the plains and armoured operations against China in the high Himalayas.

The western theatre is ideal for traditional armoured manoeuvre warfare. The northern theatre presents an entirely different environment, characterised by extreme altitude, narrow valleys, weak bridges and steep gradients.

At high altitudes, tank engines lose significant power because of thin air, fuel consumption increases, movement becomes difficult and recovering disabled vehicles is extremely challenging. Without a credible offensive armoured capability in the mountains, Indian planners feared continued vulnerability to incremental Chinese military pressure.

The capability gap had been recognised after the 1987 Sino-Indian border crisis and again after the 2017 Doklam stand-off. However, the 2020 Ladakh confrontation accelerated the launch of Project Zorawar under an emergency procurement programme. Alongside the Zorawar programme, India is pursuing Project Ranjeet, also known as the Future Ready Combat Vehicle (FRCV). The programme aims to replace ageing T-72 tanks with approximately 1,700-1,800 next-generation main battle tanks over the next decade. Expected to weigh around 55 tonnes, the FRCV will feature a gun larger than 120 mm, advanced explosive reactive armour, underbody mine protection, integrated anti-drone systems, AI-assisted fire control and network-centric connectivity with UAVs and satellites.

The programme is estimated to cost between ₹57,000 crore and ₹60,000 crore.

Tanks are adapting, not disappearing

Lieutenant General (retd.) Dushyant Singh, director general of the Centre for Land Warfare Studies (CLAWS), said no single template applies to every conflict.

"In the India-Pakistan context, territory remains central. Neither side will voluntarily surrender land. Likewise, the Iran-U.S. conflict demonstrates that unless territory is physically occupied, victory remains incomplete. Air strikes and missiles are effective for punitive action and destroying military assets, but controlling land requires boots on the ground. Legacy platforms such as tanks remain relevant despite advances in drones and missiles," he said.

He noted that Russia has managed to seize and hold territory in Ukraine because it possesses both infantry and armoured formations.

According to him, tanks now require dedicated anti-drone protection and integrated air defence support. Obstacles such as canals and layered defensive lines also complicate armoured operations.

Singh emphasised that future warfare will increasingly rely on integrated multi-domain operations involving the Army, Air Force and Navy, supported by cyber warfare, economic measures and maritime power.

He added that military history demonstrates a continuous cycle of technological innovation and countermeasures.

"Whenever one weapon system appears dominant, countermeasures eventually emerge. Tanks will continue adapting through technological innovation and remain relevant," Singh said.

Role has changed, not ended

Globally, tanks no longer dominate battlefields in the way they did between the Second World War and the end of the Cold War. Cheap drones have significantly reduced their ability to operate independently. Yet they have not become obsolete.

India is introducing an entirely new class of tanks because its principal armoured challenge lies not on drone-saturated plains but in the high Himalayas, where altitude, mobility and transportability determine operational success.

The Zorawar is designed to address a uniquely Indian strategic requirement that many Western militaries do not face. The tank is no longer the undisputed king of the battlefield. But it remains something even more enduring: an indispensable component of combined-arms warfare.

In a battlefield increasingly dominated by drones, guided missiles and precision weapons capable of destroying multi-million-dollar armoured vehicles within seconds, tanks continue to provide one capability that no drone can replicate: the ability to physically seize, occupy and hold ground. Ultimately, wars are won not only by destroying the enemy but by controlling territory. And for that, boots on the ground, supported by tanks, remain indispensable.

saurabh.trivedi@thehindu.co.in



An Indian Army soldier looking at a drone hovering over the Akhnoor sector on the Line of Control in the Jammu region. AFP

06J7. Why tanks still matter

टैंक आज भी क्यों महत्वपूर्ण हैं

- **Drones, missiles and precision-guided weapons** have transformed the modern battlefield, but military experts argue they cannot achieve the ultimate objective of war – **controlling territory**.
- **ड्रोन, मिसाइलें और प्रिसीजन-गाइडेड हथियारों** ने आधुनिक युद्धक्षेत्र को बदल दिया है, लेकिन सैन्य विशेषज्ञों का तर्क है कि वे युद्ध के अंतिम उद्देश्य — **क्षेत्र पर नियंत्रण स्थापित करने** — को प्राप्त नहीं कर सकते।
- **Saurabh Trivedi** examines why **tanks and ground forces** remain indispensable despite the rapid evolution of warfare, drawing on lessons from **Ukraine** and insights from senior **Army officers**.
- **सौरभ त्रिवेदी** बताते हैं कि युद्ध की तेजी से बदलती प्रकृति के बावजूद **टैंक और जमीनी सेनाएँ** क्यों अपरिहार्य बनी हुई हैं। इसके लिए उन्होंने **यूक्रेन** से मिले सबक और वरिष्ठ **सेना अधिकारियों** की राय का विश्लेषण किया है।
- Military experts and strategic think tanks believe that achieving victory in war ultimately requires a **physical ground presence**.
- सैन्य विशेषज्ञों और रणनीतिक थिंक टैंकों का मानना है कि युद्ध में विजय प्राप्त करने के लिए अंततः **जमीनी सैन्य उपस्थिति** आवश्यक होती है।
- While **drones, missiles, air power and cyber warfare** can inflict heavy damage on military assets and infrastructure, they cannot occupy territory, enforce surrender or establish political control.
- हालाँकि **ड्रोन, मिसाइलें, वायु शक्ति और साइबर युद्ध** सैन्य संसाधनों और बुनियादी ढाँचे को भारी नुकसान पहुँचा सकते हैं, लेकिन वे किसी क्षेत्र पर कब्ज़ा नहीं कर सकते, आत्मसमर्पण नहीं करा सकते और न ही राजनीतिक नियंत्रण स्थापित कर सकते हैं।
- History consistently shows that long-term military and political success requires **ground forces**.
- इतिहास लगातार यह दर्शाता है कि दीर्घकालिक सैन्य और राजनीतिक सफलता के लिए **जमीनी सेनाएँ** आवश्यक होती हैं।
- **Missiles and drones** can destroy targets, but they cannot capture and hold territory.
- **मिसाइलें और ड्रोन** लक्ष्यों को नष्ट कर सकते हैं, लेकिन वे किसी क्षेत्र पर कब्ज़ा करके उसे अपने नियंत्रण में नहीं रख सकते।
- **Ground forces**, supported by **armoured vehicles**, remain indispensable for achieving decisive military objectives.
- **बख्तरबंद वाहनों** से समर्थित **जमीनी सेनाएँ** निर्णायक सैन्य उद्देश्यों की प्राप्ति के लिए आज भी अपरिहार्य हैं।
- The role of **tanks** in modern warfare has become a subject of intense debate.
- आधुनिक युद्ध में **टैंकों** की भूमिका गहन बहस का विषय बन गई है।
- Critics argue that the proliferation of **drones and precision-guided weapons** has reduced their battlefield relevance, while supporters maintain that tanks remain indispensable as mobile armoured platforms capable of delivering overwhelming **firepower**, breaching enemy defences and supporting **infantry**.
- आलोचकों का कहना है कि **ड्रोन और प्रिसीजन-गाइडेड हथियारों** के प्रसार ने युद्धक्षेत्र में टैंकों की उपयोगिता कम कर दी है, जबकि समर्थकों का मानना है कि टैंक आज भी अत्यधिक **मारक क्षमता**, दुश्मन की रक्षा पंक्तियों को तोड़ने और **पैदल सेना** को समर्थन देने वाले मोबाइल बख्तरबंद प्लेटफॉर्म के रूप में अपरिहार्य हैं।
- Over the decades, **tanks** have evolved into highly mobile, heavily armed **main battle platforms** equipped with advanced protection systems, improved sensors and networked battlefield capabilities.



- दशकों के दौरान टैंक अत्यधिक गतिशील, भारी हथियारों से लैस मुख्य युद्ध प्लेटफॉर्म बन गए हैं, जिनमें उन्नत सुरक्षा प्रणालियाँ, बेहतर सेंसर और नेटवर्क आधारित युद्धक्षेत्र क्षमताएँ शामिल हैं।
- A senior **Indian Army** officer said **drones** can create panic and inflict damage, but they cannot achieve the ultimate objective of war.
- एक वरिष्ठ **भारतीय सेना** अधिकारी ने कहा कि **ड्रोन** दहशत फैला सकते हैं और नुकसान पहुँचा सकते हैं, लेकिन वे युद्ध के अंतिम उद्देश्य को प्राप्त नहीं कर सकते।
- "To enforce surrender, a **ground invasion** of enemy territory is essential.
- उन्होंने कहा, "आत्मसमर्पण कराने के लिए दुश्मन के क्षेत्र में **जमीनी आक्रमण** आवश्यक है।
- That is what **India** demonstrated during the **1965** and **1971 wars** against **Pakistan**.
- यही बात **भारत** ने **1965** और **1971 के युद्धों** में **पाकिस्तान** के विरुद्ध प्रदर्शित की थी।
- **Tanks** remain critical for such operations," the officer said.
- अधिकारी ने कहा कि ऐसे अभियानों के लिए टैंक आज भी अत्यंत महत्वपूर्ण हैं।
- He added that **tanks** are also evolving to meet emerging threats through lighter designs, **anti-drone protection**, **electronic warfare jammers** and **hard-kill active protection systems** capable of intercepting incoming missiles and drones.
- उन्होंने कहा कि टैंक भी नए खतरों से निपटने के लिए हल्के डिज़ाइन, एंटी-ड्रोन सुरक्षा, इलेक्ट्रॉनिक युद्ध जैमर और आने वाली मिसाइलों एवं ड्रोन को रोकने वाली **हार्ड-किल एक्टिव प्रोटेक्शन सिस्टम** जैसी तकनीकों से विकसित हो रहे हैं।

Lessons from the Russia-Ukraine war

रूस-यूक्रेन युद्ध से मिले सबक

- The **Russia-Ukraine war** has highlighted both the strengths and vulnerabilities of **tanks**.
- **रूस-यूक्रेन युद्ध** ने टैंकों की ताकत और कमजोरियों दोनों को उजागर किया है।
- Numerous battlefield videos have shown tanks being destroyed by inexpensive **drones**, exposing their susceptibility in an increasingly transparent battlefield dominated by aerial surveillance and precision strikes.
- कई युद्धक्षेत्र वीडियो में सस्ते **ड्रोन** द्वारा टैंकों को नष्ट होते हुए दिखाया गया है, जिससे हवाई निगरानी और सटीक हमलों वाले आधुनिक युद्धक्षेत्र में उनकी संवेदनशीलता उजागर हुई है।
- The widespread adoption of **drones** has transformed modern warfare.
- **ड्रोन** के व्यापक उपयोग ने आधुनिक युद्ध की प्रकृति बदल दी है।
- They now perform **reconnaissance**, **anti-infantry** and **anti-tank** roles at a fraction of the cost of traditional **Anti-Tank Guided Missiles (ATGMs)**.
- अब वे पारंपरिक एंटी-टैंक गाइडेड मिसाइल (ATGM) की तुलना में बहुत कम लागत पर टोही, पैदल सेना विरोधी और टैंक विरोधी भूमिकाएँ निभाते हैं।
- Many of the early drones used in the conflict were assembled from commercially available components, making them highly **cost-effective**.
- संघर्ष में इस्तेमाल किए गए शुरुआती कई ड्रोन बाज़ार में उपलब्ध सामान्य पुर्जों से बनाए गए थे, जिससे वे अत्यधिक लागत प्रभावी बने।
- Although **tanks** can no longer spearhead assaults without support, they remain highly effective when employed as part of an integrated **combined-arms operation** involving **infantry**, **artillery**, **air defence**, **electronic warfare** and **drones**.
- हालाँकि टैंक अब बिना समर्थन के आक्रमण का नेतृत्व नहीं कर सकते, लेकिन पैदल सेना, तोपखाने, वायु रक्षा, इलेक्ट्रॉनिक युद्ध और ड्रोन के साथ संयुक्त अभियान में वे अत्यधिक प्रभावी बने रहते हैं।
- In such formations, **tanks** continue to provide unmatched mobile **firepower**, operational flexibility and battlefield shock effect.
- ऐसी संरचनाओं में टैंक अब भी अद्वितीय गतिशील **मारक क्षमता**, परिचालन लचीलापन और युद्धक्षेत्र में मनोवैज्ञानिक प्रभाव प्रदान करते हैं।



- Recent conflicts have demonstrated that **low-cost drones** can impose disproportionate costs on technologically superior militaries.
- हाल के संघर्षों ने दिखाया है कि **कम लागत वाले ड्रोन** तकनीकी रूप से श्रेष्ठ सेनाओं पर भी अत्यधिक आर्थिक बोझ डाल सकते हैं।
- During the **U.S.-Iran conflict**, reports indicated that **U.S. Terminal High Altitude Area Defense** radar sites in **West Asia** were targeted by inexpensive **Shahed-like drones**.
- अमेरिका-ईरान संघर्ष** के दौरान रिपोर्टों में कहा गया कि **पश्चिम एशिया** में **अमेरिकी THAAD रडार स्थलों** को सस्ते **शाहेद जैसे ड्रोन** से निशाना बनाया गया।
- India** witnessed a similar trend during **Operation Sindoor**, when **Pakistan** reportedly employed swarms of low-radar cross-section drones to saturate Indian airspace, overwhelm air defence systems and exhaust expensive interceptor missiles.
- भारत ने ऑपरेशन सिंदूर** के दौरान भी ऐसा ही रुझान देखा, जब **पाकिस्तान** ने कथित रूप से कम रडार पहचान वाले ड्रोन के झुंड का उपयोग भारतीय वायु क्षेत्र को भरने, वायु रक्षा प्रणाली पर दबाव बनाने और महंगी इंटरसेप्टर मिसाइलों को समाप्त करने के लिए किया।
- Cheap **drones** costing only a few lakh rupees can force defenders to launch interceptors worth several crores of rupees.
- कुछ लाख रुपये कीमत वाले सस्ते **ड्रोन** रक्षकों को कई करोड़ रुपये की इंटरसेप्टर मिसाइलें दागने के लिए मजबूर कर सकते हैं।
- Even when intercepted, these drones create an unfavourable economic equation for the defender.
- यहाँ तक कि जब उन्हें मार गिराया जाता है, तब भी ये ड्रोन रक्षकों के लिए प्रतिकूल आर्थिक स्थिति पैदा करते हैं।
- Modern warfare is increasingly becoming a battle of mathematics, where defenders can lose economically despite winning tactically.
- आधुनिक युद्ध धीरे-धीरे गणित का युद्ध बनता जा रहा है, जहाँ सामरिक जीत के बावजूद आर्थिक दृष्टि से रक्षक पक्ष नुकसान उठा सकता है।

The Zorawar light tank ज़ोरावर लाइट टैंक

- Recognising the changing character of warfare, **India** is developing the indigenous **Zorawar light tank** specifically for operations along the **Line of Actual Control (LAC)**.
- युद्ध की बदलती प्रकृति को ध्यान में रखते हुए **भारत वास्तविक नियंत्रण रेखा (LAC)** पर अभियानों के लिए स्वदेशी **ज़ोरावर लाइट टैंक** विकसित कर रहा है।
- In **June** this year, **Prime Minister Narendra Modi** visited **Larsen & Toubro's Hazira** manufacturing facility in **Gujarat**, where he reviewed the **Zorawar light tank** and other indigenous defence systems.
- इस वर्ष **जून** में **प्रधानमंत्री नरेंद्र मोदी** ने **गुजरात** स्थित **लार्सन एंड टुब्रो के हजीरा संयंत्र** का दौरा किया, जहाँ उन्होंने **ज़ोरावर लाइट टैंक** और अन्य स्वदेशी रक्षा प्रणालियों का अवलोकन किया।
- Jointly developed by the **Defence Research and Development Organisation (DRDO)** and **L&T Defence**, the **25-tonne, air-transportable** combat vehicle is designed for rapid deployment in **high-altitude regions**.
- रक्षा अनुसंधान एवं विकास संगठन (DRDO)** और **एल एंड टी डिफेंस** द्वारा संयुक्त रूप से विकसित यह **25 टन वज़नी हवाई परिवहन योग्य** युद्धक वाहन **उच्च ऊँचाई वाले क्षेत्रों** में त्वरित तैनाती के लिए बनाया गया है।
- The **Indian Army** now expects to induct the **Zorawar** between **2028 and 2029**.
- भारतीय सेना** अब **2028 से 2029** के बीच **ज़ोरावर** को शामिल करने की उम्मीद कर रही है।
- Now-retired **Army Chief General Upendra Dwivedi** recently stated that issues identified during development and testing are being addressed through routine design refinements.

- सेवानिवृत्त सेना प्रमुख जनरल उपेंद्र द्विवेदी ने हाल ही में कहा कि विकास और परीक्षण के दौरान सामने आए मुद्दों को नियमित डिज़ाइन सुधारों के माध्यम से दूर किया जा रहा है।
- The Army plans to induct **354 Zorawar tanks** under a programme estimated to cost around **₹17,500 crore**.
- सेना लगभग **₹17,500 करोड़** की लागत वाली योजना के तहत **354 ज़ोरावर टैंक** शामिल करने की योजना बना रही है।
- One of the primary reasons for the revised induction timeline is the Army's demand for enhanced protection against enemy fire.
- संशोधित शामिलीकरण समयसीमा का एक प्रमुख कारण दुश्मन की गोलीबारी से बेहतर सुरक्षा की सेना की मांग है।
- Developers face the difficult challenge of improving **armour protection** while maintaining **mobility** and an optimal **power-to-weight ratio**.
- डेवलपर्स के सामने **बख़तर सुरक्षा**, **गतिशीलता** और उपयुक्त **पावर-टू-वेट अनुपात** को एक साथ बनाए रखने की कठिन चुनौती है।
- Achieving both objectives simultaneously is technically demanding and has extended the development cycle.
- इन दोनों उद्देश्यों को एक साथ प्राप्त करना तकनीकी रूप से कठिन है और इसी कारण विकास प्रक्रिया लंबी हो गई है।
- The **Zorawar** has been specifically designed for operations along the **LAC**, where **China's People's Liberation Army** has already deployed **Type-15 light tanks**.
- **ज़ोरावर** को विशेष रूप से **LAC** पर अभियानों के लिए डिज़ाइन किया गया है, जहाँ **चीन की पीपुल्स लिबरेशन आर्मी** पहले से ही **टाइप-15 लाइट टैंक** तैनात कर चुकी है।
- Indian military planners view the platform as critical to narrowing the operational gap and enabling rapid reinforcement of forward positions in mountainous terrain.
- भारतीय सैन्य योजनाकार इस प्लेटफॉर्म को परिचालन अंतर कम करने और पर्वतीय क्षेत्रों में अग्रिम चौकियों को शीघ्र सुदृढ़ करने के लिए अत्यंत महत्वपूर्ण मानते हैं।
- **India** has deployed **Russian-origin T-72** and **T-90 tanks** in **Ladakh**, but these platforms were originally designed for **plains** and **desert warfare**.
- **भारत** ने **लद्दाख** में **रूसी मूल के T-72 और T-90 टैंक** तैनात किए हैं, लेकिन इनका मूल डिज़ाइन **मैदानी और रेगिस्तानी युद्ध** के लिए किया गया था।
- **The T-72 Ajeya remains the Army's largest tank fleet**
T-72 अजेय सेना का सबसे बड़ा टैंक बेड़ा बना हुआ है
- The **T-72 Ajeya** remains the Army's largest tank fleet, with approximately **2,400-2,500 tanks**, many of which are over **four decades** old.
- **T-72 अजेय सेना का सबसे बड़ा टैंक बेड़ा बना हुआ है**, जिसमें लगभग **2,400-2,500 टैंक** हैं, जिनमें से कई **चार दशक** से अधिक पुराने हैं।
- The more capable **T-90S Bhisma**, numbering more than **1,200**, forms the backbone of **India's armoured corps**.
- अधिक सक्षम **T-90S भीष्म**, जिनकी संख्या **1,200** से अधिक है, **भारत की बख़तरबंद कोर** की रीढ़ हैं।
- **India** has also inducted **124 Arjun Mk1 tanks**, while **118 upgraded Mk1A variants** are on order.
- **भारत** ने **124 अर्जुन Mk1 टैंक** भी शामिल किए हैं, जबकि **118 उन्नत Mk1A संस्करणों** का ऑर्डर दिया गया है।
- However, the **Arjun's** weight of nearly **67 tonnes** has limited its operational utility because of constraints imposed by **bridges, culverts** and **railway transporters**.
- हालाँकि, लगभग **67 टन** वजन होने के कारण **अर्जुन टैंक** की परिचालन उपयोगिता **पुलों, पुलियों और रेलवे ट्रांसपोर्टर्स** की सीमाओं के कारण प्रभावित हुई है।

- Until recently, **India** possessed more than **4,000 medium and heavy tanks** but not a single **light tank**.
- हाल तक **भारत** के पास **4,000 से अधिक मध्यम और भारी टैंक** थे, लेकिन एक भी **हल्का टैंक** नहीं था।
- That absence became a major operational concern after the **2020 India-China border crisis**.
- यह कमी **2020 भारत-चीन सीमा संकट** के बाद एक प्रमुख परिचालन चिंता बन गई।

Unique challenge

विशिष्ट चुनौती

- **India** faces a unique strategic challenge: preparing simultaneously for **conventional warfare** against **Pakistan** in the plains and **armoured operations** against **China** in the **high Himalayas**.
- **भारत** के सामने एक विशिष्ट रणनीतिक चुनौती है—मैदानी क्षेत्रों में **पाकिस्तान** के विरुद्ध **पारंपरिक युद्ध** और **उच्च हिमालय** में **चीन** के विरुद्ध **बख्तरबंद अभियानों** की एक साथ तैयारी करना।
- The **western theatre** is ideal for traditional armoured manoeuvre warfare.
- **पश्चिमी मोर्चा** पारंपरिक बख्तरबंद युद्धाभ्यास के लिए उपयुक्त है।
- The **northern theatre** presents an entirely different environment, characterised by **extreme altitude, narrow valleys, weak bridges and steep gradients**.
- वहीं **उत्तरी मोर्चा** पूरी तरह अलग वातावरण प्रस्तुत करता है, जिसकी विशेषताएँ हैं **अत्यधिक ऊँचाई, संकीर्ण घाटियाँ, कमज़ोर पुल और तीव्र ढलानें**।
- At **high altitudes**, tank engines lose significant power because of **thin air**, fuel consumption increases, movement becomes difficult and recovering disabled vehicles is extremely challenging.
- **उच्च ऊँचाई** पर **पतली हवा** के कारण टैंकों के इंजन की शक्ति काफी कम हो जाती है, ईंधन की खपत बढ़ जाती है, आवाजाही कठिन हो जाती है और क्षतिग्रस्त वाहनों को वापस लाना अत्यंत चुनौतीपूर्ण होता है।
- Without a credible offensive armoured capability in the mountains, Indian planners feared continued vulnerability to incremental **Chinese military pressure**.
- पहाड़ों में विश्वसनीय आक्रामक बख्तरबंद क्षमता के अभाव में भारतीय योजनाकारों को **चीनी सैन्य दबाव** के प्रति लगातार संवेदनशील बने रहने की आशंका थी।
- The capability gap had been recognised after the **1987 Sumdorong Chu crisis** and again after the **2017 Doklam stand-off**.
- इस क्षमता की कमी को **1987 के सुमदोरोंग चू संकट** और बाद में **2017 के डोकलाम गतिरोध** के बाद भी पहचाना गया था।
- However, the **2020 Ladakh confrontation** accelerated the launch of **Project Zorawar** under an emergency procurement programme.
- हालाँकि, **2020 के लद्दाख टकराव** ने आपातकालीन खरीद कार्यक्रम के तहत **प्रोजेक्ट ज़ोरावर** की शुरुआत को तेज़ कर दिया।
- Alongside the **Zorawar** programme, **India** is pursuing **Project Ranjeet**, also known as the **Future Ready Combat Vehicle (FRCV)**.
- **ज़ोरावर** कार्यक्रम के साथ-साथ **भारत प्रोजेक्ट रणजीत**, जिसे **Future Ready Combat Vehicle (FRCV)** भी कहा जाता है, पर भी कार्य कर रहा है।
- The programme aims to replace ageing **T-72 tanks** with approximately **1,700-1,800 next-generation main battle tanks** over the next decade.
- इस कार्यक्रम का उद्देश्य अगले दशक में पुराने **T-72 टैंकों** के स्थान पर लगभग **1,700-1,800 अगली पीढ़ी के मुख्य युद्धक टैंक** शामिल करना है।
- Expected to weigh around **55 tonnes**, the **FRCV** will feature a gun larger than **120 mm**, advanced **explosive reactive armour, underbelly mine protection, integrated anti-drone systems, AI-assisted fire control** and **network-centric connectivity** with **UAVs and satellites**.



- लगभग 55 टन वजन वाले FRCV में 120 मिमी से बड़ी तोप, उन्नत एक्सप्लोसिव रिएक्टिव आर्मेड, अंडरबेली माइन प्रोटेक्शन, एकीकृत एंटी-ड्रोन सिस्टम, AI-सहायता प्राप्त फायर कंट्रोल तथा UAV और उपग्रहों से नेटवर्क-केंद्रित कनेक्टिविटी होगी।
- The programme is estimated to cost between ₹57,000 crore and ₹60,000 crore.
- इस कार्यक्रम की अनुमानित लागत ₹57,000 करोड़ से ₹60,000 करोड़ के बीच है।

‘Tanks are adapting, not disappearing’

‘टैंक बदल रहे हैं, समाप्त नहीं हो रहे’

- Lieutenant General (retd.) Dushyant Singh, Director General of the Centre for Land Warfare Studies (CLAWS), said no single template applies to every conflict.
- लेफ्टिनेंट जनरल (सेवानिवृत्त) दुश्यंत सिंह, सेंटर फॉर लैंड वॉरफेयर स्टडीज़ (CLAWS) के महानिदेशक ने कहा कि हर संघर्ष पर एक ही रणनीति लागू नहीं होती।
- “In the India-Pakistan context, **territory** remains central.
- उन्होंने कहा, “भारत-पाकिस्तान के संदर्भ में क्षेत्र सबसे महत्वपूर्ण बना हुआ है।
- Neither side will voluntarily surrender land.
- कोई भी पक्ष स्वेच्छा से भूमि नहीं छोड़ेगा।
- Likewise, the **Iran-U.S. conflict** demonstrates that unless territory is physically occupied, victory remains incomplete.
- इसी प्रकार **ईरान-अमेरिका संघर्ष** यह दर्शाता है कि जब तक किसी क्षेत्र पर भौतिक रूप से कब्ज़ा नहीं किया जाता, तब तक विजय अधूरी रहती है।
- **Air strikes** and **missiles** are effective for punitive action and destroying military assets, but controlling land requires **boots on the ground**.
- **हवाई हमले और मिसाइलें** दंडात्मक कार्रवाई तथा सैन्य संसाधनों को नष्ट करने में प्रभावी हैं, लेकिन भूमि पर नियंत्रण के लिए **जमीनी सैनिकों** की आवश्यकता होती है।
- Legacy platforms such as **tanks** remain relevant despite advances in **drones** and **missiles**,” he said.
- उन्होंने कहा कि **ड्रोन** और **मिसाइलों** में प्रगति के बावजूद **टैंक** जैसे पारंपरिक प्लेटफॉर्म आज भी प्रासंगिक हैं।
- He noted that **Russia** has managed to seize and hold territory in **Ukraine** because it possesses both **infantry** and **armoured formations**.
- उन्होंने कहा कि **रूस यूक्रेन** में क्षेत्र पर कब्ज़ा करने और उसे बनाए रखने में सफल रहा क्योंकि उसके पास **पैदल सेना** और **बख्तरबंद संरचनाएँ** दोनों हैं।
- According to him, **tanks** now require dedicated **anti-drone protection** and integrated **air defence** support.
- उनके अनुसार अब **टैंकों** को विशेष **एंटी-ड्रोन सुरक्षा** और एकीकृत **वायु रक्षा** समर्थन की आवश्यकता है।
- Obstacles such as **canals** and layered defensive lines also complicate armoured operations.
- **नहरें** और बहु-स्तरीय रक्षात्मक पंक्तियाँ भी बख्तरबंद अभियानों को जटिल बनाती हैं।
- **Singh** emphasised that future warfare will increasingly rely on integrated **multi-domain operations** involving the **Army**, **Air Force** and **Navy**, supported by **cyber warfare**, **economic measures** and **maritime power**.
- सिंह ने बल दिया कि भविष्य का युद्ध **सेना**, **वायु सेना** और **नौसेना** की संयुक्त **बहु-क्षेत्रीय (Multi-Domain)** कार्रवाइयों पर आधारित होगा, जिन्हें **साइबर युद्ध**, **आर्थिक उपायों** और **समुद्री शक्ति** का समर्थन प्राप्त होगा।
- He added that military history demonstrates a continuous cycle of **technological innovation** and **countermeasures**.
- उन्होंने कहा कि सैन्य इतिहास **तकनीकी नवाचार** और **प्रति-उपायों** के निरंतर चक्र को दर्शाता है।
- “Whenever one weapon system appears dominant, **countermeasures** eventually emerge.
- उन्होंने कहा, “जब भी कोई हथियार प्रणाली प्रमुख बनती है, उसके विरुद्ध **प्रति-उपाय** भी विकसित हो जाते हैं।
- **Tanks** will continue adapting through technological innovation and remain relevant,” **Singh** said.

- सिंह ने कहा कि टैंक तकनीकी नवाचारों के माध्यम से लगातार विकसित होते रहेंगे और प्रासंगिक बने रहेंगे।

Role has changed, not ended

भूमिका बदली है, समाप्त नहीं हुई

- Globally, **tanks** no longer dominate battlefields in the way they did between the **Second World War** and the end of the **Cold War**.
- वैश्विक स्तर पर टैंक अब युद्धक्षेत्र पर वैसे प्रभुत्वशाली नहीं रहे, जैसे वे **द्वितीय विश्व युद्ध** से लेकर **शीत युद्ध** के अंत तक थे।
- Cheap **drones** have significantly reduced their ability to operate independently.
- सस्ते **ड्रोन** ने उनकी स्वतंत्र रूप से संचालन करने की क्षमता को काफी कम कर दिया है।
- Yet they have not become obsolete.
- फिर भी वे अप्रासंगिक नहीं हुए हैं।
- **India** is introducing an entirely new class of tanks because its principal armoured challenge lies not on drone-saturated plains but in the **high Himalayas**, where **altitude**, **mobility** and **transportability** determine operational success.
- **भारत** पूरी तरह नई श्रेणी के टैंक शामिल कर रहा है क्योंकि उसकी मुख्य बख्तरबंद चुनौती ड्रोन से भरे मैदानी क्षेत्रों में नहीं, बल्कि **उच्च हिमालय** में है, जहाँ **ऊँचाई**, **गतिशीलता** और **परिवहन क्षमता** परिचालन सफलता तय करती हैं।
- The **Zorawar** is designed to address a uniquely Indian strategic requirement that many Western militaries do not face.
- **ज़ोरावर** को भारत की विशिष्ट रणनीतिक आवश्यकता को ध्यान में रखकर डिज़ाइन किया गया है, जिसका सामना कई पश्चिमी सेनाओं को नहीं करना पड़ता।
- The tank is no longer the undisputed king of the battlefield.
- टैंक अब युद्धक्षेत्र का निर्विवाद राजा नहीं रहा है।
- But it remains something even more enduring: an indispensable component of **combined-arms warfare**.
- लेकिन यह आज भी **संयुक्त हथियार युद्ध (Combined-Arms Warfare)** का एक अपरिहार्य घटक बना हुआ है।
- In a battlefield increasingly dominated by **drones**, **guided missiles** and **precision weapons** capable of destroying multi-million-dollar armoured vehicles within seconds, **tanks** continue to provide one capability that no drone can replicate: the ability to physically seize, occupy and hold ground.
- ऐसे युद्धक्षेत्र में जहाँ **ड्रोन**, **गाइडेड मिसाइलें** और **प्रेसीजन हथियार** कुछ ही सेकंड में करोड़ों डॉलर के बख्तरबंद वाहनों को नष्ट कर सकते हैं, टैंक अब भी एक ऐसी क्षमता प्रदान करते हैं जिसकी बराबरी कोई ड्रोन नहीं कर सकता—किसी क्षेत्र पर **भौतिक रूप से कब्ज़ा करना**, उसे **नियंत्रित रखना और बनाए रखना**।
- Ultimately, wars are won not only by destroying the enemy but by **controlling territory**.
- अंततः युद्ध केवल दुश्मन को नष्ट करके नहीं, बल्कि **क्षेत्र पर नियंत्रण स्थापित करके** जीते जाते हैं।
- And for that, **boots on the ground**, supported by **tanks**, remain indispensable.
- और इसके लिए टैंकों के समर्थन से **जमीनी सैनिक** आज भी अपरिहार्य बने हुए हैं।