



IQRA IAS

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Monthly Current Affairs – July 2024

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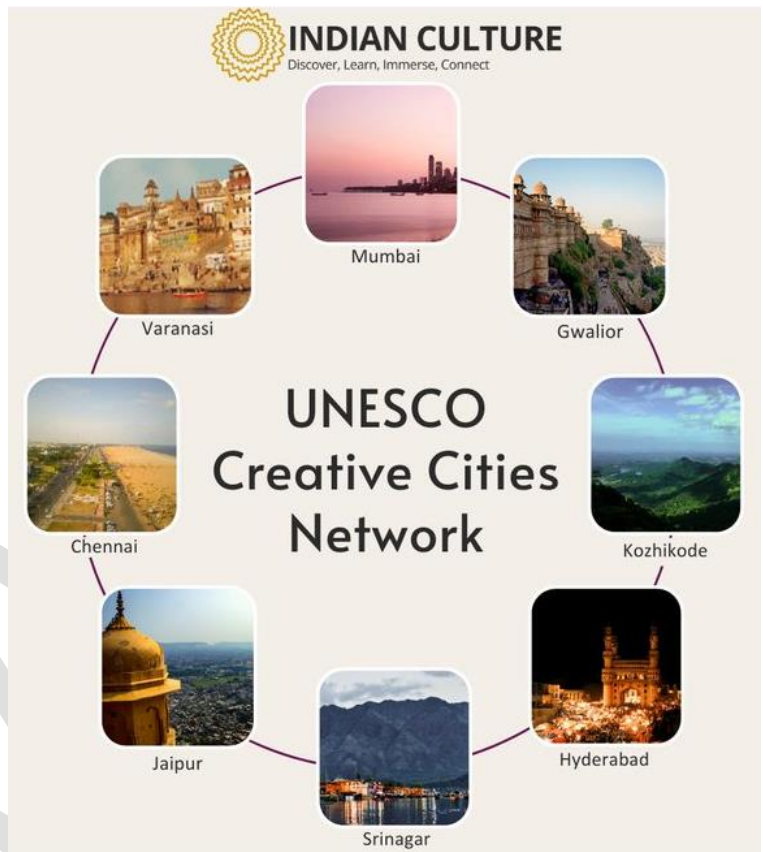
Art and Culture

Kozhikode Secures 'City of Literature' Status at Annual UCCN Conference

Context: Kozhikode became part of the UNESCO Creative Cities Network (UCCN) as the city was awarded the title of "City of Literature" at the 16th annual conference of the network that began in Portugal.

Key Highlights

- Among the representatives of the 350 UNESCO 'Creatives Cities' in the world, Mayor Beena Philip and Corporation Secretary K.U. Bini were the face of Kozhikode. "This is a moment of pride for Kozhikode and so many people have been waiting for this moment," Ms. Philip said from Braga, a city in northern Portugal where the conference is being held.
- The theme of the annual conference of UCCN this year is "Bringing youth to the table for the next decade". The forenoon session on the first day of the five-day conference began with an introduction on the topic and this was followed by an integration ceremony for the new members including Kozhikode. The older members presented their activities in clusters, offering a roadmap for the new members of the network to take their works forward.
- President of Portugal Marcelo Rebelo de Sousa and senior UN officials took part in the conference's opening ceremony.
- The new members, including Kozhikode and Gwalior, which was awarded the "City of Music" title, will get an opportunity to make a presentation on their respective traditions and cultures in a session
- UNESCO offers 'Creative Cities' status to cities across the globe based on their cultural contributions and traditions in categories like design, film, literature, music and folk art.
- The annual conference will provide the member cities with a platform to share knowledge, experiences and good practices towards building sustainable cities of tomorrow.



About UCCN

Creation and Scope

Creative Fields

Annual Conference

- **Creation and Scope:** The UNESCO Creative Cities Network (UCCN) was established in 2004 to foster collaboration among cities that have identified creativity as a strategic factor for sustainable urban development.
- **Creative Fields:** The network encompasses seven creative domains: Crafts and Folk Art, Design, Film, Gastronomy, Literature, Media Arts, and Music.

- **Annual Conference:** Each year, mayors and stakeholders from the network's cities gather for a conference that provides a platform for strengthening connections and sharing experiences. The 2024 conference is scheduled for July in Braga, Portugal.

Objective of UCCN

- **Global Network:** As of 2024, UCCN includes 350 cities worldwide, all committed to integrating creativity and cultural industries into their local development strategies while fostering international collaboration.
- **Sustainable Development Goals (SDGs):** The network particularly emphasizes SDG 11—making cities inclusive, safe, resilient, and sustainable—through innovative approaches that benefit communities at the urban level.

Significance of UCCN

- **Collaboration and Partnerships:** Cities within the UNESCO Creative Cities Network pledge to share best practices and establish partnerships that involve public and private sectors, as well as civil society. This collaboration aims to enhance the creation, production, and distribution of cultural activities, thereby enriching urban life.

Indian Cities in the UNESCO Creative Cities Network

Cities	Creative Field	Highlights
Kozhikode	Literature	<ul style="list-style-type: none"> • A cultural hub hosting prominent personalities in Kerala's literary world, leading media houses, and over 500 libraries. • The birthplace of the first Malayalam novel, Kundalatha, written by Appu Nedungadi in 1887. • Home to renowned writers like S. K. Pottekkatt, Thikkodiyan, and P. Valsala Sanjayan, along with poets, scholars, and publishers contributing to Malayalam literature and culture.
Jaipur	Crafts and Folk Arts (2015)	Known for its rich tradition in crafts and folk arts, preserving and promoting traditional Rajasthani cultural expressions.
Varanasi	Creative City of Music (2015)	A city with a deep-rooted musical heritage, recognized for its classical music and cultural contributions to the world of music.
Chennai	Creative City of Music (2017)	Celebrated for its classical Carnatic music and vibrant cultural scene, Chennai plays a pivotal role in promoting Indian classical music.
Mumbai	Film (2019)	As the heart of India's film industry, Mumbai is recognized globally for its contributions to cinema, particularly Bollywood.
Hyderabad	Gastronomy (2019)	Famous for its unique culinary traditions, Hyderabad's cuisine, particularly its biryani, has earned international acclaim.
Srinagar	Crafts and Folk Art (2021)	Renowned for its traditional crafts, including Kashmiri shawls and carpets, Srinagar is a key center for the preservation and promotion of local artisanship.

UNESCO Heritage Panel

Context: India to host 46th UNESCO heritage panel session.

Key Highlights

- The 46th session of the UNESCO World Heritage Committee, being hosted by India from July 21-31, will be held at the Bharat Mandapam in New Delhi.

- The event will be attended by over 2,500 delegates from State Parties, advisory bodies, senior diplomats, heritage experts, scholars, and researchers from 195 countries, a senior official said. State Parties are countries which have adhered to the World Heritage Convention.
- Sources said the event, being organised by the Archaeological Survey of India, is likely to be inaugurated by Prime Minister Narendra Modi. UNESCO has already released a provisional agenda and timetable for the meeting.
- The World Heritage Committee has representatives from 21 State Parties to the World Heritage Convention (1972) elected by the General Assembly.

The World Heritage Committee

- The World Heritage Committee is an essential body established to oversee the implementation of the World Heritage Convention, which aims to protect and preserve cultural and natural heritage worldwide.
- The Committee was formed under the Convention for the Protection of the World Cultural and Natural Heritage, which was adopted by the General Conference of UNESCO on November 16, 1972.
- The Committee consists of 21 States Parties to the World Heritage Convention. These members are elected by the General Assembly and include Argentina, Belgium, Bulgaria, Greece, India, Italy, Jamaica, Japan, Kazakhstan, Kenya, Lebanon, Mexico, Qatar, Republic of Korea, Rwanda, Saint Vincent and the Grenadines, Senegal, Türkiye, Ukraine, Viet Nam, and Zambia.
- Each member serves a term of six years as per the provisions of the World Heritage Convention.

UNESCO

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency of the United Nations (UN) dedicated to fostering international cooperation in education, science, and culture to build peace.

UNESCO works towards building peace through international collaboration in the fields of education, science, and culture.

It is part of the United Nations Sustainable Development Group (UNSDG), which is a coalition aimed at achieving the Sustainable Development Goals (SDGs).

The organization's headquarters are in Paris, France.

UNESCO operates more than 50 field offices globally.

It comprises 193 member states and 11 associate members (as of April 2020).

Responsibilities of the World Heritage Committee



- The Committee oversees the application of the World Heritage Convention's provisions. It manages the World Heritage Fund, which provides financial assistance for the conservation and preservation of World Heritage Sites.
- It has the authority to decide whether a site should be added to the World Heritage List. This includes evaluating nominations and ensuring that sites meet the criteria for inscription.
- The Committee reviews reports on the condition of World Heritage Sites and assesses conservation efforts. It can request that States Parties take corrective actions if sites are not being adequately managed or conserved.
- It decides whether properties should be included or removed from the List of World Heritage in Danger, based on the sites' current state of preservation and the effectiveness of conservation measures.

Hajj Pilgrimage

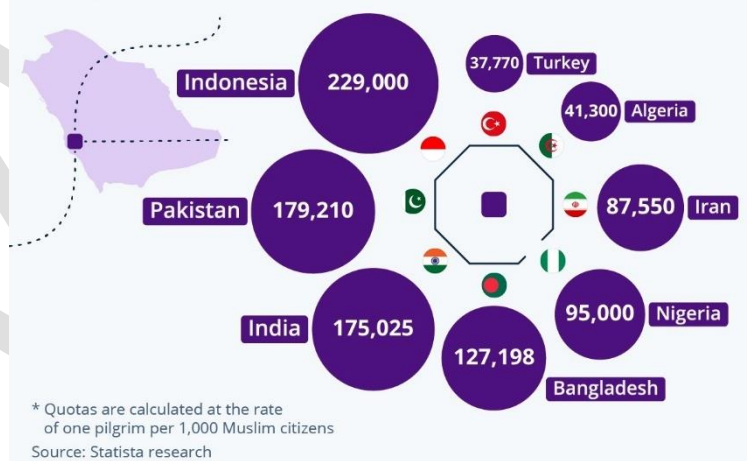
Context: Hajj, a gathering of nearly two million Muslim pilgrims, which falls in the last month of the Islamic calendar, has been in news again. More than 1,300 casualties were reported due to extreme heat in Saudi Arabia at this time of the year.

What is Hajj?

- Hajj is one of the five pillars of Islam. This pilgrimage to Mecca is an essential part of the faith and any person who is economically and physically sound has to undertake the trip once in their lifetime.
- Prophet Muhammad is said to have undertaken this pilgrimage shortly before breathing his last in 632 AD. The Hajj journey follows the lunar calendar.
- Accordingly, it falls about 11 days earlier every year. This year's pilgrimage started at the conclusion of the second week of June.
- For the upcoming couple of years, the pilgrimage will be undertaken in harsh weather with temperature exceeding 50 degrees Celsius.

Where Most Non-Domestic Hajj Pilgrims Come From

Saudi Arabia's approved quotas for foreign Hajj pilgrim visas in 2023, by countries of origin*



What happened this year?

- The Saudi authorities reserve a fixed quota for all major countries, depending on the Muslim population, for issue of Hajj visas. It helps to plan the stay and movement of pilgrims in the desert state. The authorities issued Hajj visas to a little more than 18 lakh people but the Hajj was undertaken by over two million pilgrims. This means that around 2 lakh people were unauthorised entrants.
- The Saudi authorities insisted that most pilgrims with valid Hajj visas were able to complete the Hajj rituals with the best possible facilities, and there were few deaths beyond natural causes of old age or illness.
- According to Saudi Health Minister Fahad bin Abdurrahman Al-Jalajel, some 83% of the 1,301 fatalities were unauthorised pilgrims who undertook the journey without requisite precautions at this time of extreme summer temperatures.

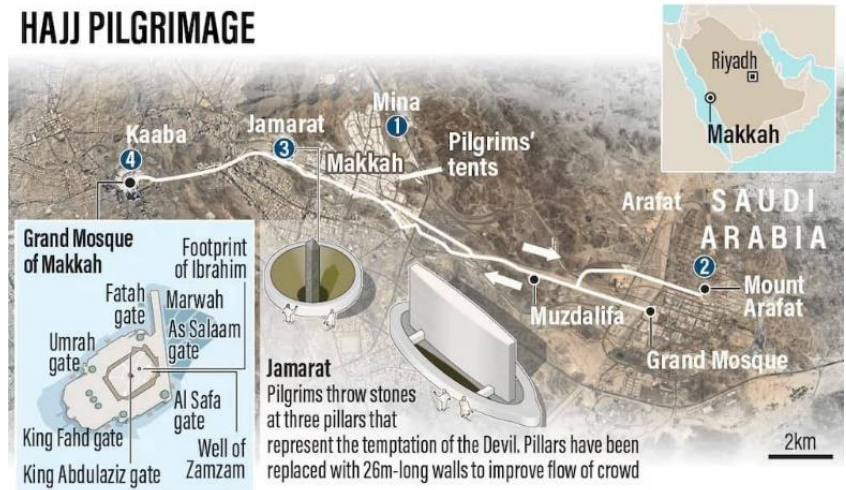
Who are 'unauthorised' pilgrims?

- The unauthorised, non-documented pilgrims often come over from neighbouring countries of Jordan, Egypt and Iraq on a visit visa a little before the Hajj season begins. Some are also blue collar workers from India and

Pakistan who while having a valid work visa, are not entitled to undertake the pilgrimage without proper permission and documentation. The non-documented visitors are usually economically too weak to bear the cost of the pilgrimage through the official route which takes at least 3,000 dollars. Hence, they often take recourse to agents who offer them the journey for half the cost.

- The agents take the money in advance and often disappear after these men and women land in Saudi Arabia, leaving them in the lurch. The visit visa holders are not allowed entry into Mecca at the time of Hajj. So, these visitors/pilgrims often undertake arduous routes through the desert to circumvent officials.
- While those who take the approved route are provided with all possible facilities by the host country, including transportation on air-conditioned vehicles with constant supply of water and medical facilities, illegal entrants are left under the blazing sun with temperatures often crossing 50 degrees Celsius.
- Many walk on their own from Arafat to Mina, a distance of around 15 kilometres. Unlike others, they have no healthcare facilities to fall back on. Also, most pilgrims in this category are old, having saved every penny for years for this journey.

HAJJ PILGRIMAGE



1 Day 1

Pilgrims walk to Mina, where they spend night

3 Day 3

First day of Jamarat ritual. It can last for three more days

2 Day 2

Pilgrims climb Mount Arafat, where the Prophet Mohammed gave his final sermon

4 Day 4

Return to Makkah for final Tawaf – circling Kaaba at centre of Grand Mosque

Samayapuram Mariamman Temple

Context: Book on over 1,200-year-old Samayapuram Mariamman temple released

Key Highlights

- Authored by Vrinda Ramanan, a qualified Bharatanatyam dancer and teacher, and J. Ramanan, a practising architect, the 190-page book describes every aspect associated with the Mother Goddess who reigns supreme in Samayapuram village.
- The temple located in Tiruchirapalli, Tamil Nadu is over 1,200 years old, is associated with legends of Goddess Mariamman, believed to be an incarnation of Goddess Durga, Mahakali, Adi Shakti, or Nishumbha Sudhini.
- The Mariamman temple has no historical evidence of its construction date, but is considered that it existed during the Chola period.
- The current Temple Complex was built by Vijayanagara King Vijayaraya Chakkaravarthi in the 18th century. It is also one of the wealthiest temples of Tamil Nadu.
- The Chithirai Ther Thiruvizha (Chariot Festival in the month of Chithirai - April) is a major festival celebrated annually at this temple for 13 days, starting on the 1st Tuesday of Tamil month Chithirai.

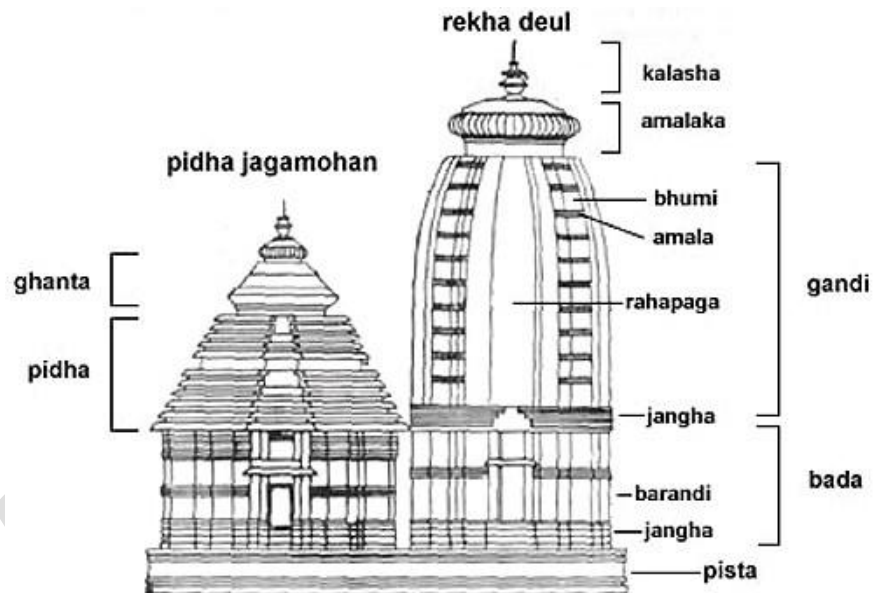
History

Committee to look into opening of Ratna Bhandar holds first meeting

Context: The high-level committee constituted under the chairmanship of Orissa High Court judge Justice Biswanath Rath for supervising the inventorisation of jewelleries and other valuables stored in the Ratna Bhandar of Shree Jagannath Temple, Puri, has fast-tracked the process of opening the temple treasury after 46 years.

Jagannath Temple's Ratna Bhandar

- The Ratna Bhandar is a renowned treasure vault situated on the northern side of the Jagamohana, which is the assembly hall of the Jagannath Temple.
- It houses the invaluable jewelry of the deities Lord Jagannath, Lord Balabhadra, and Goddess Subhadra. These treasures include offerings made by former kings over the centuries as well as contributions from devotees around the world.
- The Records of Rights, established under the Puri Sri Jagannath Temple Act of 1952, include a detailed inventory of the precious jewelry and various adornments belonging to Lord Jagannath.
- The Ratna Bhandar comprises two chambers: the outer chamber (Bahara Bhandar) and the inner chamber (Bhitar Bhandar). The inner chamber has been sealed for the past 46 years.
- According to the last inventory conducted in 1978, the Ratna Bhandar contains a total of 128.38 kg of gold and 221.53 kg of silver.
- The Archaeological Survey of India (ASI), which oversees the temple, performed a structural inspection of the Ratna Bhandar in 2008 but was unable to access the inner chamber.



Facts About Jagannath Temple

- The Jagannath Temple in Puri is one of the most revered Hindu shrines in Odisha and across India, dedicated to the worship of Lord Jagannath, an incarnation of Vishnu. Alongside Lord Jagannath, the temple also venerates his elder brother Balabhadra and sister Subhadra.

- The temple is often referred to as the "White Pagoda" and is one of the four sacred pilgrimage sites known as the Char Dhams, which hold immense significance for Hindus.
- The Jagannath Temple is an integral part of Odisha's Golden Triangle, a popular tourist circuit that includes three major destinations in the state. The other two destinations are Bhubaneswar, known as the "City of Temples," and the Sun Temple of Konark, also called the "Black Pagoda."
- These sites form a well-connected triangular route that attracts numerous pilgrims and tourists.
- The temple was built in the 12th century by Ananta Varman Chodaganga Deva, a renowned king of the Ganga Dynasty.
- It is a prime example of Kalinga architecture, known for its distinctive curvilinear towers, elaborate carvings, and intricate sculptures.
- The temple features four gates, each located at the mid-points of its boundary wall, facing the four cardinal directions. These gates are named after different animals, adding to the temple's symbolic and architectural richness.

A Cavernous Palimpsest

Context: Remains of dynasties down the ages shine through the pitch-dark interiors of the Chandravalli cave complex in Chitradurga district of Karnataka.

Key Highlights

- Its pitch-dark interiors are accessible only through a narrow entrance and visible only with the help of a powerful torch.
- The complex is also known as the Ankali Math, named after a saint from Ankalagi in Belagavi district who is believed to have come and settled here. He and his followers found the cave, surrounded by huge boulders and with a pond nearby, an ideal place for meditation and to run a Gurukul, local people say.
- The cave has many chambers such as a puja place with a shivlinga, a drawing room, a bedroom, and a water outlet that connects to a tank inside. Some of the chambers are so dark that those who are new to the complex risk getting lost if they are not in the company of a guide.
- Excavations around this site surrounded by three hills have revealed coins, painted bowls, and earthen pots dating back to various dynasties such as the Hoysala, the Satavahana and the Vijayanagara.
- There is also a rock inscription of Mayurasharma, the founder of the first Kannada dynasty — the Kadamba dynasty — dating back to AD 450. The region had connections with Rome and China, as some coins found here reveal. Some of the walls are adorned with paintings done in organic paint.



Chandravalli Cave Overview

- Chandravalli Cave is situated in the state of Karnataka, India.
- The cave complex is also referred to as Ankali Math, named after a saint from Ankalagi in Belagavi district who is believed to have settled in this location.

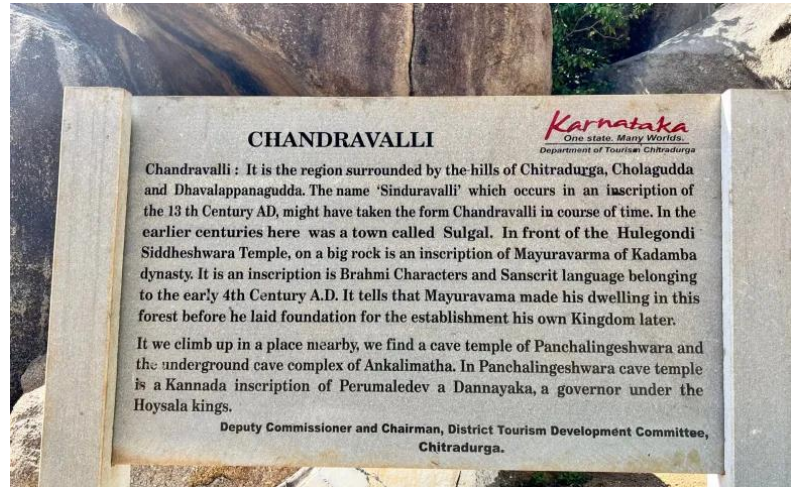
Features of the Cave Complex

- The cave contains several chambers, each with distinct purposes.

- There is a puja room housing a Shivalinga, signifying the site's spiritual significance.
- The complex also includes a drawing room, a bedroom, and a unique water outlet that connects to an internal tank, reflecting advanced architectural design.

Historical Significance of Chandravalli Cave

- Excavations around Chandravalli Cave, which is surrounded by three hills, have unearthed various artifacts such as coins, painted bowls, and earthen pots. These findings date back to several historical dynasties, including the Hoysala, Satavahana, and Vijayanagara empires.
- A notable rock inscription found at the site is attributed to Mayurasharma, the founder of the Kadamba dynasty, which is recognized as the first Kannada dynasty. This inscription dates back to around AD 450.
- The region where Chandravalli Cave is located had historical connections with ancient Rome and China, as evidenced by the discovery of coins from these civilizations.
- Some of the cave's walls are adorned with paintings created using organic paint, showcasing the artistic practices of the time.



Kadambas of Goa

- The Kadambas of Goa were vassals under the Chalukyas of Kalyana, serving as subordinate rulers while maintaining some level of regional authority.
- Chalukya emperor Tailapa II appointed Kadamba Shasthadeva as the Mahamandaleshwara (a great feudal lord) of Goa in recognition of his support in overthrowing the Rashtrakutas, a powerful dynasty that had dominated the Deccan region.
- In 960 A.D., Kadamba Shasthadeva achieved a significant military victory by conquering the city of Chandavara from the Shilaharas, a local dynasty that ruled parts of the western coast of India.
- He later expanded his control by capturing the strategic port of Gopakapattana, which is present-day Goa, further solidifying the Kadamba rule in the region.

Chance Treasure Discovery Sparks Frenzy

Context: An 18th-century pot with gold and silver coins was found by labourers digging a rainwater pit in Kannur

Key Highlights

- The chance discovery of a pot containing 18th-century gold and silver coins, and other period artefacts has suddenly elevated the profile of the sleepy village of Chengalai in Kannur district of Kerala.
- Coins bore the hallmarks of the late 18th century, with some displaying Indo-French and Kannur Ali Raja markings.





- The bead necklaces appeared to be from the same era.

Facts about King Ali Raja

Aspect	Details
Title and Reign	King Ali Raja was the title of the Muslim king of the Arakkal dynasty of Kannur, who ruled from the 17th to the 19th century.
Dynasty	The Arakkal dynasty was Kerala's only Muslim kingdom.
Succession	The eldest member of the Arakkal family, regardless of gender, became its head and ruler. - Male rulers were called Ali Rajah. - Female rulers were known as Arakkal Beevis.

Existing Structure at M.P.'S Bhojshala Complex Built Using Temple Remains: ASI

Context: The existing structure at the Bhojshala complex in Dhar district of Madhya Pradesh was constructed using the remains of a temple that existed earlier at the site, said the Archaeological Survey of India (ASI) in its scientific survey report, which was submitted to the Indore Bench of the Madhya Pradesh High Court

Key Highlights

- The court had in March asked the ASI to undertake a scientific survey of the Bhojshala Temple-Kamal Maula Mosque complex.
- The ASI said that based on the survey, conducted over a period of three months using technologies such as ground-penetrating radar and from archaeological remains studied during the investigation, the pre-existing structure "can be dated to the Paramara [dynasty] period".
- "Art and architecture of the pillars and pilasters in colonnades suggest that they were originally part of a temple. For their reuse in the existing structure, figures of deities and humans carved on them were mutilated
- The survey found images of Hindu deities such as Ganesha, Brahma with his consorts, Narasimha, Bhairava and other human and animal figures in the existing structure.
- The ASI report also said that inscriptions in Sanskrit and Prakrit were found at the site.
- The report quoted an inscription on the gateway to the tomb of Abdullah Shah Chungal at Dhar which had said that the temple "was violently converted" into a mosque.

TEMPLE OR MOSQUE?

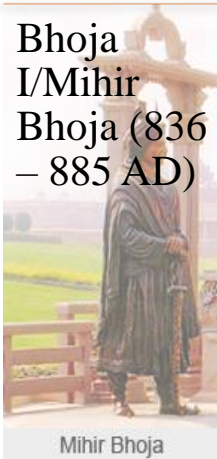
<ul style="list-style-type: none"> ➤ An 11th century ASI-protected monument, Bhojshala is considered by Hindus as a temple of Goddess Saraswati, while Muslims call it Kamal Maula Mosque ➤ In 1997, entry to Bhojshala complex was banned by district administration, triggering resentment in Hindu community ➤ On Basant Panchami in 2002, Dhar collector ordered a lathicharge on devotees who gathered for puja and 	<ul style="list-style-type: none"> demanded the gates to be opened. About two dozen injured ➤ Lathicharge sparked 'free Bhojshala' movement ➤ On April 7, 2003, ASI issued an order, permitting Hindus to worship inside Bhojshala every Tuesday, and Muslims to offer namaz on Fridays ➤ In 2006, there was tension with Basant Panchami falling on a Friday. Hundreds injured in clashes. Riots broke out in town. Over 200 booked
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Bhojshala Temple-Kamal Maula Mosque Complex

- Originally a temple dedicated to the goddess Sarasvati, built by King Bhoja of the Gurjara-Pratihara dynasty in the 11th century AD.

- The complex features a mosque constructed using structural members from the original temple. It retains some inscribed slabs with Sanskrit and Prakrit literary works.

Bhoja I/Mihir Bhoja (836 – 885 AD)



Mihir Bhoja

Bhoja I was a significant ruler of the Gurjara-Pratihara dynasty, ascending the throne in 836 AD and ruling for over 46 years.

He reorganized and consolidated the empire inherited from his ancestors, ushering in an era of prosperity and stability.

Kannauj, known as Mahodaya, was considered the capital of his empire.

The Pratiharas, under Bhoja, were reputed to have one of India's strongest cavalry forces, as noted by Arab travelers.

Bhoja was a devout follower of Vaishnavism and adopted the title "Adivaraha."

Arab traveler Al-Masudi referred to him as "King Baura," and his influence extended over neighboring regions, including Sindh, Chandalas, and Kalachuris.

- Under an agreement with the Archaeological Survey of India (ASI), Hindus perform puja every Tuesday, and Muslims offer Namaz every Friday at the site.

Raja Bhoj of Gurjara-Pratihara Dynasty

- Bhoja was the most prominent emperor of the Gurjara-Pratihara dynasty, known for his role in establishing and consolidating the empire.
- The Gurjara-Pratiharas rose to prominence in the 8th century by resisting Arab invasions.
- The Pratiharas were involved in a tripartite struggle with the Palas and Rashtrakutas for dominance over the regions of Kannauj, Malwa, and the upper Ganga valley.
- Bhoja I, also known as Mihir Bhoja, was instrumental in defeating the Pala king Devapala and the Rashtrakuta king Amoghavarsha, securing the Gurjara-Pratiharas as a dominant force in northern India.

Geography

Krishnaraja Sagar Reservoir Teesta River

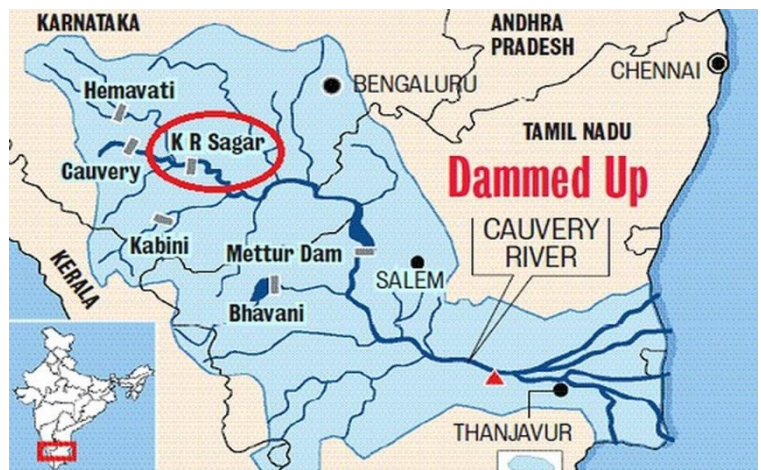
Context: Water level at the Krishnaraja Sagar reservoir, built across the river Cauvery in Mandya district of Karnataka, breached the 100 feet mark against the maximum level of 124.80 feet on Friday. This is in contrast to dam level hovering at 78.4 ft on the same day last year.

Krishnaraja Sagar (KRS) Dam

- The Krishnaraja Sagar (KRS) Dam is a gravity dam, designed to hold back water primarily through the force of gravity.
- The dam is situated below the confluence of the Kaveri River with its tributaries, the Hemavati and Lakshmana Tirtha rivers, in Mandya district, Karnataka.

Usage

- The dam plays a crucial role in irrigation, providing water for agricultural activities in Mysore and Mandya districts.



- It serves as a major source of drinking water for the cities of Mysore, Mandya, and Bengaluru.
- The water from the dam also contributes to the Shivanasamudra hydroelectric power station, ensuring a stable power supply.
- Additionally, the released water from the KRS Dam flows into Tamil Nadu and is stored in the Mettur Dam located in Salem district.

History

- Constructed during the reign of Maharaja Krishnaraja Wadiyar IV of Mysore, the dam was named in his honor.
- Construction began in 1911 and was completed in 1931.
- The dam was designed by Sir M. Visvesvaraya, a renowned Indian engineer known for his contributions to engineering and infrastructure.

Kaveri River

- The Kaveri River, also spelled Cauvery, is a sacred river in southern India, often referred to as the Ganga of South India.
- The river originates from Brahmagiri Hill in the Western Ghats, located in southwestern Karnataka.
- The Kaveri River flows southeast for 765 kilometers through Karnataka and Tamil Nadu, descending the Eastern Ghats in a series of spectacular falls.
- The river basin extends across the states of Tamil Nadu, Karnataka, Kerala, and the Union Territory of Puducherry.
- The river empties into the Bay of Bengal at Poompuhar in the Mayiladuthurai district of Tamil Nadu.
- Major left bank tributaries include the Harangi, Hemavati, Shimsha, and Arkavati rivers.
- Major right bank tributaries include the Lakshmantirtha, Kabbani, Suvarnavati, Bhavani, Noyil, and Amaravati rivers.
- The Bharachukki Falls, situated approximately 130 kilometers from Bangalore, is part of the larger Shivanasamudram Falls complex.

Features

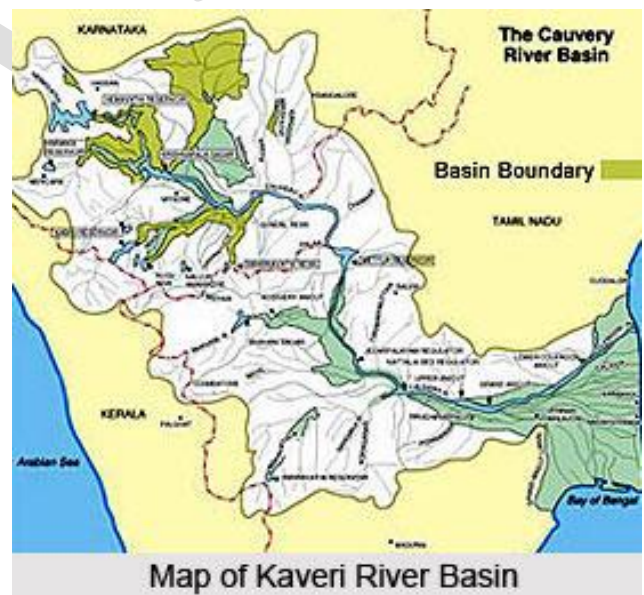
The dam was built using a combination of surki mortar and limestone.

It stretches 2,621 meters (8,600 feet) in length and rises 40 meters (130 feet) in height.

It features 177 iron sluices, some of which are equipped with automatic doors.

The reservoir created by the dam covers approximately 130 square kilometers, making it the largest in Asia at the time of its construction.

Attached to the dam is the Brindavan Gardens, an ornamental garden popular for its beauty and landscaping.



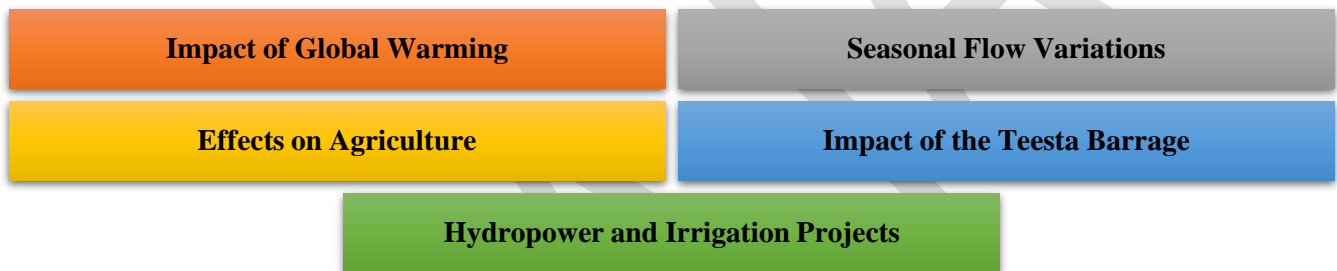
Teesta River

Context: Expressing concern over the threat of floods in north Bengal as several rivers, including the Teesta, were flowing in full state, West Bengal Chief Minister once again reiterated her opposition to sharing the river's waters with Bangladesh.

Importance of Teesta for West Bengal and Bangladesh

Aspect	Significance
Significance for Bangladesh	Agricultural Importance: The Teesta River's floodplain contributes to approximately 14% of Bangladesh's total cropped area.
	Livelihood: This region supports around 73% of the Bangladeshi population, playing a critical role in the country's economy and food security.
Significance for West Bengal	Regional Support: The Teesta River is a vital resource for North Bengal, impacting nearly half a dozen districts.
	Uses: It provides essential services such as irrigation, drinking water, and hydropower generation, which are crucial for regional development and well-being.

West Bengal's Objections



- **Impact of Global Warming:** Retreating glaciers in the Teesta River basin, according to a Mumbai think tank's strategic foresight group, affect the river's flow.
- **Seasonal Flow Variations:** The Teesta River has an average flow of about 60 billion cubic meters annually, with substantial flow occurring between June and September, and a lean season from October to April.
- **Effects on Agriculture:** Any agreement reducing water flow could severely impact North Bengal's agricultural sector, potentially leading to water shortages for farmers.
- **Impact of the Teesta Barrage:** Since the construction of the Teesta Barrage in Bangladesh in 1998, Bangladeshi farmers have been able to cultivate three cropping seasons annually. West Bengal argues that this allocation of water might be sufficient and further sharing could disrupt their irrigation projects.
- **Hydropower and Irrigation Projects:** The Teesta project in West Bengal aims to irrigate 922,000 hectares and generate 67.60 MW of hydropower. Sharing water with Bangladesh could jeopardize these initiatives.

Alternative Solutions Proposed by West Bengal

- **Rivers Like Torsa:** Mamata Banerjee suggested exploring the sharing of rivers such as the Torsa, which are closer to the Sikkim-Bangladesh border.
- **Connectivity with Padma:** The Torsa River connects with Bangladesh's Padma River, potentially offering an alternative water-sharing arrangement.
- **Proposed Commission:** She recommended establishing a commission to evaluate the water flow in the Torsa and determine the feasible amount of water that could be shared with Bangladesh.

WHY BENGAL NEEDS TEESTA

THE ISSUE

If Prime Minister Sheikh Hasina can convince her people that India has given them a fair deal in the Teesta water dispute, it will be a big breakthrough for her. But Mamata Banerjee — among the five chief ministers originally scheduled to accompany Singh, she is the only one affected by the Teesta treaty — has to take Bengal's interests into account

THE DEAL

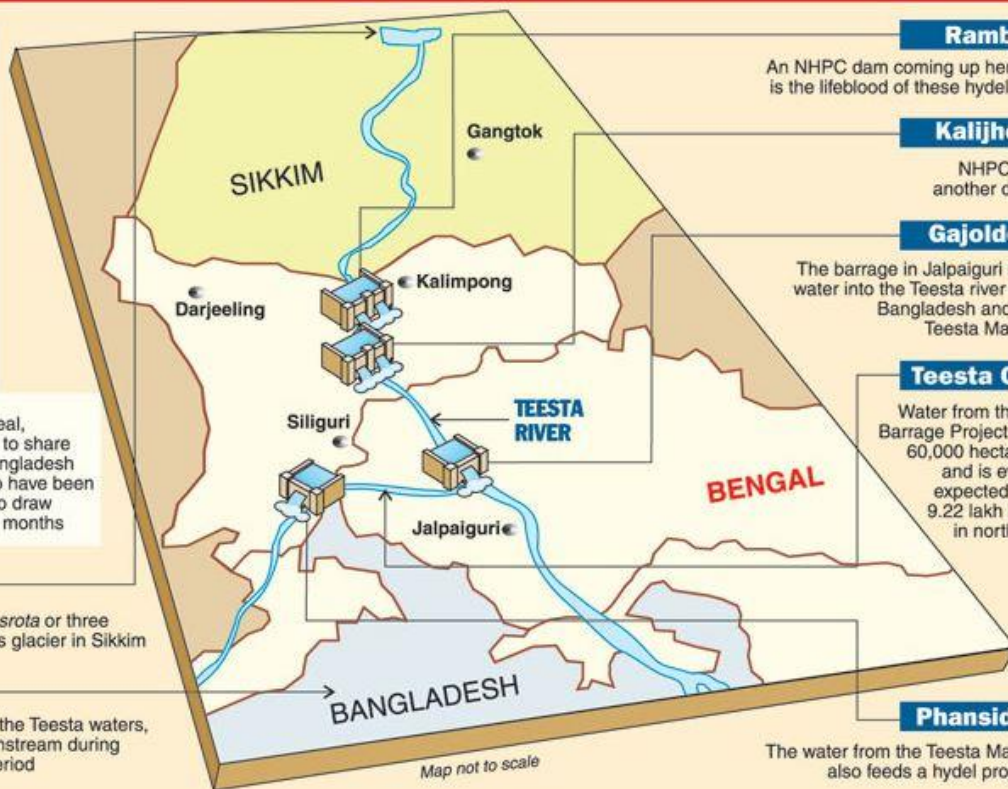
According to a tentative deal, Bangladesh and India are to share the water equally. Now Bangladesh gets 25%. A clause was to have been introduced to allow India to draw more water during certain months

Dzongu

The 315km-long Teesta (*tri-srota* or three streams) originates from this glacier in Sikkim

Bangladesh

The neighbour depends on the Teesta waters, especially for irrigation downstream during the dry December-March period



Rambhi

An NHPC dam coming up here. Water is the lifeblood of these hydel projects

Kalijhora

NHPC building another dam here

Gajoldoba

The barrage in Jalpaiguri releases water into the Teesta river entering Bangladesh and into the Teesta Main Canal

Teesta Canal

Water from the Teesta Barrage Project irrigates 60,000 hectares now and is eventually expected to cover 9.22 lakh hectares in north Bengal

Phansidewa

The water from the Teesta Main Canal also feeds a hydel project here

Almatti Dam

Context: Rainfall in the catchment areas of the Krishna River has kindled the hopes of Water Resources Department (WRD) officials and farmers alike. The water levels at the Almatti Dam in Karnataka are rising with considerable inflows of 23,678 cusecs as of July 13. The water stored in the dam is 92.17 tmcft as against its total capacity of 129.72 tmcft. The full reservoir level is 1,705 ft.

Features of Almatti Dam



Feature	Details
Official Name	Upper Krishna-I (Almatti)
Alternative Name	Lal Bahadur Shastri Dam
Location	Almatti, Nidgundi, Bijapur district, Karnataka
Districts Covered	Bijapur and Bagalkot districts
Operator	Karnataka Power Corporation Limited
Target Annual Output	560 Million Units (MU)
Primary Use	Hydroelectric power generation
Main Project	Upper Krishna Irrigation Project
Water Management	Water is released into the Narayanpur Reservoir for downstream irrigation needs after power generation.

Ecological Significance	Backwaters host several migratory birds during summer.
Major Beneficiary	Kalapuragi district

Grasslands in Kutch Likely to Host Cheetahs from Africa

Context: Some of the next batch of cheetahs being brought in from Africa, as part of the next phase of Project Cheetah, may be sent to a cheetah-breeding and conservation centre being built in the sprawling grasslands of Banni in the Rann of Kutch in Gujarat

Key Highlights

- While the Gandhi Sagar sanctuary in Madhya Pradesh is the preferred location for the next lot of wild cats, with Banni being considered a potential habitat for over a decade, officials say there is a surge in activity to set up basic infrastructure in Banni and get it ready this year.
- Banni is a vast grassland in the southern part of Kutch and extends to nearly 3,500 square kilometres. While that is plenty of space, more than that available in Kuno and Gandhi Sagar, there is barely enough prey to sustain a viable population.
- Antelope species such as chinkara and blackbuck — the prey for the cheetah — are present in the Banni landscape but not enough for the big cat.
- While the Madhya Pradesh Forest Department is tasked with managing the cheetahs at Kuno in Madhya Pradesh, an expert steering committee gives scientific input on managing the programme. This includes recommending future sites for introducing fresh batches of cheetahs at regular intervals.
- Of the 20 adult cheetahs brought to Kuno since September 2022, 13 survive. Additionally, there are 13 cubs, making it 26 animals overall. However, the maximum capacity (in terms of available prey) of the Kuno reserve is for 21 adult animals.
- The government’s estimate is that India will need to import anywhere between 10 and 12 adult cheetahs every year for the next five years to groom a sustainable breeding population. “One attractive aspect of Banni is that there are no leopards. So with enough prey, we can overtime sustain a larger population. But this is a long-term plan,” an official said.



CHEETAH FACTS:

- **Oldest** of the big cat species
- Ancestors can be traced back about **8.5 million years**
- Number of cheetahs just **under 7,500** individuals globally



- IUCN's Red List recognises cheetahs as **"vulnerable"** species
- The Asiatic cheetah and the Northwest African cheetah are **critically endangered**
- Cheetahs have **lost 90%** of their global habitat
- They now live in **9%** of its historic range

- In October, all of the cheetahs in Kuno are expected to be released into the wild. Currently, most of them are in the bomas, or large enclosures that are a kilometre wide and long. These animals were brought in after infections and acclimatisation problems led to fatalities. Following the release of all the animals into the wild, preparations for the next batch are expected to begin — again from South Africa and Namibia.

Agriculture

ICAR to Release 323 New Varieties of 56 Crops

Context: The Indian Council of Agricultural Research (ICAR) will launch its “one scientist, one product” programme on Tuesday to improve research in the field of agriculture and animal husbandry.

Key Points

- The council will formally announce the release of 323 varieties of 56 crops, including cereals, oilseeds, forage crops, and sugar cane, at a function here on Tuesday as part of its 96th foundation day.
- These crops include 289 climate-resilient varieties and 27 bio-fortified varieties.
- The “one scientist, one product” programme will be inaugurated by Union Agriculture Minister Shivraj Singh Chouhan.
- ICAR was also working to develop 100 new seed varieties and 100 farm technologies in 100 days as part of the Centre’s 100-day action plan.
- The ICAR said in a release that with the help of breeder seeds, about 16 million hectares (mha) are under bio-fortified varieties of different crops, including wheat (13 mha), rice (0.5 mha), pearl millet (1.5 mha), lentil (0.5 mha) and mustard (1 mha) during 2023-24.
- These include 2,177 climate-resilient (83% of total) varieties with biotic and abiotic stress resistance, and 150 bio-fortified crop varieties.

One Scientist-One Product

Feature	Details
Programme Name	One Scientist-One Product
Objective and Scope	This programme aims to streamline research efforts in agriculture and animal husbandry by assigning specific products or research areas to individual scientists. The primary goals are to: <ul style="list-style-type: none">• Enhance specialization• Improve research efficiency• Accelerate the development of new agricultural technologies and products.
100-100-100 Initiative	As part of the Centre’s 100-day action plan, ICAR has set the following ambitious targets: <ol style="list-style-type: none">1. Development of 100 new seed varieties2. Creation of 100 new farm technologies These goals are to be achieved within a 100-day timeframe, showcasing ICAR’s commitment to rapid innovation in the agricultural sector.

Polity

New Criminal Laws In Force

Context: Bharatiya Nagrik Suraksha Sanhita (BNSS) came into Force

Key Highlights

- Union government officials said that the States were free to bring in their own amendments to some provisions of the Bharatiya Nagrik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure (Cr.PC).

- The BNSS prescribes the procedure and conditions for arrest, bail, and custody, among other things.
- The Bharatiya Nyaya Sanhita (BNS) replaces the Indian Penal Code, 1860.
- The Bharatiya Sakshya (BS), which replaces the Indian Evidence Act, 1872, is the third law which will come into force.
- From 00:00 hours on July 1, more than 650 district courts and 16,000 police stations across the country will have no option but to migrate to the new system. Cognisable offences will be registered under Section 173 of the BNSS, instead of Section 154 of the Cr.PC.
- The IPC and Cr.PC will run concurrently along with the new laws as several cases are still pending in courts and some crimes that took place before July 1 that are reported later will have to be registered under the IPC.
- First information reports (FIRs) are filed through the Crime and Criminal Tracking Network Systems (CCTNS), a programme that functions under the National Crime Records Bureau. A significant upgrade to the CCTNS will help people file an e-FIR, without visiting a police station, and a zero FIR, which can be filed irrespective of the jurisdiction of the crime location.
- The changes have also been made to the CCTNS software to register FIRs in languages other than English and Hindi.
- The BNSS mandates compulsory audio-video recording of search and seizure in each criminal case and mandatory forensic examination in all cases where an offence attracts punishment of seven years or more. The recordings will have to be submitted before the court electronically “without delay”.
- Officials pointed out that the security of the cloud-based system where the data will be stored will be of prime concern. The e-sakshya platform is being hosted by National Informatics Centre.
- The BNSS provides the States time till June 2029 to prepare their forensic capabilities..

New Acts

New Act	Replacing	Major Points
Bharatiya Nyaya Sanhita 2023	Indian Penal Code, 1860	<ul style="list-style-type: none"> • Community service introduced for minor offenses like obstructing public servants' duties, including attempted suicide. • All sexual acts with women under 18 classified as rape, regardless of consent. • Terrorist acts defined as a distinct offense.
Bharatiya Nagarik Suraksha Sanhita 2023	Criminal Procedure Code, 1973	<ul style="list-style-type: none"> • Undertrial detention: Accused held for half the maximum sentence must be released on bond, except in cases involving death penalty, life imprisonment, or multiple charges. • Magistrate of the first class authorized to order accused to provide specimen signatures, finger impressions, handwriting, or voice samples.
Bharatiya Sakshya Adhinyam 2023	Indian Evidence Act, 1872	<ul style="list-style-type: none"> • Equal legal status granted to electronic and digital records as to paper documents. • Oral evidence includes all statements, including electronic ones, as permitted or required by the Court.

PMLA

Context: The grant of bail to former Jharkhand Chief Minister and Jharkhand Mukti Morcha leader Hemant Soren exposes the questionable practice of the Enforcement Directorate in slapping money-laundering cases just to arrest political adversaries of the ruling dispensation.

Key Highlights

- Responding to a question on the implementation of the UCC, he said that it was part of the government’s agenda.

- On the issue of “One Nation, One Election”, Mr. Meghwal said the committee under former President Ram Nath Kovind had submitted its report, and the Law Commission was also working on the subject.
- Mr. Meghwal also signed the national litigation policy document soon after taking charge. The policy document, part of the 100-day agenda of the new Narendra Modi government, will be placed before the Union Cabinet for approval in the coming days.
- The Law Minister said a key priority of his Ministry would be faster justice in matters pending in the Supreme Court, High Courts, lower courts, tribunals, and consumer courts.
- The national litigation policy has been drafted and redrafted over several years by successive governments, and aims to lay down principles for responsible litigation. A national litigation policy has been a part of the BJP’s manifesto since 2014.

About Prevention of Money Laundering Act

The PMLA was established to prevent money laundering and enable the confiscation of property derived from such illegal activities. It aims to combat money laundering linked to offenses like drug trafficking, smuggling, and terrorism financing.

Key Provisions of PMLA



- **Offenses and Penalties:** The PMLA defines money laundering offenses and imposes penalties, including rigorous imprisonment and fines for those involved. Money laundering is the process of converting illegally obtained money into legitimate funds.
- **Attachment and Confiscation of Property:** The Act permits the attachment and confiscation of properties involved in money laundering, with an Adjudicating Authority overseeing these proceedings.
- **Reporting Requirements:** Entities such as banks and financial institutions are required to maintain transaction records and report suspicious activities to the Financial Intelligence Unit (FIU).
- **Appellate Tribunal:** Section 25 of the PMLA establishes an Appellate Tribunal with the authority to hear appeals against orders issued by the Adjudicating Authority.

Recent Amendments in PMLA

Prevention of Money-laundering (Restoration of Confiscated Property) Amendment Rules, 2019

- **New Rule 3A:** This rule allows the Special Court to publish notices in newspapers inviting claimants with legitimate interests in attached, seized, or frozen properties to establish their claims for restoration after charges have been framed.

Prevention of Money Laundering (Maintenance of Records) Amendment Rules, 2023

- The Finance Ministry has revised regulations to expand disclosure requirements for NGOs by reporting entities such as financial institutions and intermediaries.
- The amendment clarifies the definition of "politically exposed persons" (PEPs) in line with Financial Action Task Force (FATF) recommendations. PEPs include individuals holding prominent public functions in foreign countries, such as heads of state, senior politicians, high-ranking officials in government, judiciary, military, state-owned corporations, and key political party officials.

Concerns Regarding PMLA, 2002

- **Broad Definition of Proceeds of Crime:** There are concerns about the expansive interpretation of "proceeds of crime," which may include legal financial transactions. The law targets those involved in generating and laundering crime proceeds, holding accountable even those indirectly involved in the laundering process.
- **Coverage of Numerous Offenses:** The PMLA includes a wide range of offenses in its schedule that are unrelated to its original purpose of combating drug money laundering. The UN resolution that prompted the law's enactment in India specifically mentioned laundering drug money, a serious economic crime with the potential to destabilize the global economy and threaten national sovereignty.
- **Arrest Without Written Communication of Grounds:** Enforcement Directorate officers have been criticized for arresting individuals without providing written communication of the grounds for arrest, in violation of Article 22(1) of the Constitution and Section 19(1) of the PMLA.
- **Recent Observations by the Supreme Court:** Recently, the Supreme Court ordered the release of NewsClick founder Prabir Purkayastha, ruling that his arrest under the Unlawful Activities Prevention Act (UAPA) was invalid due to non-compliance with Article 22(1), which requires that arrested individuals be promptly informed of the reasons for their arrest.

Bailable and Non-Bailable Offenses in India

Offense Type	Description	Examples
Bailable	Offenses that are less severe, where the accused is presumed innocent and has the right to be released on bail.	Theft, Traffic violations, Simple assault
Non-Bailable	Offenses that are more serious, where bail is not a guaranteed right and is subject to the court's discretion based on certain criteria.	Murder, Rape, Kidnapping.

Centre Delays Fixing Boundaries to Hold Census

Context: The deadline to freeze administrative boundaries of districts, tehsils, towns, municipal bodies and others for the Census exercise ended, but a new date has not been announced.

Key Highlights

- The ambiguity has a direct impact on the dates of the Census exercise that was previously held in 2011. The deadline has been extended nine times since December 2020.
- A former Census official said an order for a post-facto extension could be issued on a later date, but if that was not done, it meant doors were open for the Census exercise in the next three to six months.
- The order on December 30, 2023 which extended the freezing of administrative boundaries by State governments till June 30, 2024 effectively pushed the decennial Census exercise at least till October 1 as it usually takes three months to prepare the enumerators for the task.
- The implementation of the women's reservation Act passed in the Special Session of Parliament last year, reserving 33% of seats in Parliament and the Assemblies for women, is dependent on the conduct of the Census.
- According to the Nari Shakti Vandan Adhiniyam, reservation of one-third of the seats in the Lok Sabha and the Assemblies for women shall come into effect after an exercise of delimitation is undertaken based on the relevant figures of the first Census recorded after the Act has commenced.

What is the Census?

- This is a comprehensive process of gathering, compiling, analyzing, and sharing demographic, economic, and social data about all individuals in a country or a specific region at a particular time.

- The census helps in assessing the country's progress over the past decade, monitoring ongoing government programs, and planning future initiatives. It offers a snapshot of the community at a specific moment, providing crucial data for various analyses and policy-making.

Phases

- **Houselisting/Housing Census:** This phase involves documenting all buildings, whether permanent or temporary, along with details about their types, amenities, and assets. This provides a foundation for understanding the housing situation in the country.
- **Population Enumeration:** In this phase, detailed information is collected on each individual residing in the country, whether they are Indian nationals or foreign residents. This step follows the creation of a list of households that are to be surveyed.

Nodal Ministry

- The decennial Census is managed by the Office of the Registrar General and Census Commissioner, which is part of the Ministry of Home Affairs.
- Prior to 1951, the Census Organization was established on an ad-hoc basis for each census.

Other Facts about Census

- **Historical Context:** The first synchronized census in India was conducted in 1881 by W.C. Plowden, the Census Commissioner of India. Since then, censuses have been held every ten years without interruption.
- **Legal Framework:** The Census of India Act, 1948, provides the legal framework for conducting the census. However, it does not specify the timing or periodicity of the census.
- **Constitutional Mandate:** While a decennial census is constitutionally mandated, there is no specific constitutional or legal requirement for it to occur every ten years. Many countries, such as the US and the UK, follow a ten-year cycle, but others, like Australia, Canada, and Japan, conduct their censuses every five years.

About Nari Shakti Vandan Adhiniyam

The Nari Shakti Vandan Adhiniyam bill introduces a significant policy change by reserving one-third of the seats in the Lok Sabha, State Legislative Assemblies, and the Delhi Assembly for women. This reservation also applies to seats reserved for Scheduled Castes (SCs) and Scheduled Tribes (STs) in these legislative bodies.

Background of the Bill

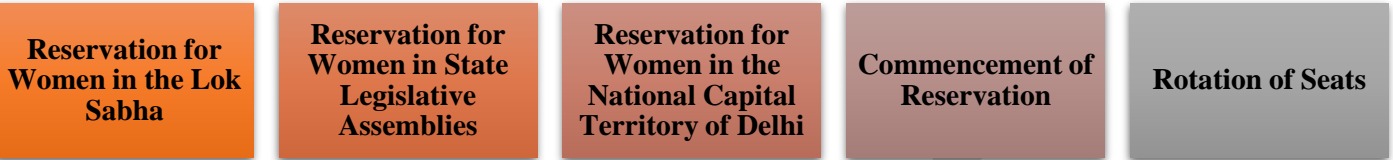
Year	Event	Details
1996	Introduction of the First Women Reservation Bill	The bill was introduced in Parliament during Shri Atal Bihari Vajpayee's tenure.
1998-2003	Subsequent Attempts to Pass the Bill	The bill was tabled four times but failed to pass due to lack of majority support.
2009	Presentation Amid Protests	The bill was presented once more but faced protests.
2010	Approval by the Union Cabinet	The bill was approved by the Union Cabinet and passed by the Rajya Sabha (RS).
2014	Anticipation of Presentation in Lok Sabha	The bill was expected to be tabled in the Lok Sabha (LS).

Need of the Bill

- Currently, there are 82 women Members of Parliament in the Lok Sabha (15.2%) and 31 women in the Rajya Sabha (13%).
- Despite an increase from the 1st Lok Sabha (5%), women's representation in India remains lower compared to several other countries.

- According to recent UN Women data, countries like Rwanda (61%), Cuba (53%), and Nicaragua (52%) lead in female representation, with Bangladesh (21%) and Pakistan (20%) also ahead of India.

Key Features of the Bill



- The bill proposes the insertion of Article 330A into the Constitution, which adapts provisions from Article 330 that reserve seats for SCs and STs in the Lok Sabha.
- Reserved seats for women will be allocated by rotation among different constituencies in states or Union Territories.
- One-third of seats reserved for SCs and STs will be allocated to women on a rotational basis.
- The bill introduces Article 332A, mandating one-third reservation for women in every state Legislative Assembly.
- It ensures that one-third of the seats reserved for SCs and STs, and one-third of all seats filled through direct elections, are reserved for women.
- The bill amends Article 239AA to extend the reservation provisions to the Union Territory of Delhi, ensuring laws framed by Parliament apply to this territory.
- A new Article 334A stipulates that reservations will become effective after the census conducted post-bill commencement is published.
- Delimitation will follow to allocate reserved seats for women, with reservations effective for a period of 15 years, continuing as determined by Parliament.
- Reserved seats for women will be rotated after each delimitation, in accordance with laws established by Parliament.

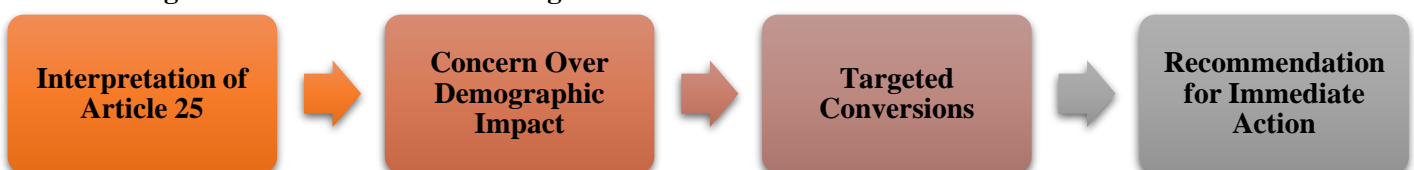
Stop Religious Gatherings Enabling Conversion

Context: Rejecting the bail application of a person accused of religious conversion, the Allahabad High Court on Monday observed that the majority population of the country would be in minority one day, if conversion at religious congregations is not stopped.

Key Highlights

- Justice Rohit Ranjan Agarwal, who was hearing the bail plea of one Kailash booked under Section 3/5(1) of the U.P. Prohibition of Unlawful Conversion of Religion Act, 2021, said Article 25 does not provide for religious conversion but only provides freedom of conscience and free profession, practice, and propagation of religion.
- The court noted that serious allegations have been made against the accused, who, according to the complainant, was taking people from her village to attend religious gatherings in New Delhi, and most of them never returned home.

Allahabad High Court Observations on Religious Conversions



- **Interpretation of Article 25:** The court highlighted that Article 25 of the Indian Constitution, which guarantees freedom of religion, allows for the propagation of religion but does not include the right to convert others. The court clarified that while individuals can promote their religion, they cannot compel or convert others to their faith.
- **Concern Over Demographic Impact:** The court expressed serious concern about the potential demographic changes that could result from unchecked conversions. It warned that if such conversions are not regulated, the majority population in India might eventually become a minority.
- **Targeted Conversions:** The court observed that unlawful conversions, especially those targeting Scheduled Castes (SCs), Scheduled Tribes (STs), and economically disadvantaged individuals, are happening at an alarming rate across Uttar Pradesh. This trend was seen as particularly troubling given the vulnerable status of these communities.
- **Recommendation for Immediate Action:** The court recommended that any religious gatherings where conversions are taking place should be immediately halted to prevent further unlawful conversions.

Constitutional Provisions Related to Religion and Rights of Minorities

Article 25

• Freedom of conscience and free profession, practice, and propagation of religion

Article 26

• Freedom to manage religious affairs

Articles 27

• Freedom as to payment of taxes for the promotion of any particular religion

Article 28

• Freedom as to attendance at religious instruction or religious worship in certain educational institutions

Article 29

• Protection of interests of minorities

Article 30

• Right of minorities to establish and administer educational institutions

- **Article 25:** This article guarantees every citizen the freedom of conscience and the right to freely profess, practice, and propagate their religion, subject to public order, morality, and health. It also allows the state to regulate or restrict any secular activity associated with religious practice, ensuring that religious freedom is balanced with other societal needs.
- **Article 26:** This provision grants every religious denomination the right to manage its own religious affairs, also subject to public order, morality, and health. It ensures that religious groups can operate autonomously within the framework of the law.
- **Articles 27 to 30:** These articles guarantee the freedom to manage religious affairs, contribute financially to any religion, and establish and administer educational institutions. These rights ensure that religious communities can function and thrive while preserving their traditions and beliefs.

Uttar Pradesh Prohibition of Unlawful Conversion of Religion Act, 2021

Purpose of the Act



Punishments for Violations



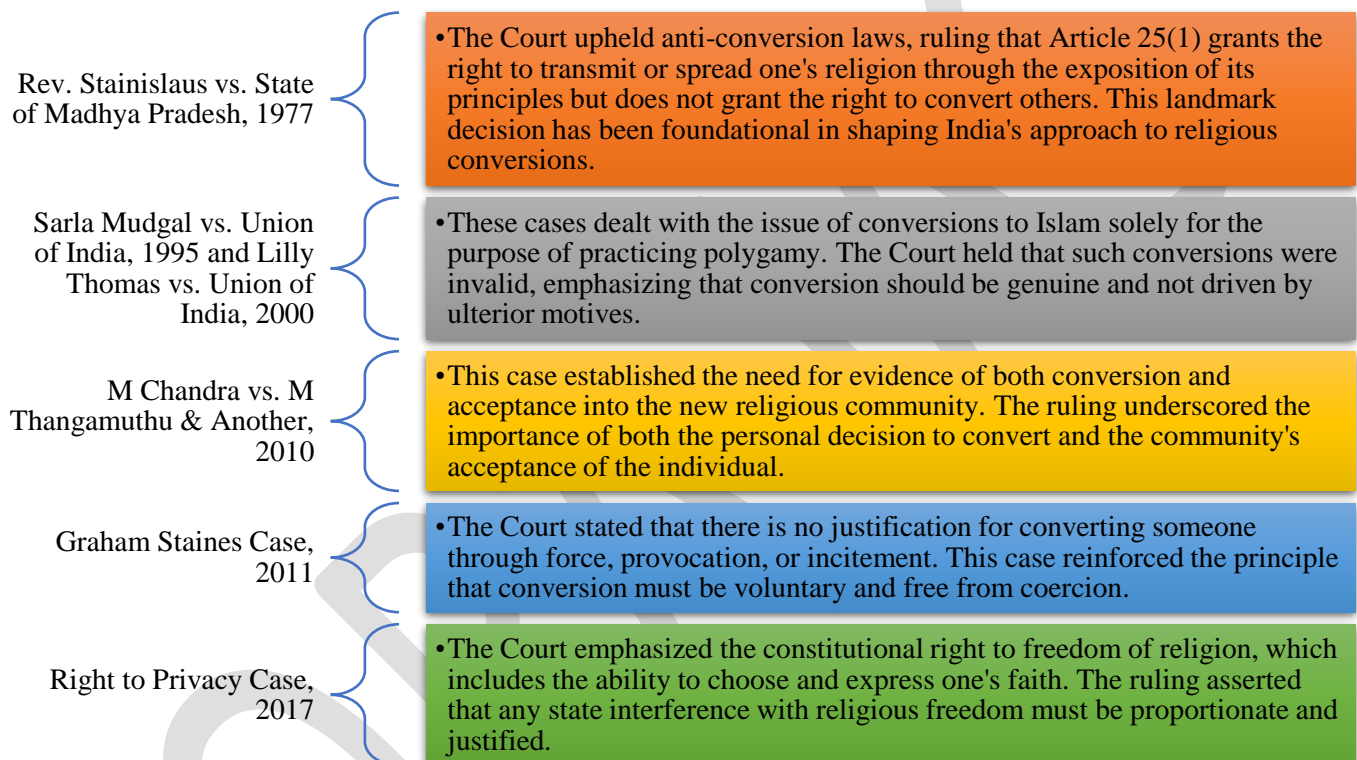
Additional Provisions

- **Purpose of the Act:** The Act aims to prohibit conversions achieved through misrepresentation, force, undue influence, coercion, allurement, or any fraudulent means. It seeks to ensure that any religious conversion is entirely voluntary and not the result of external pressures.

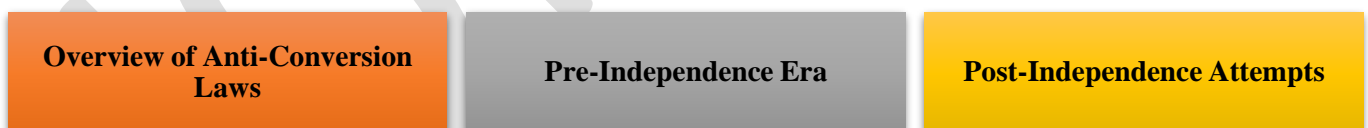


- **Punishments for Violations:** The Act prescribes penalties for illegal conversions, with standard punishments ranging from 1 to 5 years of imprisonment and a minimum fine of Rs. 15,000. If the victim is a woman, minor, or belongs to an SC/ST community, the punishment is enhanced to 2 to 10 years of imprisonment and a minimum fine of Rs. 25,000. In cases of mass conversion, the penalties are even more severe, with imprisonment ranging from 3 to 10 years and a minimum fine of Rs. 50,000.
- **Additional Provisions:** Repeat offenders may face up to double the relevant punishment. Furthermore, any marriage conducted solely for the purpose of unlawful conversion is declared void under this Act.

Supreme Court Interpretations on Religious Conversions



Anti-Conversion Laws in India



- **Overview of Anti-Conversion Laws:** These laws are regulations that seek to prevent individuals from converting to another religion through force, fraud, inducement, or allurement. They aim to protect individuals from being coerced or misled into changing their faith, ensuring that religious conversions are genuinely voluntary.
- **Pre-Independence Era:** Before India's independence, several princely states enacted anti-conversion laws to restrict missionary activities and conversions to Christianity. Examples include the Raigarh State Conversion Act (1936), Patna Freedom of Religion Act (1942), Sarguja State Apostasy Act (1945), and Udaipur State Anti-Conversion Act (1946).
- **Post-Independence Attempts:** After independence, there were several attempts to pass central legislation on religious conversion, but these efforts repeatedly failed. Bills such as the Indian Conversion (Regulation and

Registration) Bill (1954), Backward Communities (Religious Protection) Bill (1960), and All India Freedom of Religion Bill (1978) were introduced but did not pass into law. However, several states have since enacted their own anti-conversion laws.

State-Level Anti-Conversion Laws

State	Year of Enactment	Key Provisions
Odisha	1967	<ul style="list-style-type: none"> First state to enact a law restricting religious conversions. Specifically prohibits forceful conversions and conversions through fraudulent means.
Madhya Pradesh	1968	<ul style="list-style-type: none"> Introduced the Madhya Pradesh Dharma Swatantraya Adhiniyam. Requires mandatory notification to the District Magistrate for any conversion activities under penalty of law.
Arunachal Pradesh	1978	<ul style="list-style-type: none"> Enacted laws restricting religious conversions, focusing on protecting vulnerable communities.
Gujarat	2003	<ul style="list-style-type: none"> Implemented laws prohibiting conversions by force or fraudulent means. Includes stringent penalties for violations, particularly for conversions involving minors or SC/ST communities.
Chhattisgarh	2000, 2006	<ul style="list-style-type: none"> Established anti-conversion laws with provisions for regulating conversions. Enhanced penalties for conversions involving SCs, STs, minors, and women.
Rajasthan	2006, 2008	<ul style="list-style-type: none"> Introduced laws targeting forced and fraudulent conversions. Similar to other states, with penalties for violations, especially for vulnerable groups.
Himachal Pradesh	2006, 2019	<ul style="list-style-type: none"> Passed laws to prevent conversions through coercion, undue influence, or fraud. Increased penalties for conversions involving women, minors, and marginalized communities.
Tamil Nadu	2002-2004	<ul style="list-style-type: none"> Enforced laws against forced conversions, though these laws were later repealed. Initial focus was on curbing conversions through improper means.
Jharkhand	2017	<ul style="list-style-type: none"> Adopted strict regulations against forced religious conversions, especially those targeting vulnerable sections of society.
Uttarakhand	2018	<ul style="list-style-type: none"> Enforced anti-conversion laws with provisions for stringent penalties. Particular focus on protecting SCs, STs, women, and minors from coercion and fraud.
Uttar Pradesh	2021	<ul style="list-style-type: none"> Implemented comprehensive laws against unlawful conversions. Includes severe penalties for forced conversions and enhanced punishment for violations involving vulnerable groups.
Haryana	2022	<ul style="list-style-type: none"> Enacted laws targeting religious conversions through coercion, allurement, or fraud. Focus on protecting the rights of vulnerable communities against forced conversions.



Centre's Efforts

- The Union Ministry of Home Affairs has stated in an affidavit to the Supreme Court that the right to religion does not include the right to convert others, especially through fraudulent or coercive means.
- The Centre referenced the Supreme Court's interpretation of Article 25, emphasizing that fraudulent conversion infringes on an individual's freedom of conscience and can disrupt public order.
- The Centre has not yet clarified whether it will introduce a special law on religious conversions as requested in a petition.

IT Amendment Rules, 2021

Context: The Bombay High Court began hearing arguments presented by Maharashtra along with Solicitor-General Tushar Mehta on the IT Amendment Rules, 2021, which were challenged by satirist Kunal Kamra, the Editors Guild of India, the Association of Indian Magazines, and the News Broadcasters and Digital Association, seeking a stay on the notification of formation of a fact-check unit (FCU).

Provisions of IT Rules 2021 and Amendments

The Information Technology (IT) Rules 2021 were introduced under Section 87 of the IT Act, 2000. These rules are specifically designed for regulating social media platforms, digital media, and OTT (Over-The-Top) platforms.



- Social media platforms with a large user base in India are categorized as significant social media intermediaries (SSMIs). This classification subjects them to stricter regulations.
- A structured framework is outlined for the regulation of content by online publishers, covering both news and current affairs as well as curated audio-visual content.
- All intermediaries are mandated to establish a grievance redressal system to address and resolve complaints from users or affected individuals.
- Social media platforms must ensure that their privacy policies inform users not to share copyrighted materials or content that could threaten the unity, integrity, defense, security, or sovereignty of India, or damage friendly relations with other states, or violate any existing laws.
- Intermediaries are required to remove unlawful or inappropriate content within specific time frames, particularly within 24 hours of receiving a complaint about content that violates privacy or depicts individuals in compromising situations.

Amendments to IT Rules 2021



- Intermediaries are now responsible for ensuring that no content is uploaded that intentionally spreads misinformation or falsehoods. This amendment places a greater responsibility on intermediaries to manage content on their platforms.
- The amendments emphasize that intermediaries must respect the rights guaranteed to Indian citizens under Articles 14, 19, and 21 of the Indian Constitution, ensuring that these rights are upheld in digital spaces.
- The Central Government will establish one or more Grievance Appellate Committees (GAC) within three months. Each committee will consist of a chairperson and two members, one of whom will be an ex-officio member and the others independent members.
- These committees are intended to provide users with an alternative recourse to court proceedings for resolving disputes with social media platforms.
- An online dispute resolution mechanism is introduced, allowing the entire appeals process—from filing to decision—to be conducted digitally.
- Intermediaries must implement appropriate safeguards to prevent the misuse of the grievance redressal mechanism. They are required to acknowledge user complaints within 24 hours and resolve them within 15 days, or 72 hours in the case of an information takedown request.
- The amendments require intermediaries to make reasonable efforts to prevent users from uploading harmful or unlawful content. This provision ensures that the obligations of intermediaries are not just formalities.
- Communication of the rules and regulations must be done in regional Indian languages to enhance understanding among users.
- Some content categories under rule 3(1)(b) have been rephrased to specifically address misinformation and content that could incite violence between different religious or caste groups.
- The amendments emphasize the need for intermediaries to respect user rights, including due diligence, privacy, and transparency. While the original IT Rules 2021 required intermediaries to inform users about prohibited

Censoring 'fake news'

A rundown on the new amendments in the IT Rules, 2021

■ The amendment requires platforms to take steps to prevent "fake news" on the Central Government from being hosted

■ The government will appoint an agency, likely the Press Information



Bureau, to determine what is considered to be fake news

■ MoS Chandrasekhar said this amendment would only remove the legal shield for third party posts on social media platforms, and wouldn't constitute censorship



I don't want anybody to conflict this as some battleground between free speech and misinformation.
RAJEEV CHANDRASEKHAR

Ministry of Electronics & Information Technology
Government of India

myGov
मेरी सरकार

Safeguarding Users' Rights,
Ensuring Responsible Internet Freedom

Govt Notifies IT Rules, 2021
(Intermediary Guidelines & Digital Media Ethics Code)



The proposed framework seeks to address peoples' varied concerns while removing any misapprehension about curbing creativity and freedom of speech

The guidelines have been framed keeping in mind the difference between viewership in a theatre and television as compared to watching it on Internet

Right to criticize and disagree is an essential element of democracy but social media platforms need to follow Constitution and the laws of India

content, the amended rules now require intermediaries to take "all reasonable measures" to ensure users are aware of these restrictions.

HC Issues Notice to MSBCC Over Report on Maratha Quota

Context: The Bombay High Court on Wednesday issued a notice to the Maharashtra State Backward Class Commission (MSBCC) amid ongoing hearings of petitions challenging the State's decision to grant 10% reservation to Marathas in education and jobs.

Key Highlights

- The High Court, which started hearing the petitions last week, had on Tuesday noted that the MSBCC was a necessary party in the pleas as some of them had challenged its report recommending the reservation for Marathas.
- A full Bench — comprising Chief Justice Devendra K. Upadhyaya, Justice Girish S. Kulkarni, and Justice Firdosh Pooniwalla — issued the notice to the MSBCC, headed by former judge Sunil B. Shukre.
- The Bench also gave the State government a week's time to file an additional affidavit and a rejoinder.
- The pleas challenged the constitutional validity of the Maharashtra State Reservation for Socially and Educationally Backward Classes Act, 2024, under which the 10% quota was granted to the Maratha community in government jobs and education.
- The petitions also challenged the setting up of the MSBCC, its methodology, and the report recommending the reservation.
- The Bombay High Court will resume hearing the challenge to the 10% quota in jobs and education for Marathas under the Socially and Educationally Backward Class (SEBC) category in Maharashtra on June 13. This means the court will decide on the pleas seeking an interim stay on the state's SEBC Act, 2024, only after the Lok Sabha elections are over.

Maharashtra State Backward Class Commission

Establishment and Leadership

Population and Community Status

Economic and Social Challenges

Representation and Employment

Recommendations

- The Maharashtra State Backward Class Commission was created in December 2023.
- Justice (retired) Sunil B Shukre is heading the commission.
- The Maratha community constitutes 28% of Maharashtra's population.
- Of the Maratha population, 84% are categorized as not advanced, indicating significant socio-economic challenges.
- The commission has determined that such a large segment of the backward community does not fit within the Other Backward Classes (OBC) category.
- The commission points out severe poverty, declining agricultural income, and fragmentation of land holdings as key issues facing the Maratha community.
- Notably, 94% of farmer suicides in the state are attributed to individuals from the Maratha community.
- The commission identifies a lack of adequate representation of the Maratha community in public services as a result of their socio-economic status.
- To address these issues, the commission suggests implementing separate reservations aimed at enhancing Maratha representation in government jobs and in various developed sectors.

Highlights of the Maratha Reservation Bill

- The Bill is founded on the Maharashtra State Backward Class Commission's report, which identified the Maratha community as socially and educationally backward.
- This classification supports the need for reservation for the Maratha community.
- The Bill designates the Maratha community as a Socially and Educationally Backward Class under Article 342A(3) of the Indian Constitution.
- It provides for reservations under:
 - Article 15(4): Allows the state to make special provisions for the advancement of SEBCs, Scheduled Castes (SCs), and Scheduled Tribes (STs).
 - Article 15(5): Enables the state to reserve seats in educational institutions for SEBCs, SCs, and STs, with exceptions for minority institutions.
 - Article 16(4): Permits the state to reserve appointments or posts for any backward class not adequately represented in state services.
- The Bill stipulates that reservations will only apply to Marathas who are not part of the "creamy layer," ensuring that the benefits reach the most disadvantaged within the community.
- The commission's report justified exceeding the Supreme Court's 50% reservation ceiling (as per the Indra Sawhney judgment of 1992) due to "exceptional circumstances and extraordinary situations."
- Maharashtra's current total reservation stands at 52%, encompassing SCs, STs, OBCs, Vimukt Jati, Nomadic Tribes, and other categories.
- With the proposed 10% reservation for Marathas, the total reservation in the state will increase to 62%.

Avoid Arrest of Boys Who Go on A Date: HC In Response to PIL On Gender Discrimination

Context: The boy should not be arrested if two young persons go on a date, said Uttarakhand High Court, while hearing a public interest litigation pertaining to gender discrimination in teenage dating.

Key Points

- The observations were made by a Bench of Chief Justice Ritu Bahari and Justice Rakesh Thapliyal, who said that the State could examine the issue whether recording of the statement under Section 161 of Criminal Procedure Code (CrPC) would be sufficient to not arrest the boy, who had gone on a date with the girl.
- It is worth mentioning here that CrPC has now been replaced with the Bharatiya Nagarik Suraksha Sanhita.
- In cases where two young persons, one is girl and one is boy, are dating each other, they may be between the age of 16 to 18 years, and on the complaint made by the parents of the girl, the boy should not be arrested if no offence under Sections 3, 4, 5, 6 and 7 of the Protection of Children from Sexual Offences [POCSO] Act is made out
- The petitioner says he was forced to file the PIL as in most cases of teenage dating, the girls are considered as victims while boys are treated as perpetrators.

What is the POCSO Act?

- The Protection of Children from Sexual Offences (POCSO) Act was enacted and came into force on 14th November 2012, following India's ratification of the UN Convention on the Rights of the Child in 1992.
- This special legislation was designed to address the serious issue of sexual exploitation and abuse of children, which previously lacked specific definitions or adequate penalties in existing laws.
- Under the Act, a child is defined as any individual below the age of 18 years, and the Act prescribes punishments based on the severity of the offence.

- In 2019, the Act was amended to introduce harsher penalties, including the death penalty for certain sexual crimes against children, aiming to deter such offences and protect vulnerable children.
- In addition, the Government of India has notified the POCSO Rules, 2020, to further streamline the implementation of the Act.

Features of POSCO

Gender-Neutral Approach

Ease in Reporting

Explicit Definitions

- The POCSO Act acknowledges that both boys and girls can be victims of sexual abuse, and it criminalizes such abuse regardless of the victim's gender.
- This aligns with the principle that all children deserve protection from sexual abuse and exploitation, without any gender-based discrimination.
- The Act has created broader awareness and established a legal obligation to report cases of child sexual exploitation, not only by individuals but also by institutions.
- Failure to report is a specific offence under the POCSO Act, making it more difficult for perpetrators to conceal crimes against children.
- The Act has introduced new offences, such as the storage of child pornography, and provided clear definitions for crimes like 'sexual assault' with stricter minimum punishments.
- This is a significant improvement over the Indian Penal Code, where similar offences were vaguely defined, such as the term 'outraging modesty of a woman.'

POCSO Rules 2020

Interim Compensation and Special Relief

Immediate Payment of Special Relief

Support Person for the Child

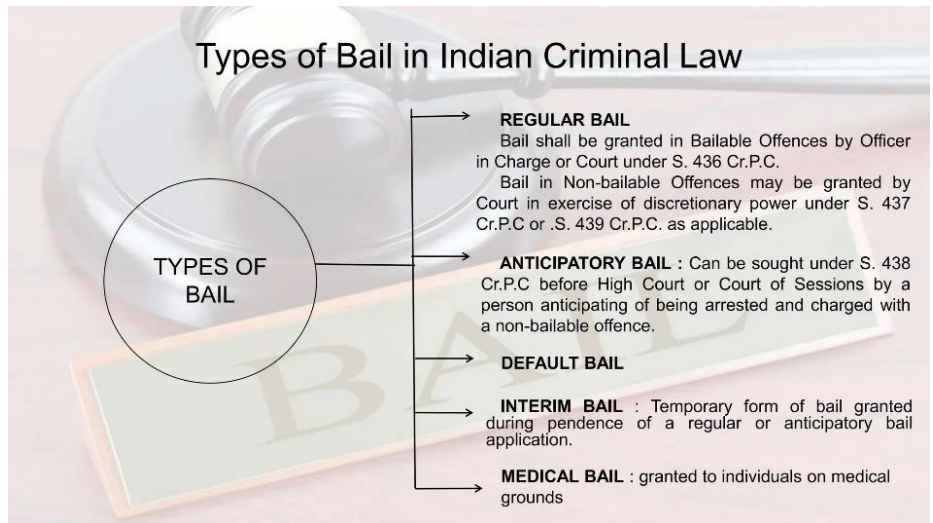
- Rule 9 of the POCSO Rules allows the Special Court to grant interim compensation to cover a child's needs related to relief or rehabilitation following the registration of an FIR. This interim compensation is later adjusted against any final compensation awarded.
- Under the POCSO Rules, the Child Welfare Committee (CWC) can recommend immediate financial assistance for essential needs such as food, clothing, and transportation. This support is provided through funds from the District Legal Services Authority (DLSA), District Child Protection Unit (DCPU), or under the Juvenile Justice Act 2015.
- The payment must be made within a week of receiving the recommendation from the CWC.
- The POCSO Rules empower the CWC to appoint a support person to assist the child throughout the investigation and trial.
- This support person ensures the child's best interests, including their physical, emotional, and mental well-being, and facilitates access to necessary medical care, counseling, and education. They also keep the child and their parents or guardians informed about court proceedings and case developments.

Bail Cannot Be Withheld as A Form of Punishment, Says SC

Context: The Supreme Court has held that the right to bail of an accused cannot be withheld as a punishment irrespective of the nature of the crime.

Key Points

- Refusal to grant bail is an unjust punishment leading to “prisonisation” of an accused, who is innocent until proven guilty, the apex court reminded.
- If the state or any prosecuting agency, including the court concerned, has no wherewithal to provide or protect the fundamental right of an accused to have a speedy trial as enshrined under Article 21 of the Constitution then the state or any other



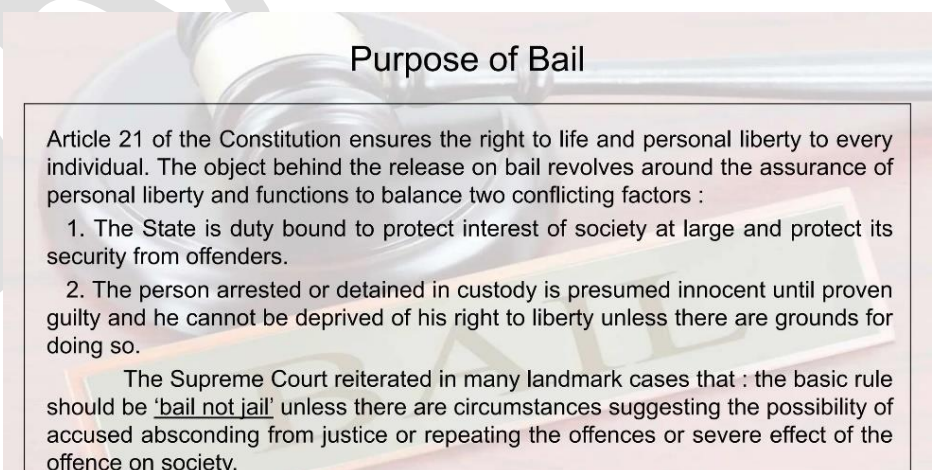
prosecuting agency should not oppose the plea for bail on the ground that the crime committed is serious. Article 21 of the Constitution applies irrespective of the nature of the crime.

Background of Javed Gulam Nabi Shaikh v. State of Maharashtra and Another Case

- In this case, the appellant, Javed Gulam Nabi Shaikh, was apprehended by the Mumbai police and found in possession of counterfeit currency notes with a denomination of Rs. 2000.
- A First Information Report (FIR) was registered against the appellant for offences under Sections 489B, 489C, 120B, and Section 34 of the Indian Penal Code, 1860 (IPC).
- The investigation was later transferred to the National Investigation Agency (NIA).
- The appellant filed an appeal against the order of the High Court of Bombay, which had denied his request for bail in connection with the prosecution under the Unlawful Activities (Prevention) Act, 1967 (UAPA).

Court's Observations

- The Court decided to grant bail to the appellant, considering three significant factors
- The appellant had been incarcerated as an undertrial prisoner for the past four years.
- The trial court had not yet framed charges against the appellant.
- The prosecution planned to examine at least eighty witnesses, indicating a prolonged trial process.
- The Court emphasized that the accused has a constitutional right to a speedy trial, as guaranteed under the Constitution of India.
- It reiterated the legal principle that bail should not be denied as a form of punishment.



- The Court held that if the State cannot ensure a speedy trial, which is a fundamental right under Article 21 of the Constitution of India, it should not oppose the granting of bail, even in cases involving serious crimes.
- The Court further stated that the infringement of the right to a speedy trial would constitute a violation of Article 21 of the Constitution.

Cannot Force Accused to Share Google Map Pin: SC

Context: The Supreme Court on Monday held that requiring an accused to share his or her Google location pin with the investigating officer to facilitate tracking of movement is a violation of the right to privacy.

Key Highlights

- There cannot be a bail condition defeating the purpose of bail. We have said Google PIN cannot be a condition. The police cannot peep into the private life of an accused on bail
- The verdict came in an appeal filed by Frank Vitus, who is an accused in a drugs case, challenging a Delhi High Court order of 2022, mandating him to share his Google Map location with the probe officer as a condition for his bail.

Constitutional Provision

The Right to Privacy is safeguarded as an intrinsic element of the right to life and personal liberty under Article 21 of the Indian Constitution. Additionally, it is considered a part of the broader freedoms guaranteed under Part III of the Constitution.

Right to Privacy

- Privacy is generally understood as the right to be left alone, free from intrusion into personal matters.
- The Supreme Court of India provided a comprehensive definition of privacy in the landmark case of K.S. Puttaswamy v. Union of India (2017), where it recognized the Right to Privacy as a fundamental and inalienable right. This right extends to all personal information and the choices an individual makes.

Restrictions on Privacy

- The Right to Privacy, as outlined by the Supreme Court, is not absolute and can be restricted by the state under specific conditions. These restrictions must meet three essential criteria:
- The restriction must have a clear legislative mandate.
- It must serve a legitimate state purpose.
- The action must be proportionate, meaning it should be necessary in a democratic society and should be the least intrusive method available to achieve the intended purpose.

Government Initiatives to Safeguard Right to Privacy

Government Initiative	Details
B N Srikrishna Committee	Formation: Established by the Indian government, chaired by Justice B N Srikrishna.
	Objective: To examine data privacy and protection issues in India.
	Report Submission: The committee submitted its report in July 2018, which laid the groundwork for shaping India's data protection laws.
Information Technology Act, 2000	Overview: A legislative framework addressing data security and privacy issues.
	Provisions: Includes safeguards against unauthorized access to and misuse of computer systems and data.
	Safeguards: Sets legal standards to prevent breaches like hacking and data theft, ensuring the security of digital information and enhancing cybersecurity.

Films Should Not Misrepresent People with Disabilities: SC

Context: The Supreme Court held that creative freedom did not include the liberty to lampoon, stereotype, misrepresent or disparage persons with disabilities in films and visual media. The verdict was based on a petition filed by activist Nipun Malhotra alleging an insensitive portrayal of persons with disabilities in the film Aankh Micholi.

Key Highlights

- Often, humour was a powerful tool used in films and visual media to challenge notions of “otherness” or “inferiority” associated with persons with disability, the Chief Justice, who authored the judgment, said.
- Comics with disabilities use self-deprecating humour to critique the social order and counter stereotypical images. He also drew attention to how films and visual media tend to perpetuate myths about disabilities. The court noted how persons with certain disabilities were portrayed as “super-cripples”.
- The judgment denounced the use of words such as “cripple” and “spastic”, which stigmatise those with disabilities.
- The court frowned upon terms such as “afflicted”, “the suffering”, and “victim”. “They contribute to a negative self-image
- The court advised authorities to involve persons with disabilities as major stakeholders on statutory committees while taking decisions to protect their rights, especially under the Cinematograph Rules.
- It reminded the government that the Convention on the Rights of Persons with Disabilities required authorities to take in the “lived experiences” of the group concerned.

Privilege Notice Against PM

Context: Congress’s Rajya Sabha Chief Whip Jairam Ramesh submitted a breach of privilege notice against Prime Minister Narendra Modi for making “derogatory” remarks against former Vice-President and Chairman of the Upper House Hamid Ansari during a speech in the Lok Sabha in the last Parliament session.

What is Parliamentary Privilege?

- Parliamentary privilege encompasses the rights, immunities, and exemptions granted to Parliament as an institution and to its members (MPs) individually. These privileges are essential for MPs to perform their duties effectively as mandated by the Constitution.
- If any of these rights or immunities are violated, it constitutes a breach of privilege, which is considered an offence punishable under the laws governing Parliament.

Breach of Privilege

A breach of privilege occurs when these protected rights or immunities are disregarded or infringed upon. When such a breach occurs, a notice can be submitted in the form of a motion by any member of either House, addressing those responsible for the breach.

What is the Privileges Committee?

- In the Lok Sabha, the Speaker nominates a Committee of Privileges, which consists of 15 members representing different political parties proportionally.
- The committee examines the issue and presents a report to the House for consideration.
- The Speaker may allow a half-hour debate on the report before passing final orders or directing that the report be tabled before the House.
- A resolution concerning the breach of privilege can then be moved, which must be unanimously passed by the House.

Committee Composition and Function in the Rajya Sabha

In the Rajya Sabha, the Deputy Chairperson leads the Committee of Privileges, which consists of 10 members.

What is the Role of the Speaker/Rajya Sabha Chair?

- The Speaker of the Lok Sabha or the Chairperson of the Rajya Sabha is responsible for the first level of scrutiny of a privilege motion.
- The Speaker/Chairperson can either make a decision on the privilege motion independently or refer it to the Privileges Committee for further examination.
- Procedure if Consent is Given
- If the Speaker/Chairperson gives consent under the relevant rule (Rule 222 in Lok Sabha or Rule 187 in Rajya Sabha), the member who raised the motion is allowed to make a brief statement regarding the issue.

What are the Rules Governing Privilege?

Constitutional Provisions

Article 105 of the Indian Constitution outlines two key privileges: the freedom of speech within Parliament and the right to publish its proceedings.

Parliamentary Rules

In the Lok Sabha, Rule 222 in Chapter 20 of the Rule Book, and in the Rajya Sabha, Rule 187 in Chapter 16 of the Rule Book, govern the procedures related to privileges.

A member of Parliament may raise a question involving a breach of privilege, with the consent of the Speaker or the Chairperson, whether it concerns an individual member or the House as a whole.

The rules require that any notice of a breach of privilege must relate to a recent incident and must necessitate the intervention of the House.

Digital Competition Bill

Context: In February 2023, the Ministry of Corporate Affairs (MCA) constituted a Committee on Digital Competition Law (CDCL) to examine the need for a separate law on competition in digital markets.

What is an ex-ante framework?

- The Competition Act, 2002 is the primary legislation concerned for preventing practices that have an adverse effect on competition. It establishes the Competition Commission of India (CCI) as the national competition regulator. As with competition law in all other jurisdictions, the Competition Act, 2002 is based on an ex-post framework. This means that the CCI can use its powers of enforcement only after the anti-competitive conduct has occurred.
- In the case of digital markets, the CDCL has advocated for an ex-ante competition regulation. This means that they want the CCI's enforcement powers to be supplemented such that it allows it to pre-empt and prevent digital enterprises from indulging in anti-competitive conduct in the first place.
- Ex-ante competition regulation is unusual. The European Union is the only jurisdiction where a comprehensive ex-ante competition framework, under the Digital Markets Act, is currently in force.

What is the draft's basic framework?

- The draft Bill follows the template of the EU's Digital Markets Act. It does not intend to regulate all digital enterprises, and places obligations only on those that are "dominant" in digital market segments. At present, the draft Bill identifies ten 'core digital services' such as online search engines, social networking services, video sharing platform services etc.
- The draft Bill prescribes certain quantitative standards for the CCI to identify dominance of digital enterprises. These are based on the 'significant financial strength' test which looks at financial parameters and 'significant spread' test based on the number of users in India.
- Even if the digital enterprise does not meet quantitative standards, the CCI may designate an entity as a "systemically significant digital enterprise (SSDE)" based on qualitative standards.
- The primary obligation of SSDEs is to not indulge in anti-competitive practices. These require the SSDE to operate in a fair, non-discriminatory and transparent manner with its users.
- The draft Bill prohibits SSDEs from favouring its own products on its platform over those of third parties (self-preferencing); restricting availability of third party applications and not allowing users to change default settings; restricting businesses users of the service from directly communicating with their end users (anti-steering) and tying or bundling of non-essential services to the service being demanded by the user.
- SSDEs also cannot cross utilise user data collected from the core digital service for another service and non-public data of users cannot be used to give unfair advantage to the SSDE's own service.

Large internet firms oppose 'ex-ante' regulations in digital competition law



A government panel has proposed a new digital competition law and prescribed ex-ante regulations

This is to pre-emptively regulate potential abuse of dominance by large digital companies

In an ex-ante framework, the law issues a set of proscriptions to prevent anti-competitive behaviour

THOSE IN FAVOUR

Paytm has supported the framework only if large digital cos are subject to it

MakeMyTrip favoured ex-ante regulations only to select large horizontal platforms

Trade unions and industry bodies such as CAIT, NRAI also support ex-ante rules

THOSE AGAINST

Zomato said the framework should not stifle innovation in the startup ecosystem

Swiggy said ex-ante regulation may adversely impact small homegrown players

Amazon and Flipkart said this system is 'largely untested' in EU

What has been the response?

- There is considerable scepticism on how well an ex-ante model of regulation will work. This stems in part from the fact that it seems to be transposed from the EU to India without taking into account differentiating factors between the two jurisdictions and the lack of evidence of it actually working well there.
- This is compounded by concerns of its potential negative effects on investments for start-ups in India and that they might be deterred to scale up to prevent meeting quantitative thresholds.
- Studies have also shown that restrictions on tying and bundling and data usage would negatively impact MSMEs that have come to rely significantly on big tech to reduce operational costs and enhance customer outreach.

Ministry of Corporate Affairs

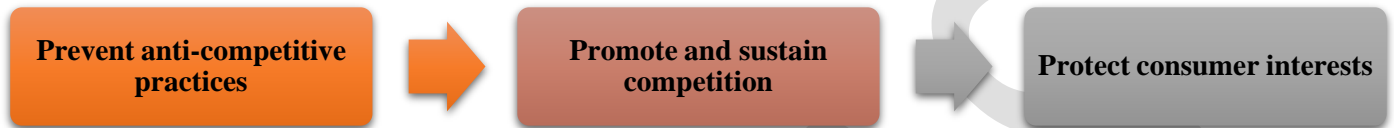
- The Ministry is tasked with overseeing the administration of several key legislative frameworks that govern corporate activities in India. These include:
- The Companies Act, 2013 and Companies Act, 1956, which regulate the incorporation, functioning, and dissolution of companies.
- The Limited Liability Partnership (LLP) Act, 2008, which governs the formation and regulation of limited liability partnerships.

- Other related acts, rules, and regulations designed to ensure that the corporate sector operates in compliance with the law.

Regulation of the Corporate Sector

The Ministry's primary role is to regulate the functioning of the corporate sector. This includes ensuring that companies and LLPs adhere to legal standards, maintain transparency in their operations, and uphold corporate governance principles.

Competition Law Administration



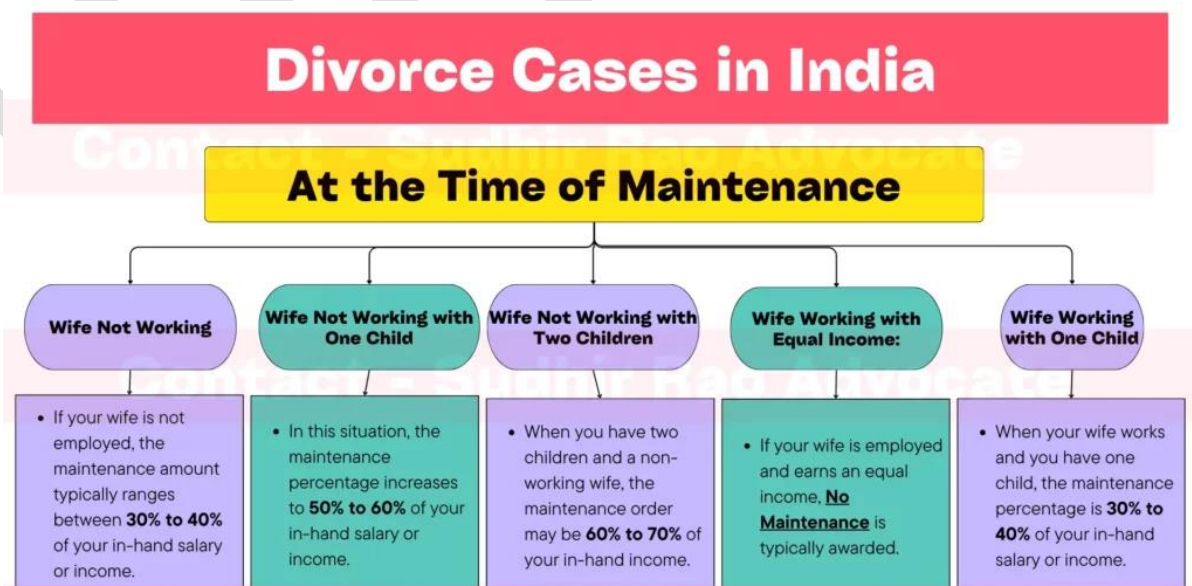
- **Prevent anti-competitive practices:** The Ministry, through the Competition Commission of India (CCI), works to prevent practices that could harm competition within markets.
- **Promote and sustain competition:** By fostering a competitive environment, the Ministry helps ensure that markets operate efficiently and fairly.
- **Protect consumer interests:** The Ministry, through the CCI, safeguards consumer rights by preventing unfair business practices that could negatively impact consumers.

Divorced Muslim Women Entitled to Secular Remedy: SC

Context: The Supreme Court held that divorced Muslim women are entitled to maintenance under the “secular” Section 125 of the Code of Criminal Procedure.

Key Highlights

- A remedy under the secular statutory provision of Section 125 of the Cr.PC cannot be foreclosed for divorced Muslim women by virtue of enactment of a personal law remedy under the Muslim Women (Protection of Rights on Divorce) Act, 1986.
- A divorced Muslim woman is entitled to all rights of maintenance available to other equally situated women in the country.



Evolution of Maintenance Law in India

- The law governing maintenance for destitute wives, children, and parents is primarily codified under Section 125 of the Criminal Procedure Code (CrPC).
- According to this provision, if any person with sufficient means neglects or refuses to maintain his wife, a magistrate of the first class can order the person to provide a monthly allowance for the maintenance of his wife, at a rate the magistrate deems appropriate.
- The term "wife" in this context is broad, including a woman who has been divorced by or has obtained a divorce from her husband and has not remarried. This provision does not specify the woman's religion, making it a secular law applicable to all women.

Introduction of the 1986 Act

- The Muslim Women (Protection of Rights on Divorce) Act, 1986 is a religion-specific law that governs maintenance for Muslim women during divorce.
- The Act was introduced to counteract the Supreme Court's 1985 decision in the Mohd. Ahmad Khan v. Shah Bano Begum (Shah Bano case), which had upheld the right of a Muslim woman to seek maintenance from her divorced husband under Section 125 of the CrPC.
- The Shah Bano verdict was controversial as it was seen by some as conflicting with religious personal laws. To address these concerns, the

What the top court said

GENDER EQUALITY

Discrimination against Muslim women in matters of alimony under secular laws will be regressive, it said



PERSONAL LAW DOESN'T SUPERSEDE

Rejects argument that CrPc Section 125 provisions don't apply due to there being a personal law for Muslims and that the Muslim Women (Protection of Rights on Divorce) Act, 1986, will prevail over the country's secular law



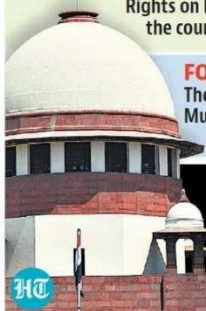
FORTIFYING WOMEN'S RIGHTS

The 1986 Act does not bar Muslim women from seeking maintenance under the CrPc



SHAH BANO ALLUSION

Philosophy laid down in Shah Bano verdict lives through. In that case, the apex court ruled that Muslim women were entitled to maintenance under CrPc Section 125, which was later countered by the Rajiv Gandhi govt through the 1986 Act



"There cannot be disparity in receiving maintenance on the basis of the law under which a woman is married or divorced. The same cannot be a basis for discriminating a divorced woman entitled to maintenance..."

— JUSTICE BV NAGARATHNA, SC JUDGE, IN HER ORDER

Judgements Related to Maintenance

Supreme Court's Interpretation in Danial Latifi Case (2001)

In the Danial Latifi v. Union Of India (2001) case, a Constitution Bench of the Supreme Court upheld the constitutional validity of the 1986 Act.

Further Clarifications in Shabana Bano Case (2009)

The Court clarified that the right to maintenance for a Muslim woman extends until she remarries, although it reduced the period during which maintenance is mandatory to the completion of the iddat period.

In Shabana Bano v. Imran Khan (2009), a Division Bench of the Supreme Court reiterated that a divorced Muslim woman is entitled to claim maintenance under Section 125 of the CrPC as long as she does not remarry.

The ruling also emphasized that maintenance could be claimed even after the iddat period, reinforcing the woman's right to financial support beyond the constraints of the 1986 Act.

Patna High Court Ruling (2019)

In 2019, Justice Ahsan Amanullah of the Patna High Court further clarified the rights of divorced Muslim women regarding maintenance.

The Court set aside a family court order that had rejected a Muslim woman's plea for maintenance, emphasizing that she has the option to claim maintenance under both the CrPC and the 1986 Act.

The ruling affirmed that choosing to seek maintenance under the CrPC does not disqualify a divorced Muslim woman from receiving support, even if she is divorced.

1986 Act limited a divorced Muslim woman's right to maintenance to the period of iddat—a waiting period of typically three months after divorce or the death of her husband.

- During this period, the woman is entitled to an amount equal to her mahr or dowry. If, after the iddat period, she has not remarried and is unable to support herself financially, she may approach a first-class magistrate for further maintenance.

Centre Begins Efforts to Implement Labour Codes

Context: Union Labour Ministry has started efforts to implement the four Labour Codes, which were passed in Parliament in its second term in 2019 and 2020.

Labor Code

Aspect	Details
Applicability	Applies to all establishments and employees in both organized and unorganized sectors.
Uniform Provisions	Ensures timely payment of wages, minimum wages for all employees, and bonus payments in all employments involving industry, business, trade, or manufacturing activities.
Floor Wage Concept	Introduces a floor wage determined by the Centre, considering minimum living standards, with variations for different geographical areas.
State Wage Rates	State governments cannot set minimum wages below the floor wage determined by the Centre; minimum wages must be above the floor wage.
Determining Minimum Wages	Minimum wages are set considering the difficulty level of the work and the workers' skill levels; existing higher wages cannot be reduced.
Gender Equality	Prohibits gender discrimination in wages and recruitment for the same work or work of a similar nature, which requires similar skill, effort, experience, and responsibility.
Definition of Wages	Wages include salary, allowances, or any other monetary component, excluding bonuses and travel allowances.
Working Hours and Overtime	Working hours are set by central or state governments; overtime compensation is at least twice the standard wages.
Wage Period	Employers can set the wage period as daily, weekly, fortnightly, or monthly.
Advisory Boards	Advisory boards will advise governments on minimum wage fixation and increasing employment opportunities for women.
Penalties	Specifies penalties for employers for contraventions, including paying less than the minimum wage; the maximum punishment is three months imprisonment and a fine of Rs. 1 lakh.

Money Bills

Context: SC to hear petitions against passing laws as Money Bills

Key Points

- The Money Bill question was referred to a seven-judge Bench in November 2019 by a five-judge Bench headed by Chief Justice Ranjan Gogoi in the case of Rojer Mathew vs. South Indian Bank Ltd. The cardinal issue is whether such amendments could be passed as a Money Bill, circumventing the Rajya Sabha, in violation of Article 110 of the Constitution.
- A Money Bill is deemed to contain only provisions dealing with all or any of the matters under clauses (a) to (g) of Article 110(1), largely including the appropriation of money from the Consolidated Fund of India and taxation. In other words, a Money Bill is restricted only to the specified financial matters.
- The reference includes legal questions concerning amendments made from 2015 onwards in the Prevention of Money Laundering Act (PMLA) through Money Bills, giving the Enforcement Directorate almost blanket powers of arrest, raids, etc. Though the court had upheld the legality of the PMLA amendments, it left the question of whether the amendments could have been passed as Money Bills to the seven-judge Bench.

Money Bill?

- A Money Bill is a type of financial legislation that deals exclusively with matters related to the imposition, abolition, remission, alteration, or regulation of taxes, government revenues, or expenditures.
- It is defined under Article 110 of the Indian Constitution.

Provisions of the Money Bill

- Article 110(1)(a) Imposition, abolition, remission, alteration, or regulation of any tax
- Article 110(1)(b): The regulation of borrowing by the government or giving of any guarantee by the government or the amendment of the law for any financial obligations undertaken by the government
- Article 110(1)(c): Custody of the Consolidated Fund or the Contingency Fund of India, the payment of money into or the withdrawal of money from any such Fund.
- Article 110(1)(d): Appropriation of money out of the Consolidated Fund of India
- Article 110(1)(e): Declaration of any expenditure to be expenditure charged on the Consolidated Fund of India or the increase of the amount of any such expenditure
- Article 110(1)(f): Receipt of money on account of the Consolidated Fund of India or the public account of India or the custody or issue of such money or the audit of the accounts of the Union or of a State
- Article 110(1)(g): Any matter incidental to any of the matters specified in sub-clauses (a) to (f).

Characteristics

- A Money Bill can only contain provisions related to the following:
- Imposition, abolition, remission, alteration, or regulation of any tax.
- Regulation of the borrowing of money or the giving of any guarantee by the Government of India.
- Custody of the Consolidated Fund or the Contingency Fund of India, the payment of money into or withdrawal of money from any such fund.
- Appropriation of money out of the Consolidated Fund of India.
- Declaring any expenditure to be expenditure charged on the Consolidated Fund of India.
- Receipt of money on account of the Consolidated Fund of India or the public account of India or the custody or issue of such money.
- Audit of the accounts of the Union or of a state.

Difference between a Money Bill and a Financial Bill

Aspect	Money Bill	Financial Bill
Definition	A Money Bill is limited to matters mentioned in Article 110 of the Constitution, such as taxes, borrowing, or the expenditure of the government.	A Financial Bill includes a broader range of financial matters, not strictly related to taxes or government spending.
Introduction	Can only be introduced in the Lok Sabha.	Can be introduced in either house of Parliament.
Speaker's Certification	Requires the Speaker of the Lok Sabha to certify that it is a Money Bill.	Does not require the Speaker's certification.
Role of Rajya Sabha	The Rajya Sabha can only make recommendations on a Money Bill, which the Lok Sabha may accept or reject.	Requires approval from both the Lok Sabha and Rajya Sabha.
Scope of Matters	Limited to specific financial matters such as taxes, appropriation of funds, and charges on the Consolidated Fund of India.	Covers a broader range of financial matters, including those not strictly

		related to taxes or government expenditure.
Approval Requirement	Requires approval only from the Lok Sabha, with the Rajya Sabha's role being advisory.	Requires approval from both houses of Parliament.

States Cannot Tinker With The Scheduled Castes List, Says SC

Context: The Supreme Court has held that the States cannot tinker with the Scheduled Castes List notified under Article 341 of the Constitution.

Key Highlights

- Any inclusion or exclusion of any caste, race or tribe or part of or group within the castes, races or tribes has to be, by law, made by the Parliament, and not by any other mode or manner
- The judgment by the top court came in a challenge by Dr. Bhim Rao Ambedkar Vichar Manch, Patna, to a July 1, 2015 notification issued by the Bihar government, on the basis of the recommendation of the State Backward Classes Commission to merge the Extremely Backward Class (EBC) of Tanti-Tantwa with the Scheduled Caste of Pan/Sawasi in the Scheduled Castes List. The merger would enable the Tanti-Tantwa to claim the benefits of Scheduled Castes.
- The State government had no competence/authority/power to tinker with the lists of Scheduled Castes published under Article 341 of the Constitution
- The court said the State Backward Commission, in the first place, had jurisdiction to recommend the joining of a caste or group with a notified Scheduled Caste community.

Procedure to Amend/Alter the Scheduled Castes (SC) List



- **State Government Proposal:** The process begins when a state government proposes the inclusion or exclusion of a community from the Scheduled Castes (SC) list.
- **Ministry Scrutiny:** The proposal is then scrutinized by the Ministry of Social Justice and Empowerment, which evaluates it based on socio-economic factors and historical data.
- **Registrar General of India (RGI):** Inputs from the Registrar General of India are also considered during this phase.
- **National Commission for Scheduled Castes (NCSC):** The proposal is referred to the NCSC for expert recommendations. The NCSC plays a crucial role in providing insights and suggestions based on the community's social and economic conditions.
- **Cabinet Review:** The proposal, along with the NCSC's recommendations, is reviewed by the Cabinet, which then decides whether to approve the proposed amendments.
- **Constitutional Amendment Bill:** After Cabinet approval, a Constitutional Amendment Bill is introduced in Parliament. This Bill outlines the specific changes proposed for the SC list.
- **Special Majority:** The Bill must be passed by a special majority in both Houses of Parliament. This requires a majority of the total membership of each House and a majority of the members present and voting.
- **Presidential Assent:** Once the Bill is passed by Parliament, it is sent to the President for assent.
- **Enactment:** Upon receiving the President's assent, the amendments to the SC list are officially enacted and come into effect.

Uttarakhand HC Allows Protection to Interfaith Live-In Couple Under UCC

Context: In the first such case after the Uniform Civil Code of Uttarakhand Act came into force, the High Court recently allowed protection to an interfaith couple in a live-in relationship, provided they apply for mandatory registration under the new Act within 48 hours.

Key Highlights

- The counsel for Uttarakhand State submitted in the High Court that under Section 378(1) of the recently enforced Uniform Civil Code (UCC), it is obligatory for partners of a live-in relationship within the State, whether they are residents of Uttarakhand or not, to submit a statement of their relationship to the registrar within whose jurisdiction they are living. And that failure to do so may result in a jail sentence of up to three months or a fine of up to ₹10,000 or both.
- Article 21 of the Constitution, 'Protection of Life and Personal Liberty', ensures that no person shall be deprived of his life or personal liberty except according to procedure established by law.

Uttarakhand's UCC Bill, 2024

Uniform Civil Code (UCC)	Article 44 of the Constitution	Prohibition of Practices	Uniform Age of Marriage
Live-in Relationships	Gender Equality	Property Rights	Scheduled Tribes (STs)
	Marriage Age	Live-in Relationship Registration	

- **Uniform Civil Code (UCC):** The UCC aims to replace the various personal laws governing marriage, divorce, adoption, and inheritance across different religions with a single set of laws applicable to all citizens, regardless of religion.
- **Article 44 of the Constitution:** The bill is guided by Article 44, which envisions a uniform civil code for all citizens.
- **Prohibition of Practices:** The UCC proposes to ban practices such as polygamy, nikah halala (a practice requiring a woman to marry another man and then divorce him before remarrying her former husband), iddat (a waiting period after divorce or the death of a husband observed by Muslim women), triple talaq (instant divorce), and child marriage.
- **Uniform Age of Marriage:** Establishes a uniform marriage age for girls across all religions.
- **Live-in Relationships:** Mandates registration of live-in relationships.
- **Gender Equality:** The bill aims to promote gender equality by ensuring equal treatment of men and women in matters such as inheritance and marriage.
- **Property Rights:** It is expected to extend equal property rights to Muslim women, potentially increasing their share from the current 25% under Muslim personal laws.
- **Scheduled Tribes (STs):** The bill exempts Scheduled Tribes from its provisions due to their special status and dissent against the UCC, given the distinct personal laws and customs of tribal communities. The ST population in Uttarakhand is around 3%.
- **Marriage Age:** The minimum legal age for marriage remains unchanged at 18 years for women and 21 years for men.

- **Live-in Relationship Registration:** The bill proposes mandatory registration of live-in relationships, with criminal penalties for non-compliance, which could grant excessive state power over consensual relationships and potentially infringe on individual autonomy.

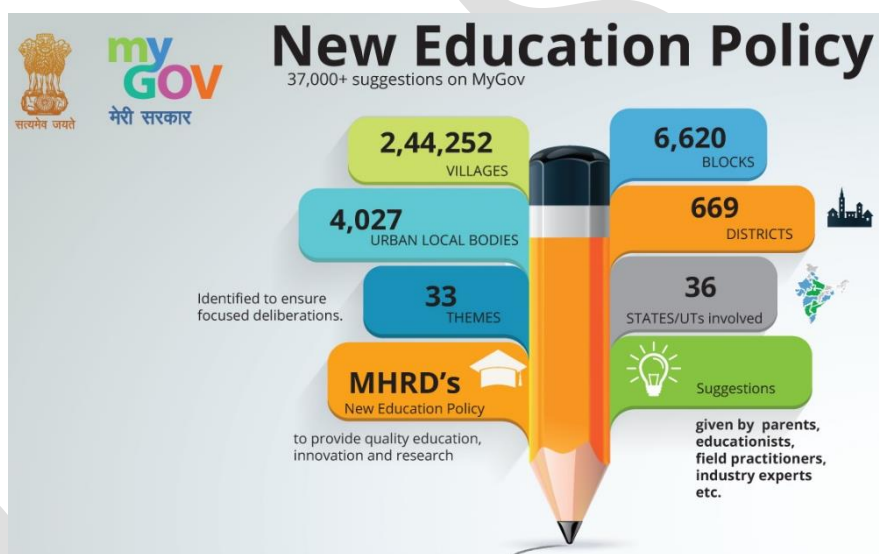
Governance & Social Justice

Should Education Be Brought Back To The State List?

Context: The NEET-UG exam has been embroiled in controversies over the award of grace marks, allegation of paper leaks and other irregularities. The government also cancelled the UGC-NET exam after it was held, while the CSIR-NET and NEET-PG exams have been postponed.

Historical Background

- The Government of India Act, 1935, introduced a federal structure in India, distributing legislative subjects between the federal legislature (now the Union) and the provinces (now the States). Education, a vital public good, was placed under the provincial list.
- After independence, education remained in the State list under the distribution of powers.
- During the Emergency, the Congress party formed the Swaran Singh Committee to recommend constitutional amendments. One key recommendation was to move 'education' to the Concurrent List to enable nationwide policies. This was implemented through the 42nd Constitutional Amendment (1976), shifting 'education' from the State List to the Concurrent List without much debate or detailed rationale.
- The Janata Party government, led by Morarji Desai, sought to reverse many changes made during the Emergency through the 44th Constitutional Amendment (1978). Although the Lok Sabha passed an amendment to return 'education' to the State List, it did not pass in the Rajya Sabha.



International Practices

- **United States:** State and local governments set educational standards, mandate standardized tests, and supervise colleges and universities. The federal education department mainly focuses on policies for financial aid, key educational issues, and ensuring equal access.

Indian Education System - Then & Now

Category	Then (1947)	Now (2021-22)
No. of primary schools in India	1,40,794	7,74,742
No. of students in primary schools	1,49,69,537	12,20,21,291
No. of teachers in primary schools	3,44,171	24,94,640
No. of universities in the country	14	1,026
No. of undergraduate colleges in the country	591	42,343
No. of teacher training institutes or colleges	529	12,829
Percentage of students enrolled for formal instruction in schools / colleges	6% (primary and higher average)	70% (primary) & 27 % (higher)
Total education budget	Rs. 2.88 crore	Rs 1,04,278 crore
Per capita expenditure	Rs. 2.2	Rs. 3,841.5
Average annual tuition fee per student (school)	Rs. 0.59	Rs. 5,000

- **Canada:** Education is entirely managed by the provinces.
- **Germany:** The constitution gives legislative powers over education to the landers (States).
- **South Africa:** Education is managed by two national departments for school and higher education, while provincial education departments implement national policies and address local issues.

Difference between Union List, State List, and Concurrent List

Category	Union List	State List	Concurrent List
Number of Subjects	Originally had 97 subjects, now has 100 subjects.	Initially had 66 subjects, now has 61 subjects.	Contains 52 subjects.
Legislative Authority	The Centre has exclusive power to legislate on subjects in the Union List.	State legislatures have exclusive power to legislate on subjects in the State List, but only under normal circumstances.	Both Centre and State Governments can legislate on subjects in the Concurrent List. In case of conflict, the Central law prevails.
Significance	Represents a strong central government as it contains more subjects and more important subjects than the State List.	Addresses matters of regional and local importance, reflecting the diversity of state interests.	Ensures that subjects requiring uniformity across the country but not essential for centralization are managed collaboratively.
Amendments	The 88th Amendment added "taxes on services" to the Union List.	The 42nd Amendment Act (1976) moved five subjects from the State List to the Concurrent List, including education and forests.	The 42nd Amendment Act (1976) shifted five subjects from the State List, enhancing the Concurrent List's role in central-state collaboration.
Taxation Powers	Parliament has exclusive power to levy taxes on 15 subjects in the Union List.	State legislatures have the exclusive power to levy taxes on 20 subjects in the State List.	Both the Centre and States can levy taxes on three subjects in the Concurrent List.
Judicial Authority	Parliament can extend the Supreme Court's jurisdiction and powers concerning Union List matters.	The 69th Constitutional Amendment Act (1991) restricts the Delhi Government from making laws on public order, police, and land.	Allows both Central and State governments to address national and regional issues, with central laws taking precedence in conflicts.
Examples of Subjects	Defence, Army, International Relations, Ports, Railways, Highways, Communication.	Public Order, Police, Public Health and Sanitation, Hospitals, Betting and Gambling.	Education, Forests, Trade Unions, Marriage, Adoption, Succession.
Residuary Subjects	The Union Government has the power to legislate on subjects not mentioned in any list, known as Residuary Subjects, like Computer Software and E-Commerce.	Not applicable.	Not applicable.

Article 246 and the Seventh Schedule

Article 246 outlines the three lists in the Seventh Schedule — the Union List, State List, and Concurrent List. The Union government has the authority to legislate on subjects listed in the Union List, while state governments have jurisdiction

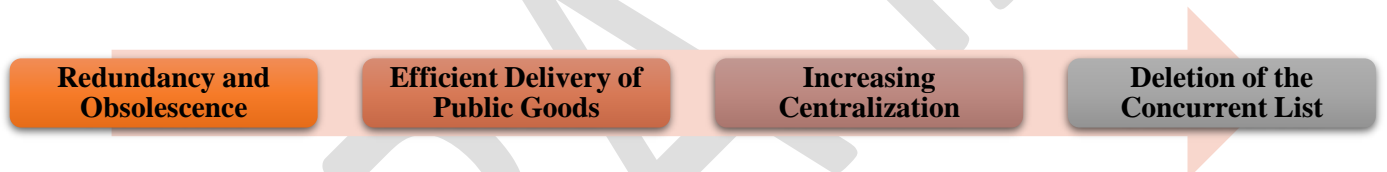
over subjects in the State List. For subjects in the Concurrent List, both the Centre and the states can legislate, but in case of a conflict, the Union law prevails.

Significance of the Seventh Schedule



- **Clear Responsibilities:** The division of subjects into the Union, State, and Concurrent Lists ensures that the various levels of government are aware of their respective roles and responsibilities.
- **Harmony:** The clear separation of powers helps maintain peace and harmony between the Centre and the states by preventing the Union from altering the foundational principles of the Constitution.
- **Division of Powers:** The Seventh Schedule provides a well-defined division of powers between the Centre and states, reducing the potential for conflicts.
- **Unity and Integrity of India:** Post-partition, national integration was crucial. A strong central government, as enabled by the Seventh Schedule, was seen as essential for safeguarding the nation from external threats.
- **Autonomy to States:** By devolving legislative powers to the states, the Schedule ensures that states have autonomy within their respective domains.

Need for Reforms in the Seventh Schedule



- **Redundancy and Obsolescence:** The Seventh Schedule, which dates back to the Government of India Act of 1935, is considered outdated and in need of revision to reflect contemporary governance needs.
- **Efficient Delivery of Public Goods:** Most public goods are best delivered at the local government level. The Seventh Schedule could be revised to include a Local Body List, enabling better allocation of funds, functions, and functionaries to local governments.
- **Increasing Centralization:** Over time, certain subjects have shifted from the State List to the Concurrent List and from the Concurrent List to the Union List, reflecting a trend toward greater centralization, particularly since the 1976 amendments.
- **Empowering Local Bodies:** A proposed fourth list for local bodies could empower them to handle local issues more effectively by devolving specific powers to them.
- **Deletion of the Concurrent List:** The Concurrent List often creates confusion and disputes between the Centre and the states. Removing it could reduce friction and clarify the division of legislative powers.

Way Forward

- **Arguments for Education in the Concurrent List:** Advocates argue that a uniform education policy, improved standards, and synergy between the Centre and States are benefits of keeping education in the Concurrent List. However, given India's vast diversity, a 'one size fits all' approach is not feasible or desirable.
- **Financial Aspects:** According to the 2022 report by the Ministry of Education on 'Analysis of Budgeted Expenditure on Education,' out of the ₹6.25 lakh crore revenue expenditure by education departments in 2020-

21, 15% was spent by the Centre, while 85% was spent by the States. Including all departmental expenditures on education and training, the share is 24% by the Centre and 76% by the States.

- **Arguments Against Returning Education to the State List:** Critics argue that corruption and lack of professionalism are concerns if education is returned to the State List. However, recent issues with the NEET and NTA have shown that centralization does not necessarily resolve these issues.

Rahul, Rajnath Spar Over Compensation for Agniveers

Context: The Agnipath scheme for the recruitment of soldiers, which was a major poll issue in the recently concluded Lok Sabha election, led to a heated exchange between the Leader of the Opposition in the Lok Sabha Rahul Gandhi and Defence Minister Rajnath Singh in Parliament.

About the Agnipath Scheme

- This initiative allows young, patriotic, and motivated individuals to serve in the Armed Forces for a fixed period of four years.
- Those who join the army under this scheme will be referred to as "Agniveers," enabling youth to experience military service for a short, defined duration.
- The scheme plans to recruit approximately 45,000 to 50,000 soldiers annually, with the majority exiting the service after completing their four-year term.
- After this period, only about 25% of each batch will be retained and offered further service in the Armed Forces for an additional 15 years.

Eligibility Criteria

- The scheme is designed exclusively for non-officer ranks, meaning it does not apply to those who join the forces as commissioned officers.
- Commissioned officers are the highest-ranking officials in the army, often holding positions of authority under the President's commission and are responsible for protecting the nation.
- The scheme is open to aspirants aged between 17.5 years and 23 years.
- Objectives of the Scheme
- The scheme aims to provide an opportunity for young, enthusiastic individuals with a strong sense of patriotism ("Josh") and passion ("Jazba") to join the Armed Forces.
- It is intended to lower the average age profile of the Indian Armed Forces by approximately 4 to 5 years.
- Currently, the average age within the forces is 32 years, but the scheme envisions reducing it to 26 years within the next six to seven years.

Benefits for Agniveers

- After completing the four-year service period, Agniveers will receive a one-time 'Seva Nidhi' package amounting to ₹11.71 lakhs, including accrued interest.
- During their tenure, Agniveers will be covered by a life insurance policy worth ₹48 lakhs.
- In the unfortunate event of death, the total payout will exceed ₹1 crore, which includes compensation for the remaining unserved tenure.
- The government will also assist in rehabilitating those who leave the service after four years by providing them with skill certificates and opportunities for further education through bridge courses.

Related Concerns

Challenges in Securing
Another Job

Absence of Pension Benefits

Underutilization of Training



- The 'Agnipath' scheme recruits around 45,000 soldiers into the Army, Navy, and Air Force on a short-term contract of four years. After this period, only 25% of the recruits will be retained, leaving the rest to seek other employment.
- There is a concern that the four years spent in service might make it difficult for these individuals to find other jobs, potentially leaving them behind their peers in the job market.
- Those recruited under the 'Agnipath' scheme will receive a one-time lump sum of approximately ₹11 lakhs at the end of their four-year tenure.
- However, they will not be entitled to pension benefits, making it essential for most to find a second job to support themselves and their families.
- The Armed Forces may lose experienced personnel after just four years of service.
- Although recruits will receive technical training to support ongoing operations, their departure after four years could create a gap in experienced manpower.

Significance for the Country



- The scheme is designed to produce "future-ready" soldiers who can contribute to the nation's defense.
- By acquiring skills and experience during their four years of service, these soldiers will have increased employment opportunities in various sectors.
- The scheme will contribute to the economy by providing a pool of highly skilled individuals, which can enhance productivity and contribute to overall GDP growth.

Criteria for Recognizing Leader of the Opposition

- According to the Salary and Allowances of Leaders of Opposition in Parliament Act, 1977, the recognition of the Leader of the Opposition in a House is granted by the Presiding Officer. This recognition is given to the leader of the opposition party with the greatest numerical strength in that House.
- To be recognized as a political party in the House, a party must have at least one-tenth of the total membership of that House, as per the directions issued by the Presiding Officers of both Houses.
- This means that only the leader of a political party with at least one-tenth of the total membership of the House is eligible to become the 'Leader of the Opposition.'
- In situations where two or more opposition parties have the same numerical strength, the Presiding Officer has the authority to recognize any one of the leaders from those parties as the 'Leader of the Opposition.'
- The decision made by the Presiding Officer in this regard is considered final and conclusive.

Role of Leader of the Opposition in India



- **Constructive Criticism:** The Leader of the Opposition offers constructive criticism of government policies, decisions, and actions, which helps in ensuring accountability and transparency in governance.

- **Alternative Policies:** By presenting alternative policies and perspectives, the Leader of the Opposition enriches parliamentary debates and discussions, offering different approaches to governance.
- **Alternative Government:** The role includes being prepared to form an alternative government, acting as a counterbalance to the ruling party. This is why Ivor Jennings referred to the Leader of the Opposition as the 'Alternative Prime Minister.'
- **Leading Opposition:** The Leader of the Opposition leads opposition parties in debates, discussions, and the legislative process, ensuring that the voices of those not in power are heard.
- **Facilitating Communication:** Acting as a bridge between the government and opposition, the Leader of the Opposition facilitates communication and strives for consensus on critical issues.
- **Maintaining Checks and Balances:** The Leader of the Opposition plays a crucial role in maintaining the checks and balances of the parliamentary system, promoting a robust democratic discourse.
- **Upholding Democratic Principles:** By defending minority rights and promoting democratic norms, the Leader of the Opposition ensures that robust debate is maintained in Parliament.
- **Influencing Legislative Agenda:** Through speeches and interventions, the Leader of the Opposition can influence the legislative agenda and shape public opinion.

Status of Leader of the Opposition in India

- The office of the Leader of the Opposition is not mentioned in the Constitution of India, making it a non-constitutional position.
- However, it gained statutory recognition in 1977 under the Salary and Allowances of Leaders of Opposition in Parliament Act, 1977, making it a statutory position.
- The rank of the Leader of the Opposition in both the Lok Sabha and the Rajya Sabha is equivalent to that of a Cabinet Minister.
- As a result, the Leader of the Opposition is entitled to a salary, allowances, and other facilities similar to those of a Cabinet Minister.
- An official 'Leader of the Opposition' was recognized for the first time in the Parliament of India in 1969.

Significance of Leader of the Opposition in India



- **Ensuring Checks and Balances:** By providing structured opposition to the ruling government, the Leader of the Opposition scrutinizes policies, decisions, and actions, thereby holding the government accountable and ensuring transparency.
- **Presenting Alternative Policies:** The Leader of the Opposition enriches legislative debates by offering alternative policies and perspectives, which contribute to more comprehensive decision-making and provide citizens with different governance options.
- **Guarding Minority Rights:** This role involves safeguarding the interests of minorities and those who did not vote for the ruling party, ensuring their concerns are addressed in Parliament.
- **Leading Committees:** The Leader of the Opposition plays a vital role in parliamentary committees, providing oversight and ensuring balanced representation during committee deliberations.

- **Upholding Parliamentary Procedure:** By maintaining decorum and upholding parliamentary procedures, the Leader of the Opposition ensures that debates and discussions are conducted in an orderly manner.
- **Acting as a Bridge:** The Leader of the Opposition facilitates dialogue and negotiation between the government and opposition parties, acting as a bridge to resolve critical legislative issues.
- **Strengthening Democracy:** Through promoting accountability, fostering debate, and ensuring that diverse societal interests are reflected in decisions, the Leader of the Opposition enhances the functioning of a democratic system.

Manipur Facing Civil War-Like Crisis

Context: Congress MP A. Bimol Akoijam made a scathing attack on Prime Minister Narendra Modi for remaining silent on Manipur, which has been affected by ethnic violence for the past one year.

Ethnic composition of Manipur

Ethnic Group	Description
Meiteis	Largest ethnic group in Manipur, primarily residing in the Imphal Valley. Meitei Hindus are the dominant group.
Nagas	Indigenous hill tribe residing in the eastern hills of Manipur.
Kukis	Indigenous hill tribe residing in the north-western and southern hills.
Mizos	Indigenous hill tribe found in the surrounding hills.
Pangals (Manipuri Muslims)	Immigrant group in the valley, originally from Bengal, with a distinct long face and different anthropometric features.
Scheduled Tribes	Comprise various tribal groups, constituting 34.41% of the population.
Scheduled Castes	Non-Hindu Meiteilon-speaking population placed under this category, making up 2.02% of the population.
Christians	Significant religious group, constituting 34.11% of the population, primarily among the Nagas and Kukis.
Hindus	Largest religious group, constituting 58% of the population.
Muslims	Minority religious group, constituting 7.26% of the population.
Tangkhuhs (Naga)	Largest Naga tribal group in the eastern hills.
Thadous (Kuki)	Largest Kuki tribal group in the north-western and southern hills.
Other Minor Tribes	Include small populations of Angamis, Semas, and Saltes.

Causes of Recent Unrest in Manipur



While forest eviction and the demand for ST status for Meiteis have been prominent recent triggers, the divide between Meiteis and tribals has deepened over the past decade due to several issues.

- **Delimitation Issues:** In 2020, the central government began the first delimitation process in the state since 1973. The Meitei community argued that the census figures used were inaccurate and did not reflect the population's true distribution. In contrast, tribal groups like the Kukis and Nagas claimed that they had grown to 40% of the state's population and were underrepresented in the Assembly.

- **Migration Issues:** The February 2021 coup in Myanmar led to a refugee crisis in India's Northeast, and Meitei leaders alleged a sudden mushrooming of villages in the Churachandpur district due to migrant influx.
- **Drug Problems:** Some tribal groups with vested interests are accused of attempting to undermine the government's anti-drug campaign, which includes destroying poppy fields cultivated by illegal settlers, particularly related to the Kuki-Zomi community.
- **Recent Protests:** Violence first erupted over the eviction of residents from a Kuki village. The state government declared 38 villages in the Churachandpur-Khoupum Protected Forest area as illegal settlements, claiming their residents were encroachers involved in poppy cultivation and drug trade.
- Kuki groups argued that the survey and eviction **violated Article 371C**, which provides special provisions for the Hill Areas of Manipur, including the creation of a Hill Areas Committee in the State Legislative Assembly to safeguard the interests of the hill communities.
- The state government also withdrew from **suspension of operations agreements** with two Kuki extremist groups accused of inciting protests.

Special Provisions for Manipur under Article 371C

- Article 371C of the Indian Constitution provides special provisions specifically for the State of Manipur.
- This Article was incorporated through the 27th Amendment Act of 1971, highlighting the unique administrative needs of Manipur, particularly its Hill Areas.

Creation of a Hill Areas Committee

- The President of India holds the authority to establish a committee within the Manipur Legislative Assembly.
- This committee is exclusively composed of members who are elected from the Hill Areas, reflecting the distinct ethnic and cultural makeup of these regions.

Definition of Hill Areas

- The term "Hill Areas" in this context refers to regions that the President of India may declare as such through a formal order.
- This classification ensures that specific regions within Manipur receive focused attention and governance.

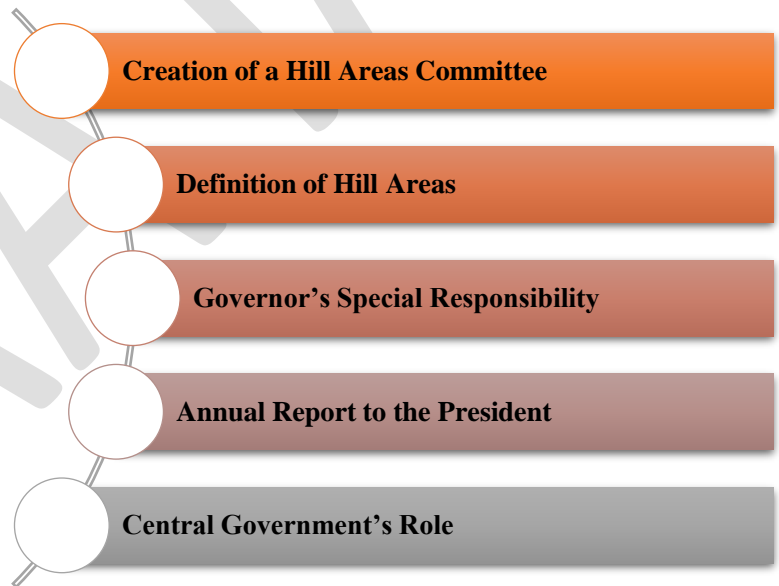
Governor's Special Responsibility

- The President can assign the Governor of Manipur a special responsibility to ensure the effective functioning of the Hill Areas Committee.
- This responsibility underscores the importance of addressing the unique challenges faced by these regions.

Annual Report to the President

- The Governor is required to submit an annual report to the President of India concerning the administration and governance of the Hill Areas.
- This report serves as a crucial mechanism for monitoring and assessing the governance of these areas.

Central Government's Role





- The Central Government is empowered to issue directives to the State Government of Manipur regarding the administration of the Hill Areas.
- This provision ensures that the Central Government can intervene if necessary to address specific issues in these regions.

Reservation in Bihar

Context: The Bihar government moved the Supreme Court, challenging the Patna High Court’s directive to ‘set aside’ the increase in the State’s reservation for disadvantaged communities, from the existing 50% to 65%.

Key Highlights

- This is the quota for SCs, STs, Extremely Backward Classes (EBCs), and OBCs in government jobs and educational institutions.
- Following the release of a caste-based survey report in 2022, the government had decided to increase the quota from 50% to 65%. Immediately afterwards, PIL petitions were filed in the Patna HC, challenging the quota hike as a “violation of the right to equal opportunity for citizens in matters of employment and education”.
- Mr. Dinu argued that the Supreme Court had imposed a 50% cap of reservations in the Indira Sawhney case. He told the Patna HC that the State’s decision was taken “on the basis of the proportion of castes”.

Reservation in India

- The reservation system in India has its roots in the age-old caste system, which historically marginalized certain communities based on their caste identity.
- In essence, reservation is a mechanism designed to ensure that specific sections of the population have access to government jobs, educational institutions, and legislative bodies.
- These sections have faced systemic discrimination and social injustice due to their caste affiliations.
- Reservation operates as a form of affirmative action, often referred to as positive discrimination, aimed at leveling the playing field for these marginalized groups.
- The reservation policy in India is governed by government regulations and is firmly anchored in the Indian Constitution.

History of reservations in India

1950: Provision made for reservation of seats for Scheduled Castes and Scheduled Tribes in legislatures

1951: Constitutional amendment brought in to give states the right to reserve seats in educational institutions

1955: First backward classes commission, set up under chairman Kaka Kalelkar in 1953, submits its report

1963: Supreme Court puts a cap of 50% on reservations

1979: Second backward classes commission set up under B.P. Mandal. Commission submits its report in 1980 in which it recommends 27% reservation for OBC candidates across all services

1990: Union government accepts recommendations of

Mandal Commission. This leads to widespread protests across the country

1992: SC, in the Indira Sawhney judgement, upholds the government’s decision to implement the recommendations. Specifies exclusion of creamy layer

1993: National Commission for Backward Classes (NCBC) set up

2006: States empowered to make special provisions in admission to educational institutions. Following protests, then PM Manmohan Singh

sets up an oversight committee to look into the implementation in higher educational institutes

2008: SC upholds the constitutional validity of the

Central Educational Institutions Act which provides for 27% quota for OBCs in higher educational institutions

2010: Following years of protests by Gujjars, Rajasthan government agrees to provide reservation within quota

2016: Maratha organizations hold silent marches to demand a quota for the community

2016: Violent protests by Jats demanding reservation leaves Haryana under lockdown for over 10 days. The BJP-led state government sets up a committee to look into their demands

2018: Parliament passes a bill to give statutory powers to NCBC. Maharashtra legislature passes bill proposing 16% reservation for Marathas in educational institutions and government jobs



Historical Background

- The concept of caste-based reservation was first proposed by William Hunter and social reformer Jyotirao Phule in 1882.
- The formal structure of the reservation system as we know it today began to take shape in 1933 with the British Prime Minister Ramsay Macdonald's 'Communal Award'.
- The 'Communal Award' introduced separate electorates for various communities, including Muslims, Sikhs, Indian Christians, Anglo-Indians, Europeans, and Dalits (then referred to as Depressed Classes).
- A significant turning point was the signing of the 'Poona Pact' between Mahatma Gandhi and Dr. B.R. Ambedkar, which resulted in a unified Hindu electorate with specific reservations rather than separate electorates.
- Post-independence, reservations were initially provided for Scheduled Castes (SCs) and Scheduled Tribes (STs).
- In 1991, the scope of reservations was expanded to include Other Backward Classes (OBCs) based on the recommendations of the Mandal Commission.

Mandal Commission

- Under Article 340 of the Indian Constitution, the President established the Mandal Commission in December 1978, chaired by B.P. Mandal.
- The Commission was tasked with identifying India's "socially and educationally backward classes" and recommending measures for their advancement.
- The Mandal Commission determined that approximately 52% of India's population belonged to OBCs and recommended a 27% reservation in government jobs for them.
- The Commission developed eleven criteria to measure social, educational, and economic backwardness.
- It also extended its study to identify backward classes among non-Hindus, including Muslims, Sikhs, Christians, and Buddhists.
- The Commission generated a comprehensive list of 3,743 OBC castes and a further list of 2,108 "depressed backward classes."
- In the landmark Indra Sawhney Case of 1992, the Supreme Court upheld the 27% reservation for OBCs but struck down the proposal to reserve 10% of government jobs for economically backward classes among the higher castes.
- The Supreme Court also established that the total beneficiaries of reservations should not exceed 50% of India's population.
- The concept of the 'creamy layer'—the wealthier and more educated members of OBCs who should be excluded from the benefits of reservation—was also introduced in this judgment. The Court further ruled that reservations should apply only to initial appointments and not to promotions.

CENTRAL EMPLOYEES AND SOCIAL CATEGORIES

	TOTAL	SC	ST	OBC	EWS	OTHERS
Group-A	50,068	6,440 (12.86%)	2,826 (5.64%)	8,455 (16.88%)	11 (0.02%)	32,226 (64.58%)
Group-B	1,25,732	20,954 (16.66%)	8,244 (6.55%)	19,829 (15.77%)	5 (0.04%)	76,700 (61%)
Group-C (excluding Safai Karmacharis)	3,22,503	58,774 (18.22%)	22,296 (6.91%)	72,710 (22.54%)	84 (0.03%)	1,686,39 (52.29%)
Group-C(Safai Karmacharis)	13,772	4,507 (32.72%)	1,056 (7.66%)	2,774 (20.14%)	0	5,435 (39.46%)
Total	5,12,075	90,675 (17.70%)	34,422 (6.72%)	1,03,768 (20.26%)	100 (0.02%)	2,83,110 (55.28%)

- In recent developments, the Constitutional (103rd Amendment) Act of 2019 introduced a 10% reservation in government jobs and educational institutions for economically weaker sections in the unreserved category.
- This amendment modifies Articles 15 and 16 of the Constitution, allowing the government to provide reservations based on economic criteria.
- This 10% reservation for economically weaker sections is in addition to the existing 50% reservation cap.

TRACES Portal

Context: Ahead of the looming July 31 deadline for filing I-T returns, some employers are struggling to issue Form 16 certificates to staff on processing delay and technical glitches in the I-T portal as well as challenges arising from new norms related to PAN-Aadhaar link, as per tax practitioners.

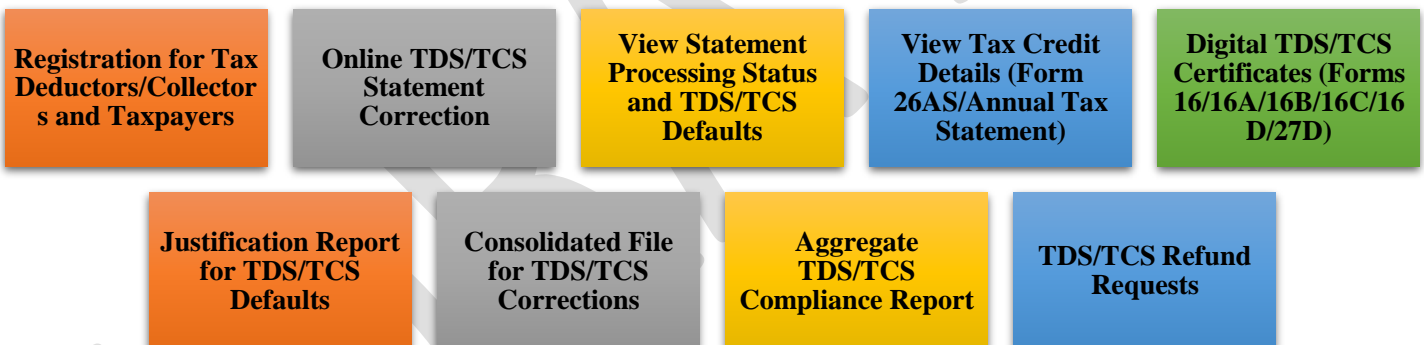
Key Highlights

- Companies file fourth-quarter returns for taxes withheld on behalf of staff by May 31, and individual staff's Form 16 reflecting income and tax deductions for a year, are subsequently generated on the IT department's TRACES portal.
- There have been some technical glitches on the TRACES portal over the last one month and as a result, it is seen the quarterly TDS returns filed are not timely processed, which is generally processed within two days.

About Traces

TRACES is a web-based application developed by the Income Tax Department to facilitate the administration of Tax Deducted at Source (TDS). It provides a range of services for stakeholders involved in TDS management.

Key Features and Services



- Tax deductors, collectors, and taxpayers can register on the TRACES portal.
- Registration allows users to create and manage their accounts under their respective TAN (Tax Deduction and Collection Account Number) or PAN (Permanent Account Number).
- After successful registration, users can log in to access various functionalities.
- The portal provides a facility for online correction of TDS/TCS statements.
- Deductors and collectors can submit and process corrections directly through TRACES.
- Users can track the status of their submitted statements.
- If there are any omissions, they can download the intimation sent by the Centralized Processing Cell (CPC).
- Taxpayers can view and download Form 26AS or Annual Tax Statement from TRACES.
- The document is available in PDF, Text, or Excel formats.
- Deductors and collectors can download digital certificates for TDS/TCS after processing details.
- These certificates reflect the TDS/TCS deductions or collections and are also included in the 26AS or Annual Tax Statement for use in income tax returns.

- A justification report provides details on defaults found in a statement.
- After processing a statement with defaults, this report helps the deductor or collector understand and rectify the issues.
- The portal allows users to download a consolidated file for submitting corrections to TDS/TCS details.
- The compliance report aggregates TDS/TCS information for multiple TANs linked to a PAN.
- This helps in identifying defaults across various TANs associated with a tax-deducting or collecting entity.
- Deductors and collectors can submit refund requests through the TRACES portal.

RBI Proposes Rationalising Norms on EXIM Deals

Context: The RBI proposed rationalising regulations that cover export and import transactions to promote ease of doing business and empower banks to provide more efficient service to their foreign exchange customers.

Key Highlights

- The central bank has issued 'Regulation of Foreign Trade under Foreign Exchange Management Act (FEMA), 1999 – Draft Regulations and Directions'.
- As per the draft, every exporter should furnish to the specified authority a declaration specifying the amount representing the full export value of the goods or services.

RBI's Draft Regulations under FEMA

- The Reserve Bank of India (RBI) has released the draft guidelines titled "Regulation of Foreign Trade under Foreign Exchange Management Act (FEMA), 1999 – Draft Regulations and Directions."
- The draft regulations contain several significant proposals aimed at regulating foreign trade transactions.

Key Proposals in the Draft Regulations



- The regulations propose that the full export value of goods and services should be realized and repatriated to India within 9 months from the shipment date for goods and from the invoice date for services.
- Exporters who fail to realize the full value within the specified period may be caution-listed by the authorized dealer, which could restrict their export activities.
- Exporters who are caution-listed can only conduct exports if they receive full advance payment or an irrevocable letter of credit, as per the satisfaction of the authorized dealer.
- The regulations also propose that advance remittances for the import of gold and silver should not be permitted unless specifically approved by the RBI.

Expected Benefits of the Proposed Regulations

- The proposed regulations aim to simplify foreign trade processes, particularly benefiting small exporters and importers by providing clearer guidelines and timelines.
- The regulations are designed to empower authorized dealer banks, enabling them to offer faster and more efficient services to their foreign exchange customers, thereby improving overall trade facilitation.



About the Foreign Exchange Management Act (FEMA), 1999

- Regulation of Foreign Exchange and Trade
- FEMA, 1999, serves as the legal framework governing foreign exchange transactions and trade in India.
- FEMA was enacted to replace the earlier Foreign Exchange Regulation Act (FERA), 1973, reflecting a shift towards a more liberal and market-oriented approach to foreign exchange management.



Significance of FEMA in Regulating EXIM Transactions



- FEMA provides a well-defined regulatory framework that helps streamline export and import (EXIM) transactions, making international trade more efficient and less cumbersome, thereby supporting the growth of global trade.
- By monitoring and regulating foreign exchange earnings and expenditures, FEMA plays a crucial role in maintaining economic stability. It helps prevent illegal outflows of foreign currency, ensuring that the economy remains robust.
- A transparent and well-regulated foreign exchange environment, as established by FEMA, enhances investor confidence. This, in turn, makes India a more attractive destination for foreign investment, contributing to economic growth.
- FEMA represents a shift from the strict controls of the earlier Foreign Exchange Regulation Act (FERA) to a more liberal approach. This encourages businesses to participate in international trade with greater ease, fostering economic liberalization and global integration.

FEMA Regulation on EXIM transactions

Aspect	Regulation under FEMA
Resident Indian Criteria	Defined in Section 2(v) of FEMA. A person is considered a resident if they reside in India for more than 182 days during the preceding financial year.
Current Account Transactions	Freely permitted for EXIM activities, covering trade payments and remittances.
Capital Account Transactions	Regulated by RBI, including Foreign Direct Investment (FDI) in export-oriented units and overseas investments by Indian entities.
Documentation and Declarations	Exporters and importers are required to submit declarations to the RBI to ensure compliance and monitor foreign exchange.

Export Declarations	Must include the value of goods/services exported, expected foreign earnings, and the timeframe for realization.
Import Declarations	Must provide details of imported goods/services, foreign exchange spent, and ensure payments are made through authorized channels.
Authorized Dealers	Only dealers (banks or financial institutions) approved by the RBI are permitted to handle foreign exchange transactions for EXIM activities.
Import Payment Regulations	Payments for imports must be conducted through authorized channels within prescribed time limits and in compliance with DGFT terms.
Foreign Currency Accounts	Entities are allowed to maintain foreign currency accounts to efficiently manage foreign exchange for EXIM activities.

e-Pramaan app

Context: Investigating Officers will be helped by a team of experts in recording video and audio evidence and registering FIRs on the e-Pramaan mobile application under the three new laws.

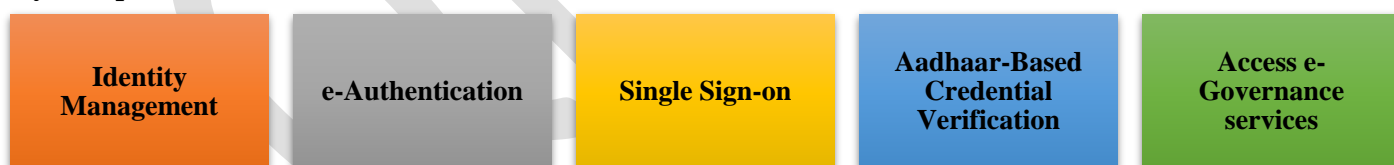
Key Highlights

- e-Pramaan is a national e-Authentication framework that allows users to securely access government services on mobile and desktop. It provides a multi-factor authentication system, single sign-on (SSO), and authentication chaining options. It also consolidates identity documents like PAN, voter ID, and driving license into a single digital profile.
- e-Pramaan is offered by the Ministry of Electronics and Information Technology (DeitY). It's based on established authentication standards and works with projects like Aadhaar.

About e-Pramaan

- e-Pramaan is a national e-Authentication service launched by the Department of Electronics and Information Technology (DeitY). It offers a secure, convenient, and streamlined method for users to access government services online via the internet or mobile devices. At the same time, it enables government agencies to authenticate the identity of users effectively.
- This service fosters trust and confidence in digital transactions, promoting the adoption of e-services as a preferred method for service delivery.

Key Components of e-Pramaan



- **Identity Management:** This includes the registration of credentials, ensuring users are properly identified within the system.
- **e-Authentication:** Involves step-up authentication methods that enhance the security of user interactions.
- **Single Sign-on:** Users can access multiple government services with a single login, simplifying the process.

What is e-Authentication?

e-Authentication, or electronic authentication, is the digital process of verifying a user's identity. It offers a secure, straightforward way for users to access government services via the internet or mobile devices. For the government, it serves as a tool to verify the authenticity of users, which is essential in building trust and confidence in online transactions and promoting the use of digital platforms for service delivery.

- **Aadhaar-Based Credential Verification:** Utilizes the Aadhaar system for secure and reliable user verification.
- e-Pramaan provides authentication as a service by validating the credentials of individuals seeking to **access e-Governance services**.

Why e-Pramaan?



- **Transparency:** e-Authentication decisions are made openly and transparently, ensuring fairness and accountability.
- **Cost-Effectiveness:** Government agencies can avoid implementing complex and expensive e-Authentication processes for low-risk or simple transactions.
- **Risk Management:** The choice of e-Authentication mechanisms is guided by an assessment of potential risks and their impacts.
- **Consistency:** A uniform approach is applied across government departments and agencies in selecting the appropriate e-Authentication mechanisms.
- **Trust:** The e-Authentication mechanisms enhance the security, safety, and trustworthiness of online and mobile-based transactions.
- **Improved Privacy:** Personal information is collected only when necessary, in line with the sensitivity of the application or service.
- **Efficiency:** The time required to deploy e-Authentication capabilities for any government application is significantly reduced.

e-Authentication levels in e-Pramaan

e-Authentication Level	Description	Suitable For
Level 0	No authentication required	Accessing publicly available information
Level 1	Basic authentication using a User ID and password	Public services with low sensitivity
Level 2	Two-factor authentication with User ID, password, and OTP	Services involving personal information and moderate security needs
Level 3	Authentication with User ID, password, and a digital certificate (soft or hard)	Services requiring high security
Level 4	Authentication with User ID, password, and biometric verification	Services demanding the highest level of security

Note: At Level 4, e-Pramaan supports UIDAI biometric authentication, allowing Aadhaar holders to verify their identity by submitting a fingerprint. This biometric data is authenticated in the background via the Aadhaar Authentication Server. The e-Pramaan services are integrated with the National Service Delivery Gateway (NSDG) and the State Service Delivery Gateway (SSDG). Central or state government departments can use e-Pramaan to authenticate users before granting access to their services.

Centre Issues Advisory For Ads On Food And Health Products Only

Context: The Ministry of Information & Broadcasting issued a fresh advisory, asking advertisers and advertising agencies issuing advertisements for products and services related to the food and health sectors to upload an annual self-declaration certificate on the platforms made available for the purpose.

Key Highlights

- According to the new advisory, the facility for uploading the self-declaration certificate by the advertisers/advertising agencies has been made available on the Broadcast Seva Portal for TV/radio advertisements and on the portal of the Press Council of India for the advertisements on print media/internet.
- The advisory supersedes all previous advisories issued by the Ministry.
- It is limited to the food and health sector only, meaning these sectors are only required to provide the self-declaration certificate annually.
- Accordingly, in view of the Supreme Court order dated May 7, 2024, and in suppression of the previous advisories dated June 3, 2024, and June 5, 2024, the advertisers/advertising agencies issuing advertisements for products and services related to food and health sectors have been advised to upload an annual self-declaration certificate on these platforms, as applicable.

Ayushman Bharat Health And Wellness Centres (AB-Hwcs)

Context: After Mizoram and Nagaland, Meghalaya has refused to rename the health and wellness centres in the State as Ayushman Arogya Mandirs. About 75% of the population in Meghalaya follows Christianity. The percentage of Christians in Mizoram and Nagaland is about 90%.

Key Highlights

- Union Health Ministry decided to rename its flagship Ayushman Bharat Health and Wellness Centres as Ayushman Arogya Mandir (AAM) with the tagline 'Arogyam parmam dhanam' (Health is the greatest wealth).
- There are 1.6 lakh such centres across the country.

Ayushman Bharat Health and Wellness Centres (AB-HWCs)



- **Purpose:** AB-HWCs were established to transition from selective health care to a more holistic approach. They offer a comprehensive range of services including:
 - Preventive care
 - Promotive care
 - Curative care
 - Rehabilitative care
 - Palliative care
 - These services cater to individuals of all ages.
- **Scope:** There are currently 160,000 AB-HWCs across India as part of this initiative.
- **Vision:** According to the National Health Policy of 2017, AB-HWCs are envisioned as the cornerstone of India's health system.
- **Rebranding:** The Union Health Ministry has rebranded AB-HWCs as Ayushman Arogya Mandirs (AAM). The new tagline for these centres is 'Arogyam Parmam Dhanam'.
- **Implementation:** States and Union Territories have been directed to complete the rebranding process by the end of 2023.

Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (PM-JAY)

Aspect	Details
Scheme Overview	<ul style="list-style-type: none">• The world's largest fully government-funded health insurance scheme.• Launched in 2018.

Health Benefit Package	<ul style="list-style-type: none"> Provides Rs 5 lakh per family for secondary and tertiary care. Covers surgery, medical and daycare treatments, medications, and diagnostics. Includes 3 days of pre-hospitalisation and 15 days of post-hospitalisation care, including diagnostics and medicines. No restrictions on family size, age, or gender. Covers all pre-existing conditions from day one.
Beneficiaries	<ul style="list-style-type: none"> An entitlement-based scheme targeting beneficiaries identified by the latest Socio-Economic Caste Census (SECC) data. States and Union Territories (UTs) can use non-SECC data with a similar socio-economic profile to identify remaining SECC families.
Financing	<ul style="list-style-type: none"> Jointly funded: 60% by the Centre and 40% by the legislature for all States and UTs. 90% central funding and 10% state contribution for North-Eastern States, Jammu & Kashmir, Himachal Pradesh, and Uttarakhand. 100% central funding for Union Territories without legislature.
Nucleus Agency	<ul style="list-style-type: none"> The National Health Authority (NHA) is responsible for the effective implementation of PM-JAY and operates under the Societies Registration Act, 1860. State Health Agency (SHA) is the apex body of the State Government responsible for implementing AB-PMJAY at the state level.

NRC Can Be Implemented In Manipur Under The Strict Supervision Of SC: Kuki Group

Context: An apex body of the Kuki-Zo community said it would not oppose the implementation of the National Register of Citizens (NRC) in Manipur if it was carried out under the strict supervision of the Supreme Court.

Key Highlights

- The condition set by the Kuki Inpi Manipur (KIM) followed demands for an Assam-like NRC by Meitei and Naga organisations to “check infiltration” from across Manipur’s border with civil war-torn Myanmar.
- Assam underwent a major exercise to update the NRC of 1951. The exercise has remained in limbo since the complete draft was published in August 2019, leaving out 19.06 lakh of some 3.3 crore applicants from the list of citizens.
- The KIM said that its members would not dispute any genuine effort to identify non-citizens and take necessary action according to the “constitutional rules and principles”, provided the NRC is carried out under the strict supervision of the Supreme Court and in due consultation with tribal organisations.
- Any illegal immigrant found, whether a Kuki, Naga or Meitei, may be thoroughly dealt with as per the established laws of the country.
- The Meitei State leadership responsible for the oppression and persecution of our people, causing the loss of 186 precious lives, the arson and destruction of more than 7,000 houses, and rendering more than 41,000 Kuki-Zo people homeless, has no legitimate say and authority over the future of our people.

National Register of Citizens (NRC)

- The National Register of Citizens (NRC) of 1951 was created following the Census of 1951. It lists households in a serial order, detailing the number and names of individuals residing in each house or holding.
- This register was published only once in 1951 and has not been updated until recently. The NRC has been updated in Assam, with plans for a national update in the future.

Status of NRC in Assam

- The need to update the NRC in Assam became significant due to large-scale illegal migration from erstwhile East Pakistan, now Bangladesh, especially after 1971.

- This migration issue led to the Assam Movement from 1979 to 1985, spearheaded by the All Assam Students' Union (AASU). The movement aimed to deport illegal migrants and demanded an updated NRC.
- The movement resulted in the Assam Accord of 1985, which established March 25, 1971, as the cut-off date for deporting illegal migrants. This date was chosen to replace the earlier cut-off date of July 19, 1949, as specified in Articles 5 and 6 of the Constitution.
- To enforce this new cut-off date, an amendment was made to the Citizenship Act, 1955, introducing a new section specifically applicable to Assam.
- Persistent demands for NRC updates led to a Supreme Court petition by an Assam-based NGO. In December 2014, the Supreme Court ordered the NRC update be conducted in a time-bound manner.
- The NRC update uses two key documents: the 1951 NRC and the Electoral Roll of 1971, up to March 24, 1971, known as Legacy Data. Individuals and their descendants listed in these documents are recognized as Indian citizens.
- Currently, Assam is the only northeastern state that has undertaken an NRC update exercise with March 24, 1971, as the cut-off date for citizenship.

Status of NRC Elsewhere in the Northeast

- Nagaland has conducted a similar initiative known as the Register of Indigenous Inhabitants of Nagaland (RIIN), started in June 2019, to differentiate between indigenous and non-indigenous Nagas.
- Recently, the Manipur Assembly has resolved to implement the NRC and establish a State Population Commission (SPC). This decision follows requests from at least 19 apex tribal organizations, which urged the Prime Minister to adopt the NRC and other measures to protect indigenous populations from the increasing number of non-local residents.

Citizenship Amendment Act

Context: The Union Home Ministry is deliberating measures to simplify one of the provisions of the Citizenship Amendment Act (CAA) which requires applicants to furnish a document proving he or she is a citizen of Bangladesh, Pakistan, or Afghanistan.

Rules Issued by the Government Concerning the Citizenship Amendment Act (CAA)

The Indian government has made several efforts to address refugee issues over the years, including amendments to the Citizenship Rules in 2004 and various notifications in 2014, 2015, 2016, and 2018.

CAA Rules 2024

Proof of Country of Origin

Date of Entry into India

Mechanism for Implementation of CAA Rules

- The application process for citizenship under the CAA is governed by Section 6B of the Citizenship Act, 1955. To qualify for Indian citizenship, applicants must provide evidence of their country of origin, religion, date of entry into India, and knowledge of an Indian language.
- The requirements for proving one's country of origin have been relaxed. Acceptable documents include birth or educational certificates, identity documents, licenses, land records, or any document that verifies previous citizenship of the specified countries.
- Applicants can present 20 different types of documents as proof of their entry into India. These documents include visas, residential permits, census slips, driving licenses, Aadhaar cards, ration cards, government or court letters, and birth certificates.
- The Ministry of Home Affairs (MHA) has delegated the task of processing citizenship applications under the CAA to the Postal Department and Census officials within the Union government.

- Central security agencies, such as the Intelligence Bureau (IB), will conduct background and security checks.
- Final decisions on applications will be made by Empowered Committees led by the Director of Census Operations in each State.
- These committees will include officials from various departments, including the IB, the PostMaster General, the State or National Informatics Centre, and representatives from the State Government's Department of Home and the Divisional Railway Manager.
- At the district level, committees headed by the Superintendent of the Department of Post, with a representative from the District Collector's office, will review applications.

Processing of Applications

- The Empowered Committee and District-Level Committee (DLC) will handle the processing of citizenship applications, bypassing state-level control.
- Applications will be received by the DLC, and the Empowered Committee, led by the Director of Census Operations, will make the final decisions.

Associated Concerns with CAA

Exclusionary Nature

**Contradiction with
Secularism**

Undermining Pluralism

Constitutional Challenge

- Critics argue that the CAA is exclusionary because it offers a pathway to Indian citizenship for undocumented migrants from Afghanistan, Bangladesh, and Pakistan, but only for those belonging to Hindu, Sikh, Buddhist, Jain, Parsi, or Christian religions. This exclusion of Muslims raises concerns about religious discrimination.
- The Indian Constitution upholds secularism, which mandates equality before the law regardless of religion. The CAA's preferential treatment of certain religious groups is seen as conflicting with this secular principle.
- India's history is characterized by religious diversity and pluralism. Critics contend that the CAA undermines this diversity by favoring specific religious groups, which could lead to social and religious polarization.
- The CAA is criticized for violating Article 14 of the Indian Constitution, which guarantees the right to equality before the law and prohibits religious discrimination. The Act's provision of citizenship based on religion is seen as discriminatory.

Centre Set to Tweak Criteria for According Classical Language Status PLI Scheme

Context: Amid demand for classical status for many languages, the Union government has decided to tweak the criteria for giving the special tag.

Key Highlights

- The Linguistics Expert Committee of the Culture Ministry submitted a report on October 10 last year
- The sources said the Centre had asked the panel to reconsider the rules. The issue was taken up first at a meeting on June 21, 2023. A Gazette notification of the new criteria will be issued after Cabinet approval.
- This, in effect, means that classical language status for certain languages, chiefly Marathi, which is under consideration of the government, may have to wait for the notification.
- Over the years, some States and literary circles have been demanding classical status for languages such as Marathi, Bengali, Assamese and Maithili.
- In 2014, then Maharashtra Chief Minister Prithviraj Chavan constituted a committee of Marathi language experts chaired by Ranganath Pathare, and the report was submitted to the Centre. The Pathare committee had concluded that Marathi fulfils all parameters to be recognised as a classical language.

Criteria for Declaring a Language as Classical

Criteria	Description
Antiquity	The language must have a recorded history or early texts dating back 1500-2000 years.
Literary Heritage	The language should possess a significant body of ancient literature or texts that are regarded as valuable heritage by successive generations.
Original Literary Tradition	The language's literary tradition must be original, not derived from another speech community.
Distinctiveness	The classical language and its literature should be distinct from its modern forms, showing a clear difference from later developments or offshoots.

PLI Scheme

Context: The Centre has reopened the application window for the Production linked Incentive (PLI) scheme for white goods from July 15 to October 12, citing industry appetite to invest more in the scheme originally launched in 2021.

Production Linked Incentive Scheme (PLI)

- The Production Linked Incentive (PLI) scheme was designed to enhance domestic manufacturing capabilities, encourage import substitution, and generate employment opportunities.
- Launched in March 2020
- The scheme initially focused on three key industries:
 - Mobile and related component manufacturing
 - Electrical component manufacturing
 - Medical devices

The scheme includes 14 sectors

- Mobile manufacturing
- Medical devices
- Automobiles and auto components
- Pharmaceuticals and drugs
- Specialty steel
- Telecom and networking products
- Electronic products
- White goods (such as air conditioners and LEDs)
- Food products
- Textile products
- Solar photovoltaic (PV) modules
- Advanced chemistry cell (ACC) batteries
- Drones and drone components

Incentives

- Incentives are based on incremental sales.
- For certain sectors, such as advanced chemistry cell batteries, textile products, and drones, incentives are calculated based on sales performance and local value addition over a five-year period.
- The scheme also emphasizes investment in research and development (R&D), which helps industries stay competitive globally and keep pace with international trends.

Achievements in Smartphone Manufacturing

- In the fiscal year 2017-18, India faced a significant trade deficit in mobile phones, with imports totalling USD 3.6 billion and exports amounting to only USD 334 million.
- By the fiscal year 2022-23, the situation had improved dramatically: imports decreased to USD 1.6 billion, while exports rose to nearly USD 11 billion, resulting in a positive net export value of USD 9.8 billion.

Indian Diplomat Summoned Over Sailor's Death

Context: EEPC India, a body representing producers of engineering goods, which constitute a quarter of India's merchandise exports in recent years, have urged the Centre to restore an interest subvention scheme for all players and raise the benefits offered to micro, small and medium enterprises (MSMEs).

Interest Equalisation Scheme

- The Interest Equalisation Scheme was introduced on April 1, 2015, with the aim of providing pre- and post-shipment export credit to exporters in Indian rupees.
- Initially valid for five years, the scheme was extended until March 31, 2020. It has since been continued, including an extension during the COVID-19 pandemic and additional fund allocations.
- The scheme is managed by the Reserve Bank of India (RBI) in collaboration with both public and private sector banks that offer pre- and post-shipment credit to exporters.
- Oversight and monitoring are conducted jointly by the Directorate General of Foreign Trade (DGFT) and the RBI through a consultative process.
- The scheme aims to enhance the international competitiveness of selected export sectors and promote high levels of export performance.

Features

- Exporters must obtain certification from an external auditor and submit it to their bank to claim the benefits under this scheme.
- Banks provide Interest Equalisation Scheme benefits to eligible exporters and then seek reimbursement from the RBI based on the certification provided.
- The scheme is now fund-limited, with benefits capped at Rs 10 crore per annum per Import Export Code (IEC).
- Banks lending to exporters at an average rate exceeding Repo + 4% are excluded from the scheme.

The scheme currently offers

An interest equalisation benefit of 2% on pre- and post-shipment rupee export credit for merchant and manufacturer exporters of 410 identified tariff lines.

A 3% benefit for all Micro, Small, and Medium Enterprise (MSME) manufacturer exporters.

Bihar To Induct Three Transgender Sub-Inspectors

Context: For the first time in the State's history, three transgender persons have cleared the recently concluded Bihar Police Subordinate Services Commission (BPSSC) exam and are set to join the police force as sub-inspectors.

Key Highlights

- According to the latest State caste survey conducted in 2022, the transgender community makes up only 0.0006% of Bihar's population, with just 825 members.
- The numbers, which present a sharp contrast from the 2011 census that had pegged their number at 40,827 members, has been challenged by several activists in the State.
- But the move to induct transgender persons into public service has been lauded by many.

Provisions of the Transgender Persons (Protection of Rights) Bill

Prohibition Against Discrimination

Right to be Recognized as Transgender

Right of Residence

Health Care Provisions

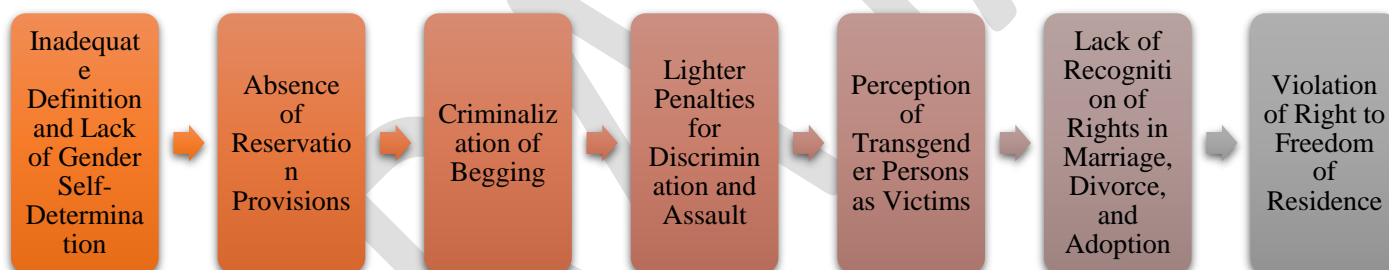
- The Bill explicitly prohibits any form of discrimination against transgender persons, ensuring equal opportunities in education, employment, healthcare, and access to various public services. This is aimed at protecting the dignity and rights of transgender individuals in all spheres of life.

- The Bill grants every individual the right to self-identify as a transgender person.
- To formalize this recognition, an individual must obtain a certificate of identity from the District Magistrate, who will issue the certificate based on the recommendation of the District Screening Committee. This certificate is crucial for accessing rights and entitlements under the law.
- The Act also mandates the establishment of a National Council for Transgender Persons (NCT), which will work towards the welfare and rights of transgender individuals.
- The Bill ensures that no transgender person shall be separated from their parents or immediate family solely based on their gender identity. This provision aims to protect transgender persons from being disowned or displaced from their homes.
- The Act seeks to provide comprehensive healthcare rights to transgender persons, including the establishment of separate HIV surveillance centers and facilities for sex reassignment surgeries.
- It also requires the government to review medical curricula to address specific health issues faced by transgender individuals and to introduce comprehensive medical insurance schemes tailored to their needs.

Penal Provisions in the Bill

- Begging, forced or bonded labor.
- Denial of access to public spaces.
- Denial of residence in a household, village, or other areas.
- Physical, sexual, verbal, emotional, and economic abuse.

Challenges Associated with the Transgender Persons (Protection of Rights) Bill



- The Act has been criticized for not adequately defining "transgender persons," and it lacks provisions for the self-determination of gender identity, which is a fundamental aspect of gender recognition.
- The Act does not provide for reservations in education and employment for transgender persons, which contradicts the Supreme Court's NALSA judgment of 2014. The judgment recognized transgender individuals as socially and educationally backward classes deserving of affirmative action.
- Begging is a traditional means of livelihood for many transgender persons, who often engage in singing, dancing, and collecting alms. The Act criminalizes begging without offering alternative measures for social security or employment, leading to concerns about the impact on their livelihood.
- The Act prescribes lighter penalties for offenses against transgender persons compared to those against cisgender individuals. For instance, sexual assault on a cisgender woman may attract a jail sentence of up to 7 years, while the penalties for similar offenses against transgender persons are less severe.
- The Act tends to portray transgender persons as victims rather than as empowered individuals with rights. This perspective is seen as limiting the ability of transgender individuals to assert their rights fully and live with dignity.
- The concerns raised by the Standing Committee about recognizing the rights of transgender persons in matters of marriage, divorce, and adoption have not been addressed in the Act, leaving significant gaps in the legal protection of transgender rights.

- The Act imposes restrictions on the freedom of residence for transgender persons, requiring them to either live with their parents or seek court intervention. This requirement potentially infringes on their constitutional Right to Freedom of Residence under Article 19, restricting their autonomy and freedom to live independently.

Centre Amends Rules to Broaden the Administrative Role Of J&K L-G

Context: The Union Ministry of Home Affairs (MHA) widened the ambit of the administrative role of the Lieutenant Governor of Jammu and Kashmir by amending the Transaction of Business Rules.

Key Points

- The amendment gives the L-G more say in matters pertaining to police, public order, All India Service (AIS) which require prior concurrence of the Finance Department and also their transfers and postings.
- Any proposal regarding appointment of Advocate-General, Law Officers and proposals regarding grant or refusal of prosecution sanction or filing of appeal shall be placed before the L-G first.
- On August 5, 2019, the special status granted to J&K under Article 370 of the Constitution was revoked and the former State was divided into two Union Territories: J&K and Ladakh, the latter without an assembly. J&K has been under Central rule since June 2018. The government has said that Statehood will be restored after Assembly elections are held. The Constitution Bench of the Supreme Court has ordered the Election Commission to conduct elections to J&K Assembly before September 30, 2024. On Friday, the MHA notified the amended Rules under Section 55 of the Jammu and Kashmir Reorganisation Act, 2019 which inserted new Sections defining the L-G's role.
- No proposal which requires previous concurrence of the Finance Department with regard to 'Police', 'Public Order', 'All India Service' and 'Anti Corruption Bureau' to exercise the discretion of the Lieutenant Governor under the Act shall be concurred or rejected unless it has been placed before the Lieutenant Governor through the Chief Secretary
- Department of Law, Justice and Parliamentary Affairs shall submit the proposal for appointment of Advocate-General and other Law Officers to assist the Advocate-General in the court proceedings, for approval of the Lieutenant Governor through the Chief Secretary and the Chief Minister.
- All matters connected with Prisons, Directorate of Prosecution and Forensic Science Laboratory are also to be submitted to the L-G.

Lieutenant Governors (LGs) and administrators in the Union Territories (UTs)

Aspect	Details
Role of Lieutenant Governors	Constitutional heads of five out of the eight Union Territories.
Appointment and Tenure	- Appointed by the President of India for a term of five years, subject to the President's pleasure. - Typically senior bureaucrats from the Indian Administrative Service (IAS) or Indian Police Service (IPS).
Union Territories with Elected Legislatures	Delhi, Jammu and Kashmir, Puducherry: - These UTs have elected legislatures and councils of ministers. - LGs act in a largely ceremonial role, similar to state governors. - They exercise powers based on the advice of the council of ministers, except in matters reserved for the President.
Union Territories with Significant Executive Powers	Andaman and Nicobar Islands, Ladakh: - LGs in these UTs hold substantial executive authority, serving as both the head of state and head of government. - They exercise wider powers due to the absence of an elected legislature.



Administrator Role	Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Lakshadweep: - Administrators manage these UTs without legislative powers. - They report directly to the Ministry of Home Affairs.
Governor of Punjab as Administrator of Chandigarh	Since 1985, the Governor of Punjab has also served as the Administrator of Chandigarh, ensuring administrative cohesion between Chandigarh and Punjab.
Functionality and Responsibilities	- LGs: Uphold the Constitution, maintain law and order, and oversee administration in consultation with elected governments where applicable. - Administrators: Focus on day-to-day administration, implementation of central government policies, and developmental activities within the UTs.
Distinct Powers and Functions	- LGs: Balance powers between governance and legislative matters, especially in UTs with elected legislatures. - Administrators: Emphasize administrative efficiency and development without legislative functions.

ED Cannot Make Arrests Under PMLA On A Whim, Says SC

Context: The Supreme Court held that the power to arrest under the Prevention of Money Laundering Act (PMLA) cannot be exercised on the “whims and fancies” of officers of the Enforcement Directorate (ED).

Key Highlights

- The court wondered if the ED even had a consistent, uniform and “one-rule-for-all” policy on when they should arrest people. It said the ED’s power to arrest must be based on objective and fair consideration of material against a person.
- Under the PMLA, ED officers can arrest a person if they have reasons to believe, based on the material in their possession, that the individual is guilty.
- A Bench of Justices Sanjiv Khanna and Dipankar Datta, in a judgment, said the power of arrest given to the ED officers under Section 19 (1) of the PMLA was drastic and ran the risk of violating the right to life and liberty under Article 21 of the Constitution.

Prevention of Money Laundering Act (PMLA), 2002

- The PMLA was enacted as part of India’s commitment to combat money laundering, in line with international agreements and standards, including:
 - The United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988
 - The Basle Statement of Principles, 1989
 - The Forty Recommendations of the Financial Action Task Force on Money Laundering, 1990
 - The Political Declaration and Global Program of Action adopted by the United Nations General Assembly in 1990

Purpose and Scope of PMLA

- The PMLA is a criminal law designed to prevent money laundering and to provide for the confiscation of property derived from or involved in money laundering and related activities.
- It forms the core of India’s legal framework to address money laundering.
- The Act applies to all financial institutions, banks (including the RBI), mutual funds, insurance companies, and their financial intermediaries.

Recent Amendments

Clarification on Proceeds of Crime

Redefinition of Money Laundering

Continuing Nature of the Offence

- The definition of "proceeds of crime" was expanded to include any property derived from or involved in criminal activities related to or similar to the scheduled offences, not just those directly resulting from scheduled offences.
- Money laundering was previously treated as a dependent crime, reliant on the commission of a predicate offence (scheduled offence).
- Recent amendments have redefined money laundering as a standalone crime.
- Under Section 3 of the PMLA, a person is considered to be involved in money laundering if they are directly or indirectly engaged with the proceeds of crime through:
 - Concealment
 - Possession
 - Acquisition
 - Use or projection as untainted property
 - Claiming as untainted property
- The amendment established that the offence of money laundering is ongoing. A person remains implicated in money laundering as long as they benefit from the proceeds of such activities, emphasizing the continuous nature of the crime.

SC Seeks Report on Gram Nyayalayas from States, Hcs

Context: The Supreme Court has sought a full report from the States and High Courts on the establishment and functioning of gram nyayalayas, meant to provide affordable and quick justice to rural India and de-clog local courts.

Key Highlights

- The top court was informed that gram nyayalayas were far and few between even 16 years after they were introduced through a parliamentary law.
- Gram nyayalayas were supposed to provide speedy and easy access to the justice system for the last citizens of the country. Every citizen has a right to affordable justice at an affordable price.

Background

2019 Petition

2020 Supreme Court Order

Centre's Position

- **Context:** A plea was filed in 2019 with the Supreme Court requesting directives to the Centre and all states for the establishment of Gram Nyayalayas under the Court's supervision.
- **Petitioner's Argument:** The Gram Nyayalaya Act of 2008 aimed to provide 'access to justice' for all citizens. However, the petitioner argued that states were undermining this objective because Section 3 of the Act allows but does not mandate the establishment of Gram Nyayalayas.
- **Order:** The Court recognized that the right to justice includes the right to affordable justice. It directed states that had not issued notifications to establish Gram Nyayalayas to do so within four weeks and instructed high courts to expedite consultations with state governments on this matter.

- **Legal Interpretation:** The Centre contended that the establishment of Gram Nyayalayas was not obligatory if similar arrangements were already in place, due to the use of the term ‘may’ instead of ‘shall’ in the legislation.

About Gram Nyayalaya

Origin

Establishment

Definition

Purpose

- **Law Commission Recommendation:** Suggested in the 114th Report of the Law Commission of India for providing affordable and swift justice at the grassroots level.
- **Legislation:** The Gram Nyayalayas Act, 2008, was enacted to establish these courts at the grassroots level across India, excluding Nagaland, Arunachal Pradesh, and Sikkim.
- **Function:** Gram Nyayalayas are mobile courts that exercise the powers of both criminal and civil courts.
- **Access to Justice:** Aims to bring justice to citizens at their doorstep and ensure that justice is not denied due to social, economic, or other disabilities.

Features Of Gram Nyayalaya

Aspect	Details
Presiding Officer	Role: The presiding officer, known as Nyayadhikari, is a Court of Judicial Magistrate of the First Class. Appointment: Appointed by the State Government in consultation with the High Court.
Appointment Process	Selection: The State Government appoints a Nyayadhikari eligible to be a Judicial Magistrate of the First Class, in consultation with the High Court.
Seat and Operations	Location: The Gram Nyayalaya is located at the headquarters of the intermediate Panchayat. The court travels to villages to handle cases.
Establishment	Scope: Set up at the intermediate Panchayat level or a group of contiguous Panchayats in a district. Alternative arrangements are made in areas without an intermediate Panchayat. Budget: Initially proposed with a one-time budget of Rs. 18 lakhs for non-recurring expenses. The Central Government funded 50% of recurring expenses for the first three years.
Jurisdiction	Cases Handled: Authorized to handle criminal cases, civil suits, claims, and disputes listed in the First and Second Schedules of the Act. Excludes cases punishable by death, life imprisonment, or imprisonment exceeding two years.
Procedure	Summary Procedure: Follows a summary procedure for criminal trials, designed for swift adjudication.

Central Information Commission Can Constitute Benches, Frame Regulations: SC

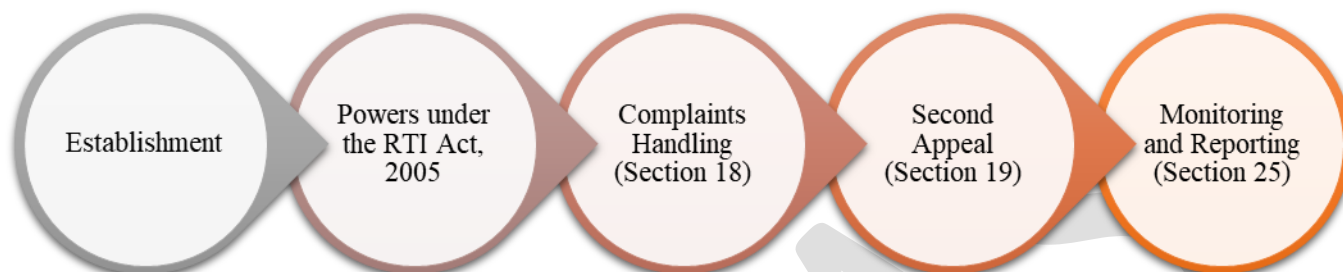
Context: The Central Information Commission (CIC) has powers to constitute Benches and frame regulations, the Supreme Court said while observing that the autonomy of the CIC is of paramount importance for its effective functioning.

Key Highlights

- The Chief Information Commissioner’s powers to frame regulations pertaining to the constitution of benches of the commission are upheld as such powers are within the ambit of Section 12(4) of the RTI Act,” the bench said.
- While the RTI Act does not explicitly grant CIC the authority to frame regulations, the overarching powers granted under Section 12(4) of the RTI Act inherently include the ability to manage the commission’s affairs effectively.

- Interfering in the functioning of these bodies can be detrimental, as it undermines their ability to operate efficiently and impartially, it said. The court said the purpose of the RTI Act is to promote transparency and accountability in the functioning of public authorities, ensuring citizens' right to information.

Chief Information Commission (CIC) and State Information Commissions (SIC)



- CIC: Established under Section 12 of the Right to Information (RTI) Act, 2005.
- SIC: Established under Section 15 of the RTI Act, 2005.
- Both CIC and SIC are responsible for exercising the powers conferred on them by the RTI Act to promote transparency and accountability in public authorities.
- They receive and inquire into complaints from citizens regarding the failure to provide information or other issues related to the RTI Act.
- They receive and decide on second appeals from citizens who are dissatisfied with the response from public information officers (PIOs) or first appellate authorities.
- They are tasked with monitoring the implementation of the RTI Act and reporting on its effectiveness. This includes ensuring compliance with the provisions of the Act and promoting its objectives.

Features Of the Central Information Commission (CIC) And State Information Commissions (Sics)

Features	CIC	SIC
Composition	- Chief Information Commissioner and up to ten Information Commissioners.	- State Chief Information Commissioner and up to ten State Information Commissioners.
Appointment	- Appointed by the President on the recommendation of a committee with the Prime Minister as Chairperson, the Leader of Opposition in the Lok Sabha, and a Union Cabinet Minister nominated by the Prime Minister.	- Appointed by the Governor on the recommendation of a committee with the Chief Minister as Chairperson, the Leader of Opposition in the Legislative Assembly, and a State Cabinet Minister nominated by the Chief Minister.
Eligibility	- Must be persons of eminence in public life with wide knowledge and experience in law, science and technology, social service, management, journalism, mass media, or administration and governance. - Must not be a Member of Parliament or any State or Union Territory Legislature, nor hold any other office of profit, be connected with any political party, or engage in business or profession.	- Must be persons of eminence in public life with wide knowledge and experience in law, science and technology, social service, management, journalism, mass media, or administration and governance. - Must not be a Member of Parliament or any State or Union Territory Legislature, nor hold any other office of profit, be connected with any political party, or engage in business or profession.
Tenure	- Term as prescribed by the Central Government or until the age of 65 years, whichever is earlier.	- Term as prescribed by the State Government or until the age of 65 years, whichever is earlier.

Reappointment	- Chief Information Commissioner is not eligible for reappointment. - Information Commissioners can be appointed as Chief Information Commissioner, with a combined term limit of five years as IC and CIC.	- State Information Commissioners can be appointed as State Chief Information Commissioner, with a combined term limit of five years as SIC and SCIC.
Removal	- The President can remove members for insolvency, criminal conviction, paid employment outside office duties, or declared unfit by reason of infirmity. - For proved misbehavior or incapacity, the President must refer the matter to the Supreme Court. If upheld, the President can remove the member. During the inquiry, the President may suspend the member or prohibit them from office.	- The Governor can remove members for insolvency, criminal conviction, paid employment outside office duties, or declared unfit by reason of infirmity. - For proved misbehavior or incapacity, the Governor must refer the matter to the Supreme Court. If upheld, the Governor can remove the member. During the inquiry, the Governor may suspend the member or prohibit them from office.
Salary and Allowances	- Prescribed by the Central Government (RTI Amendment Act, 2019).	- Prescribed by the State Government.
Jurisdiction	- Extends over all Central Public Authorities.	- Extends over all State Public Authorities.

With Two New Judges, Supreme Court Back To Its Full Judicial Strength

Context: President Droupadi Murmu on Tuesday appointed Justices N. Kotiswar Singh and Justice R. Mahadevan as Supreme Court judges.

Key Highlights

- The Centre notified the two appointments that would return the top court to its full sanctioned strength of 34 judges.
- Justice Singh is the first judge from Manipur to be appointed to the Supreme Court.
- The collegium said Justice Mahadevan was “eminently suitable” for appointment as a Supreme Court judge. Justice Mahadevan, who belongs to a backward community from Tamil Nadu, would bring diversity to the Supreme Court Bench.

Appointment of Judges

Aspect	Details
Composition and Strength of Supreme Court	Originally, the Supreme Court consisted of 8 judges (1 Chief Justice and 7 others). The current strength, after multiple increases by Parliament, is 34 judges (1 Chief Justice and 33 others).
Qualifications for Appointment	A person must be: • A citizen of India. • A judge of a High Court (or two such courts in succession) for at least 5 years. • An advocate in a High Court (or two or more such courts in succession) for at least 10 years. • A distinguished jurist in the opinion of the President.
Appointment Process	Judges of the Supreme Court are appointed by the President under Article 124(2) of the Constitution, after consultation with judges of the Supreme Court and High Courts.
Oath of Office	Appointed judges take an oath before the President (or an appointed person) to uphold the Constitution, maintain the sovereignty and integrity of India, and perform their duties without fear or favor.



Tenure and Resignation	Judges serve until they reach the age of 65 years. There is no minimum age limit for appointment. Judges may resign before 65 by submitting their resignation to the President.
Salaries and Allowances	Salaries, allowances, privileges, leave, and pension of Supreme Court judges are determined by Parliament and charged upon the Consolidated Fund of India.
Post-Retirement Restrictions	Retired judges are prohibited from practicing law in any court or pleading before any government authority in India. Under Article 128, retired judges may be called back to serve as judges by the Chief Justice of India with the President's approval.
Removal Process	Judges can only be removed by the President following an address by each House of Parliament, supported by a special majority (majority of total membership and two-thirds of members present and voting). Grounds for removal are proven misbehavior or incapacity.
Collegium System	The collegium system, not explicitly mentioned in the Constitution but established through judicial pronouncements, involves the Chief Justice of India and the four senior-most judges of the Supreme Court deciding on appointments, elevations, and transfers of judges.

International Relations

Indian Diplomat Summoned Over Sailor's Death

Context: Sri Lanka's Ministry of Foreign Affairs summoned an official from the Indian High Commission in Colombo and voiced its concern over the death of a Sri Lankan naval sailor, who was part of a patrol unit that had seized an Indian fishing vessel in the early hours of June 25.



Key Highlights

- A senior Foreign Ministry official handed over a formal note to the Indian diplomat on the issue of persisting illegal, unreported and unregulated (IUU) fishing, especially using the bottom-trawling method, and "indiscriminate poaching by Indian fishermen in Sri Lankan waters"
- The development has brought the long-persisting fisheries conflict in the Palk Strait back into the spotlight. Disregarding the relentless demand of Sri Lanka's northern fishermen that their Indian counterparts stop using the destructive bottom-trawling method of fishing, the fishermen from India have continued the practice for years.

Additional Points

- Reports indicate that Sri Lankan authorities raised concerns about illegal, unreported, and unregulated fishing, particularly the use of bottom-trawling techniques and indiscriminate fishing by Indian fishermen in Sri Lankan waters during the meeting.
- Additionally, during a meeting between Sri Lanka's High Commissioner to India and India's External Affairs Minister, the ongoing fisheries conflict in the Palk Strait was discussed. The fatal incident that led to the death of a Sri Lankan Navy sailor was also addressed.



Reaching Out

When Sri Lanka suffered due to Covid, India helped with medicines and other essentials

₹18,500 crore aid given to Lanka

Focus has been on support for currency -currency swap; extending credit for fuel and food; energy security, and encouraging Indian investment in Sri Lanka

- The Sri Lankan Navy blamed the sailor's death on the aggressive actions of an Indian trawler that resisted capture during the operation. Consequently, 10 Indian fishermen were arrested for illegal fishing, and their trawler was seized.
- The ongoing fisheries conflict, particularly the long-standing dispute over bottom trawling, has adversely affected the livelihoods of northern Sri Lankan fishermen. Affected fishing communities have called for renewed dialogue between the two countries to resolve the issue.

India Sri Lanka Ties



- **Historical Ties:** India and Sri Lanka share a rich history of cultural, religious, and trade relations that date back to ancient times. Many Sri Lankans have ancestral ties to India, and Buddhism, which originated in India, is a major religion in Sri Lanka.
- **Financial Assistance from India:** During Sri Lanka's severe economic crisis, India provided approximately USD 4 billion in aid, which was vital for the country's survival. The crisis in 2022 was the worst since Sri Lanka's independence in 1948, triggered by a severe shortage of foreign exchange reserves.
- **Role in Debt Restructuring:** India has actively collaborated with the International Monetary Fund (IMF) and other creditors to assist Sri Lanka in restructuring its debt. India was the first country to submit a letter of support for Sri Lanka's financing and debt restructuring efforts.
- **Joint Vision for Connectivity:** Both nations have agreed on a comprehensive vision for connectivity, including people-to-people links, renewable energy cooperation, logistics, port connectivity, and electricity grid integration.
- **Regional and Indian Ocean Context:** The relationship between India and Sri Lanka is framed within the broader regional and Indian Ocean context, as both are key Indian Ocean countries.
- **India's Involvement in Renewable Energy Projects:** Indian companies are involved in developing renewable energy projects in Sri Lanka's northeast, reflecting growing collaboration in the energy sector.
- **Economic and Technology Cooperation Agreement (ETCA):** India and Sri Lanka are exploring the possibility of an ETCA to integrate their economies and support mutual development.

- **Multi-Project Petroleum Pipeline Agreement:** The two countries have agreed to establish a multi-product petroleum pipeline from southern India to Sri Lanka. This pipeline aims to provide Sri Lanka with an affordable and reliable energy supply, recognizing the critical role of energy in economic development.
- **Adoption of India's UPI:** Sri Lanka has adopted India's UPI service, enhancing fintech connectivity between the two countries. The use of the Indian rupee for trade settlements is also aiding Sri Lanka's economic recovery and growth.
- **Economic Ties:** India is Sri Lanka's third-largest export destination, following the US and UK, with over 60% of Sri Lankan exports benefiting from the India-Sri Lanka Free Trade Agreement. India is also a significant investor in Sri Lanka, with Foreign Direct Investment (FDI) amounting to approximately USD 1.7 billion between 2005 and 2019.
- **Defence Cooperation:** India and Sri Lanka engage in joint military exercises (Mitra Shakti) and naval exercises (SLINEX).
- **Participation in Groupings:** Sri Lanka is a member of regional groupings like BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) and SAARC, where India plays a leading role.
- **Tourism:** In 2022, India was the largest source of tourists to Sri Lanka, with over 100,000 Indian visitors.

Recent MOU signed between India and Sri Lanka

Major MoUs	Details
Joint Declaration of Intent (JDI)	Agreement in the field of Animal Husbandry and Dairying.
Cooperation in Renewable Energy	Partnership focused on renewable energy development.
Economic Development in Trincomalee	Memorandum of Cooperation for economic development projects in the Trincomalee district of Sri Lanka.
UPI Acceptance in Sri Lanka	Network-to-Network Agreement between NPCI International Payments Limited (NPIL) and Lanka Pay for Unified Payments Interface (UPI) application acceptance in Sri Lanka.
Sampur Solar Power Project	Energy permit granted for the Sampur Solar Power Project, which will produce 100 MW of power for Sri Lanka.

SCO Summit

Context: Jaishankar to represent India in place of Modi at SCO summit in Kazakhstan.

Key Points

- Leaders of other countries in the Eurasian group, newly expanded to include Belarus this year, including Russian President Vladimir Putin, Pakistan PM Shehbaz Sharif and the Presidents of Uzbekistan, Kyrgyzstan and Tajikistan will be hosted by Kazakh President Kassym-Jomart Tokayev at the summit. Chinese President Xi Jinping landed in Astana for a state visit and bilateral meetings ahead of the SCO, while Iran's President may not be able to attend as the country is in the middle of elections. Shortly after landing, Mr. Jaishankar met Kazakh Deputy Prime Minister and Foreign Minister Murat Nurtleu.
- At the summit, the leaders are expected to review the organisation's activities over the past two decades and discuss the state and prospects of multilateral cooperation. Topical issues of regional and international importance are also expected to be discussed at the meeting
- SCO Council will adopt the Astana Declaration, which is expected to focus on strengthening ties between SCO countries on economic issues, connectivity, fighting terrorism and regional developments.

- India and Pakistan both became members of the SCO in 2017, and their leaders have often sparred at the high-level meetings over issues like terrorism and transit trade, including in Uzbekistan in 2022, and last year's SCO Foreign Minister's meeting in Goa.

Shanghai Cooperation Organisation (SCO)

- The Shanghai Cooperation Organisation (SCO) is a permanent intergovernmental international organization
- It plays a significant role in the geopolitical landscape of Eurasia, focusing on collaboration among member states to address regional challenges.

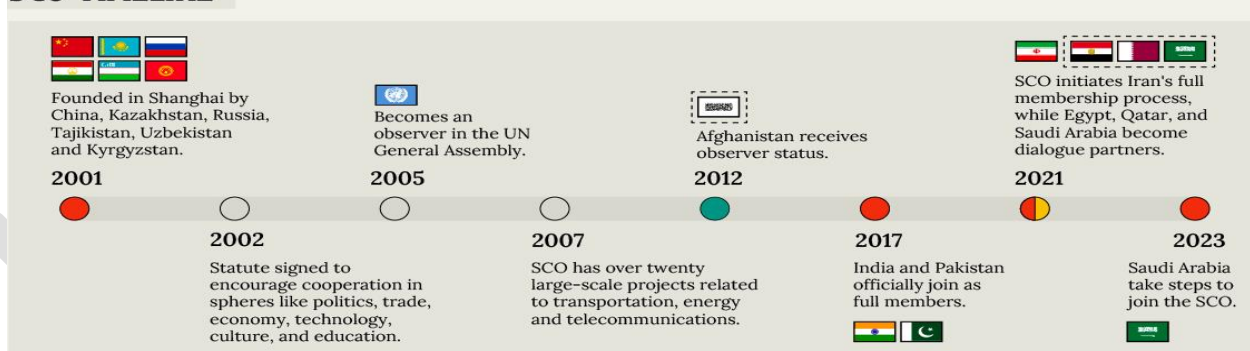


Figure 1: SCO Member States

Purpose and Objectives

- The SCO serves as a platform for political, economic, and military cooperation among its member countries.
- Its primary aim is to maintain peace, security, and stability across the Eurasian region, addressing issues such as terrorism, separatism, and extremism.

SCO TIMELINE



Formation of the SCO

- The organisation was established in 2001, marking the beginning of a new era of multilateral cooperation in the region.
- The SCO emerged as a successor to the Shanghai Five, a group formed in 1996 by China, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan.

Official Languages of the SCO

- The official languages of the SCO are Russian and Chinese.
- This linguistic choice reflects the prominence of these two languages in the region and facilitates communication and documentation among member states.

Jaishankar Meets Wang Yi, Says LAC Must Be Respected And Peace Ensured

Context: External Affairs Minister S. Jaishankar held talks with Chinese Foreign Minister Wang Yi on the sidelines of the Shanghai Cooperation Organisation (SCO) Council meeting.

Key Points

- Both sides stressed the importance of “mutual respect” in resolving the boundary issues that have frozen ties between them for the past four years.
- Mr. Jaishankar told Mr. Wang that it was important that the “Line of Actual Control must be respected and peace and tranquillity in the border areas always ensured
- However, talks between border commanders and defence officials in the meetings of the Working Mechanism for Consultation and Coordination on India-China Border Affairs (WMCC) have thus far yielded no further breakthrough, which hinges on the Chinese position at the Demchok and Depsang sectors.



Line of Actual Control (LAC)

- The Line of Actual Control (LAC) is the boundary that distinguishes Indian-controlled territory from Chinese-controlled territory.
- It is divided into three sectors:
 - Eastern Sector: Includes Arunachal Pradesh and Sikkim.
 - Middle Sector: Covers Uttarakhand and Himachal Pradesh.
 - Western Sector: Encompasses Ladakh.
- India recognizes the LAC as approximately 3,488 km long, whereas China considers it to be around 2,000 km.
- The LAC is not the same as India’s claim line. India’s claim line includes areas such as Aksai Chin and Gilgit-Baltistan, which are not part of the LAC.
- For China, the LAC serves as its claim line, except in the eastern sector, where China claims all of Arunachal Pradesh as South Tibet.

Disagreements Over the LAC

- Historical Context: The LAC has been a point of contention, particularly in the western sector. It originated from correspondence between Chinese Prime Minister Zhou Enlai and Indian Prime Minister Jawaharlal Nehru in 1959.
- Post-1962 War: After the 1962 Sino-Indian War, China claimed to have withdrawn to a position 20 km behind the LAC of 1959, aligning with the McMahon Line in the eastern sector.
- India’s Stance:
- India rejected the LAC concept both in 1959 and 1962, arguing that it was a line created by China.

- India considered the Chinese line to be an arbitrary and disconnected series of points on a map.
- India believes the LAC should reflect the position before the Chinese aggression in 1962, rather than acknowledging any gains from that conflict.
- The ambiguous nature of the Chinese definition allowed for ongoing attempts to alter facts on the ground through military actions.
- During the Doklam crisis in 2017, the Chinese Foreign Ministry urged India to adhere to the "1959 LAC."

Comparison with the Line of Control (LoC)

Aspect	Line of Control (LoC)	Line of Actual Control (LAC)
Origin	Emergred from the 1948 ceasefire line negotiated by the UN after the Kashmir War.	Originated from discussions and correspondence between China and India in the late 1950s.
Designation	Officially designated as the LoC in 1972 following the Shimla Agreement between India and Pakistan.	Not officially designated or agreed upon by both India and China.
Legal Status	Recognized internationally as a legal boundary, delineated on a map.	Conceptual boundary without formal agreement or official demarcation.
Formal Agreement	Delineated and mapped with international recognition.	Lacks formal mapping and international legal recognition.

NATO Summit

Context: Foreign Secretary Vinay Kwatra dismisses comparisons of Modi Putin meet to the NATO summit in U.S. which is set for the same day.

Key Highlights

- India’s position on the Russia-Ukraine conflict is consistently in favour of dialogue and diplomacy and a settlement that includes the two parties.
- U.S. President Joseph Biden is hosting the transatlantic group of NATO for a special 75th anniversary summit, which will also have Asia-Pacific leaders and Ukrainian President Volodymyr Zelenskyy as guests from July 8-10.
- He said India is “careful in adhering to UN sanctions” but its discussions on the G-7 sanctions are only to “protect India’s economic and national needs, whether it relates to diamonds or other sectors of our economy”.
- India has been pursuing the cases of an “estimated 30-45” Indian nationals who are working with the Russian Army after being recruited through “illegal and unethical means”, saying that Mr. Modi will likely request an “early discharge of Indian nationals who have been misled into the service of the Russian Army” in his talks.
- While India has signed a number of civil nuclear agreements with many countries, Russia is the only foreign country operating nuclear power plants in India thus far with Kudankulam units 1 and 2 operational and units 3-6 under construction.



- Trying to resolve the trade deficit between the two countries would also be high on the leaders' agenda
- India's imports from Russia were about \$60 billion dollars owing to a surge in oil purchases since the Ukraine war, while India's exports to Russia stand at about \$4 billion.

What is the NATO-India Political Dialogue?

- India engaged in its first political dialogue with the North Atlantic Treaty Organization (NATO) in Brussels on December 12, 2019.
- This dialogue marks a significant step in India's foreign relations, reflecting its growing engagement with global security alliances.

Significance

- NATO has been involved in bilateral dialogues with both China and Pakistan, influencing regional security dynamics.
- By engaging in a political dialogue with NATO, India gains a platform to influence NATO's perceptions and policies on issues critical to its national interests.
- There is a shared understanding between India and NATO on key issues such as China's rising influence, the threat of terrorism, and the situation in Afghanistan, including Pakistan's involvement.

Issues

- From NATO's perspective, the most significant threat it faces is not China but Russia, whose actions are seen as destabilizing European security.
- NATO has encountered challenges in convening meetings of the NATO-Russia Council due to Russia's reluctance to discuss critical issues like Ukraine and the Intermediate-Range Nuclear Forces (INF) Treaty.
- Within NATO, there is no unified stance on China; opinions are mixed, viewing China's rise as both a challenge and an opportunity.
- In Afghanistan, NATO views the Taliban as a political entity, which contrasts with other perspectives on the group.

Interest India, Russia to Boost Bilateral Trade To \$100 Billion By 2030

Context: India and Russia agreed to increase bilateral trade to \$100 billion dollars by 2030, including the use of national currencies to circumvent Western sanctions, as Prime Minister Narendra Modi and Russian President Vladimir Putin sat down for the 22nd Annual Summit.

Key Highlights

- The leaders agreed to a cooperation statement on projects in Russia's Far East that Mr. Putin has been focused on developing. A joint vision statement on trade and economic cooperation by the end of the decade looked at nine issues including the elimination of non-tariff barriers, the development of a "bilateral settlement system using national currencies", ironing out customs procedures and using new connectivity routes, including the Chennai-Vladivostok maritime route and Northern Sea Route and the International North-South Transport

List of Members Countries NATO

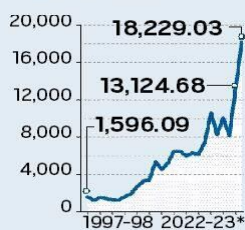
Year Joined	Country
1949	Belgium
1949	Canada
1949	Denmark
1949	France
1949	Iceland
1949	Italy
1949	Luxembourg
1949	Netherlands
1949	Norway
1949	Portugal
1949	United Kingdom
1949	United States
1952	Greece
1952	Türkiye
1955	Germany
1982	Spain
1999	Czechia
1999	Hungary
1999	Poland
2004	Bulgaria
2004	Estonia
2004	Latvia
2004	Lithuania
2004	Romania
2004	Slovakia
2004	Slovenia
2009	Albania
2009	Croatia
2017	Montenegro
2020	North Macedonia
2023	Finland
2024	Sweden

Corridor via Iran, investments in the energy sector including nuclear energy, infrastructure development and investment promotion as “priority areas”.

- In addition, India and Russia signed a number of MoUs between institutions on climate change, polar research, legal arbitration and pharmaceutical certification and other issues.
- Earlier, addressing about 500 members of the Indian diaspora in Russia, Mr. Modi announced that Russia had agreed to India’s request to open consulates in Kazan and Yekaterinburg to help facilitate services for the growing community.
- Achieving the target would catapult the business relationship to levels of trade India currently has only with bigger economies such as the U.S., China and the European Union.
- The focus on economic issues was a shift from previous Annual Summits where military supplies and the defence and strategic partnership between the two countries had been at the top of the agenda.
- Officials said that the two leaders discussed the delay in defence supplies, and have committed to exploring more areas of co-production of defence equipment such as the India-Russia joint venture for assault rifles that could fill the domestic gap as well as facilitate export to other countries.
- The Prime Minister accepted Russia’s highest civilian honour, the Order of St Andrew the Apostle, an award that had been announced by President Putin in 2019, but could only be presented now.

INDIA'S TRADE WITH RUSSIA

Trade in \$ million



*From April to August



India-Russia Agreements

Cooperation in trade, economic and investment spheres in Russian Far East (from 2024 to 2029) and the Arctic zone

MoU on climate change & low-carbon development

MoU between Survey of India and the Federal Service for State Registration, Cadastre and Cartography

MoU for cooperation in research and logistics in polar regions

MoU for cooperation in **broadcasting**

MoU between Trade Promotion Council of India and All Russia Public Organization 'Business Russia'

MoU for cooperation in **pharmacy and medicine**

MoU for cooperation in **arbitration**

Joint Investment Promotion Framework Agreement

BIMSTEC

Context: India hosts BIMSTEC Foreign Ministers amid raging Myanmar crisis

Key Highlights

- The meeting assumes significance as it is being held against the backdrop of major developments in Myanmar, where the military junta has been receiving battlefield setbacks against dozens of ethnic armed organisations.
- The developments in Myanmar pose a major issue before the BIMSTEC as instability there has put a question mark on a number of developmental and connectivity projects that were aimed at firming up ties among countries like Nepal, Bhutan, India, Bangladesh, Myanmar, and Thailand.
- A day before the beginning of the meeting in Delhi, the military junta in Naypyidaw lost control of Naungcho, a major town along a trade highway to China in the northern Shan State, to the Ta’ang National Liberation Army.
- Following his meeting with Myanmar Deputy Prime Minister and Foreign Minister U. Than Swe, Mr. Jaishankar said, “Our discussions focused on the connectivity projects, so crucial for the future of BIMSTEC. Also exchanged views on border stability and humanitarian assistance.”
- The External Affairs Ministry is yet to clarify if India will extend humanitarian assistance to the affected civilian population inside Myanmar. Till now, assistance has been limited to the displaced population and personnel of the Myanmar military who sought refuge in Mizoram.

- The Foreign Ministers of Bangladesh (Hasan Mahmood), Thailand (Maris Sangiampongsa), Myanmar, and Bhutan (D.N. Dhungyel) participated. The Nepalese and Sri Lankan Foreign Ministers skipped the meeting.

Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

- BIMSTEC is a regional multilateral organization that focuses on promoting economic and technical cooperation among countries in the Bay of Bengal region.
- The organization connects countries located along the Bay of Bengal and fosters a sense of regional unity among its members.

Areas of Cooperation within BIMSTEC

- Economic and Technical Fields
- Trade and Investment
- Technology
- Energy
- Transportation and Communication
- Social and Environmental Areas
- Tourism
- Fisheries
- Agriculture
- Cultural Cooperation
- Environment and Disaster Management
- Public Health
- Poverty Alleviation
- Security and Climate
- Counter Terrorism and Transnational Crime
- Climate Change

Regional Connectivity

BIMSTEC serves as a bridge between South Asia and Southeast Asia, linking the diverse ecologies of the Great Himalayas with the Bay of Bengal.

Objectives

- The main goals of BIMSTEC include creating a conducive environment for rapid economic development, accelerating social progress, and promoting cooperation on matters of shared interest among member countries.
 - BIMSTEC was established in 1997 through the Bangkok Declaration, initially comprising four member states: Bangladesh, India, Sri Lanka, and Thailand, under the acronym 'BIST-EC.'
 - Myanmar joined later in 1997, prompting the name change to 'BIMST-EC.'
 - The inclusion of Nepal and Bhutan in 2004 led to the current name, 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation' (BIMSTEC).
- BIMSTEC aims to foster an environment that promotes the rapid economic growth of its member states.

Member Countries	South Asia	Bangladesh
		Bhutan
		India
		Nepal
		Sri Lanka
	Southeast Asia	Myanmar
		Thailand

BIMSTEC

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

7 MEMBER COUNTRIES

Objectives of BIMSTEC

- To enable environment for rapid economic development.
- To collaborate and mutually assist members on matters of common interest.
- To maintain close and beneficial cooperation with existing international and regional organizations.
- To endeavour to eradicate poverty from the Bay of Bengal region.
- To establish multidimensional connectivity, promote synergy among connectivity frameworks in the region.

Founded in 1997 through Bangkok Declaration

- The organization encourages a spirit of equality, partnership, and active collaboration in areas of mutual interest, such as education, science, and technology.

Jaishankar To Attend ASEAN And Quad

Context: Amid the ongoing budget session, External Affairs Minister S. Jaishankar will be busy with a flurry of bilateral and multilateral meetings this week, including some with his counterparts from U.S., U.K., Japan, Australia, China and Russia. On Thursday, Mr. Jaishankar will travel to Vientiane on Thursday as Laos hosts the annual outreach meetings of the 10-nation Association of Southeast Asian Nations (ASEAN) from July 25 to 27, the Ministry of External Affairs (MEA) announced.

Facts About ASEAN

Aspect	Details
Full Name	Association of Southeast Asian Nations (ASEAN)
Purpose	Established to promote political and social stability in the Asia-Pacific region amid post-colonial tensions.
Motto	“One Vision, One Identity, One Community”
ASEAN Day	Observed on August 8
ASEAN Secretariat Location	Jakarta, Indonesia
Recent Developments	<ul style="list-style-type: none"> - 24th ASEAN-India Senior Official's Meeting (SOM): Held in Delhi, marking the 30th anniversary of ASEAN-India Dialogue Relations. - 2nd ASEAN Digital Ministers' (ADGMIN) Meeting: India and ASEAN finalized the India-ASEAN Digital Work Plan 2022 for future collaboration in the digital field.
Member Nations	<ul style="list-style-type: none"> - Indonesia - Malaysia - Philippines - Singapore - Thailand - Brunei - Vietnam - Laos - Myanmar - Cambodia
Key Milestones	<ul style="list-style-type: none"> - 1967: ASEAN established with the signing of the ASEAN Declaration (Bangkok Declaration) by Indonesia, Malaysia, Philippines, Singapore, and Thailand. - 1984: Brunei joined ASEAN. - 1995: Creation of a nuclear-free zone in Southeast Asia. - 1995: Vietnam joined ASEAN. - 1997: Laos and Myanmar joined ASEAN. - 1997: Adoption of ASEAN Vision 2020. - 1999: Cambodia joined ASEAN. - 2003: Bali Concord II set the goal for an ASEAN Community. - 2007: Cebu Declaration aimed for the establishment of the ASEAN Community by 2015. - 2008: ASEAN Charter became a legally binding agreement. - 2015: Launch of the ASEAN Community comprising the ASEAN Political-Security Community, ASEAN Economic Community, and ASEAN Socio-Cultural Community.
Objectives of ASEAN	<ul style="list-style-type: none"> - Economic Growth and Development: Accelerate economic growth, social progress, and cultural development in Southeast Asia. - Regional Peace and Stability: Promote peace and stability through respect for justice, rule

of law, and adherence to UN Charter principles.

- Collaboration and Assistance: Facilitate active collaboration and mutual assistance in economic, social, cultural, technical, scientific, and administrative fields.
- Utilization and Expansion: Enhance agriculture, industry, trade, transportation, communication, and living standards.
- Southeast Asian Studies: Promote studies related to Southeast Asia.
- International Cooperation: Maintain cooperation with international and regional organizations.

Military Exercises, Defence & Security

DRDO takes up study on development of indigenous conventional submarine

Context: As the procurement of new submarines under P-75I goes on, the Defence Research and Development Organisation (DRDO) has taken up a preliminary study on the design and development of an indigenous conventional submarine under Project-76.

Key Highlights

- DRDO got a go ahead from Defence Ministry to carry out a preliminary study to determine the project contours.
- This will be a continuation of the advanced technology vessel (ATV) project, to build a conventional submarine, under which the Arihant series of nuclear ballistic missile submarines (SSBN) are being built and another project for building nuclear-powered submarines (SSN)
- Under P-76, there will be substantial indigenous content, including weapons, missiles, combat management system, sonars, communications, electronic warfare suite, mast and periscope, sources said.
- The Navy has a 30-year submarine building programme, and after the P-75I, it intends to design and build conventional submarines indigenously, senior officials had stated on several occasions.
- An air independent propulsion (AIP) module designed and developed by the DRDO is now awaiting fitment on the Scorpene-class submarines. The first Scorpene-class submarine Kalvari is expected to go for refit in 2025 when the fitment process will begin and is expected to take two to three years
- An AIP module acts as a force multiplier as it enables conventional submarines to remain submerged for a longer duration thereby increasing their endurance and reducing chances of detection.

India's Submarine Capabilities

Category	Description	Indian Examples
Advanced Technology Vessel (ATV)	A project aimed at developing India's indigenous nuclear-powered submarine capabilities, including the design and construction of submarines.	INS Arihant (lead vessel of India's ATV program)

Ballistic Missile Submarines (SSBN)	Submarines designed to carry and launch ballistic missiles, serving as a key component of a nation's nuclear deterrent strategy.	INS Arihant, INS Arighat (part of India's SSBN fleet)
Nuclear-Powered Submarines (SSN)	Submarines powered by nuclear reactors, providing them with extended underwater endurance and higher speeds, typically used for offensive operations.	INS Chakra (leased from Russia), SSN projects under development by India

General Dwivedi Assumes Charge as The 30th Chief Of The Army

Context: General Upendra Dwivedi took over as the 30th Chief of the Army Staff (COAS) from General Manoj Pande, who superannuated after more than four decades of service.

Key Highlights

- The change in the post also initiated a series of changes among other senior appointments, including the Vice-Chief of the Army Staff and several Army Commanders.
- Born on July 1, 1964, General Dwivedi was commissioned into the Infantry (Jammu & Kashmir Rifles) of the Indian Army on December 15, 1984. Like the Navy chief, Admiral Dinesh K. Tripathi, he is an alumnus of the Sainik School, Rewa, in Madhya Pradesh.
- General Pande was to retire on May 31, but was given a one-month extension in service amid the delay in the announcement of a new chief. This generated speculation in the military fraternity of a possible deviation from the seniority principle in the appointment of service chiefs.

About the Chief of the Army Staff (COAS)

- The Chief of the Army Staff (COAS) is the professional head of the Indian Army (IA), which is the land forces branch of the Indian Armed Forces.
- Traditionally held by a four-star general officer, the COAS is the highest-ranking operational officer in the Indian Army.
- Responsibilities include overseeing the Army's operations during both peace and wartime, ensuring the force's operational readiness, and defending the nation's territorial integrity and sovereignty.
- The COAS is a permanent member of the Chiefs of Staff Committee (COSC) and the National Security Council (NSC), and advises the Government of India on matters related to the Indian Army.
- In the Indian order of precedence, the COAS ranks 12th overall and holds a status equivalent to the Chief of Defence Staff, the Chief of the Naval Staff, and the Chief of the Air Staff—all of whom are also four-star officers.

List of Chief of Army Staff

S.No.	Name	Rank	Tenure	Unit of Commission
1	General Sir Robert Lockhart	Commander-in-Chief	1947 – 1947	51 Sikhs Frontier Force
2	General Francis Robert Roy Bucher	Commander-in-Chief	1948 – 1949	Scottish Rifles
3	Field Marshal Kodandera Madappa Cariappa	Commander-in-Chief	1949 – 1953	Rajput Rifles
4	General Maharaj Rajendrasinhji Jadeja	Commander-in-Chief	1953 – 1955	2nd Lancers (Gardner's Horse)

5	General Maharaj Rajendrasinhji Jadeja	Chief of Army Staff	1955 – 1955	2nd Lancers (Gardner's Horse)
6	General Satyawant Mallana Sringsesh	Chief of Army Staff	1955 – 1957	19th Hyderabad Regiment
7	General Kodandera Subayya Thimayya	Chief of Army Staff	1957 – 1961	19th Hyderabad Regiment
8	General Pran Nath Thapar	Chief of Army Staff	1961 – 1962	1st Punjab Regiment
9	General Jayanto Nath Chaudhuri	Chief of Army Staff	1962 – 1966	7th Light Cavalry
10	General Paramasiva Prabhakar Kumaramangalam	Chief of Army Staff	1966 – 1969	Regiment of Artillery
11	Field Marshal Sam Hormusji Framji Jamshedji Manekshaw	Chief of Army Staff	1969 – 1973	12th Frontier Force Regiment
12	General Gopal Gurunath Bewoor	Chief of Army Staff	1973 – 1975	Dogra Regiment
13	General Tapishwar Narain Raina	Chief of Army Staff	1975 – 1978	Kumaon Regiment
14	General Om Prakash Malhotra	Chief of Army Staff	1978 – 1981	Regiment of Artillery
15	General Kotikalapudi Venkata Krishna Rao	Chief of Army Staff	1981 – 1983	Mahar Regiment
16	General Arun Kumar Shridhar Vaidya	Chief of Army Staff	1983 – 1986	9th Deccan Horse
17	General Krishnaswamy Sundarji	Chief of Army Staff	1986 – 1988	Mahar Regiment
18	General Ashwa Nath Sharma	Chief of Army Staff	1988 – 1990	16th Light Cavalry
19	General Sunith Francis Rodrigues	Chief of Army Staff	1990 – 1993	Regiment of Artillery
20	General Bipin Chandra Joshi	Chief of Army Staff	1993 – 1994	64th Cavalry
21	General Shankar Roy Chowdhary	Chief of Army Staff	1994 – 1997	20th Lancers
22	General Ved Prakash Malik	Chief of Army Staff	1997 – 2000	Sikh Light Infantry
23	General Sundarajan Padmanabhan	Chief of Army Staff	2000 – 2002	Regiment of Artillery
24	General Nirmal Chander Vij	Chief of Army Staff	2003 – 2005	Dogra Regiment
25	General Joginder Jaswant Singh	Chief of Army Staff	2005 – 2007	Maratha Light Infantry
26	General Deepak Kapoor	Chief of Army Staff	2007 – 2010	Regiment of Artillery

27	General Vijay Kumar Singh	Chief of Army Staff	2010 – 2012	Rajput Regiment
28	General Bikram Singh	Chief of Army Staff	2012 – 2014	Sikh Light Infantry
29	General Dalbir Singh Suhag	Chief of Army Staff	2014 – 2016	5 Gorkha Rifles
30	General Bipin Rawat	Chief of Army Staff	2016 – 2019	11 Gorkha Rifles
31	General Manoj Mukund Naravane	Chief of Army Staff	2019 – 2022	7 Sikh Light Infantry
32	General Manoj Pande	Chief of Army Staff	2022 – 2024	Corps of Engineers

Staff Field Evaluation Trials Of Submarine Bids Under Project-75I

Context: The Navy's mega-submarine deal under Project-75I, estimated at over ₹43,000 crore, has crossed a major milestone in the process with the field evaluation trials (FET) — to check the compliance of the bids received — now complete.

Key Highlights

- The evaluation report will now be compiled and presented to the Defence Ministry, which will declare the technical complaint bids which is expected to take about two months, a defence official explained.
- Diplomatic sources said that Navantia would be demonstrating the Air Independent Propulsion (AIP) system fitted in a submarine operating on the surface and not submerged and that the submerged performance would be demonstrated in due course.
- The design offered by TKMS, which has partnered with Mazagon Dock Shipbuilders Limited (MDL), is based on its highly successful Class 214 submarine as well as Class 212CD. Navantia, which has tied up with Larsen & Toubro, has offered a vessel based on its new S80 class of submarines, the first of which was launched in 2021 and was commissioned into the Spanish Navy as S-81 'Isaac Peral' in November 2023.
- The Request For Proposal (RFP) issued by the Navy, detailing the specifications required, states that the first submarine should have indigenous content (IC) of 45% which should go up to 60% for the sixth and last submarine.
- The key determinant, however, to qualify for P-75I is the AIP system which enhances the endurance of a submarine. Only Germany and Spain submitted bids for the deal. The deal is being progressed under the Strategic Partnership model of the defence acquisition procedure and L&T and MDL are the two Indian shipyards shortlisted to partner with foreign submarine manufacturers to produce six advanced conventional submarines in India under technology transfer.

Project-75 (I) Overview

- Project-75 (I) involves the indigenous construction of six Kalvari Class Diesel-Electric Attack submarines.
- These submarines are equipped with cutting-edge equipment, weapons, sensors, modern missiles, and state-of-the-art countermeasure systems.
- A key advancement over Project-75 is the inclusion of a fuel-cell-based Air Independent Propulsion (AIP) system, enhancing the submarines' stealth capabilities and extending their underwater endurance.

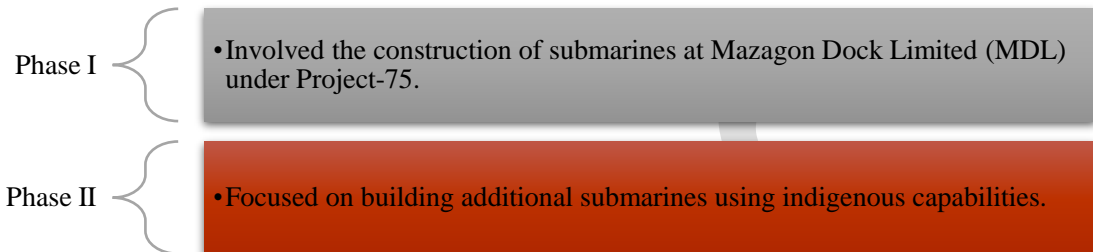
Significance

- The project boosts the construction capability of indigenous submarines in India.

- It aligns with the Atmanirbhar Bharat initiative by incorporating the latest submarine designs and technologies.
- The "75" in Project-75 refers to a unique identifier for the Scorpene class submarines.

Background of Project-75

Project-75, the precursor to Project-75 (I), was initiated in 1997 with the goal of building indigenous SSK (diesel-electric) submarines.



Progress and Challenges

- In 1999, the Ministry of Defence approved a plan to construct 24 submarines over 30 years.
- Financial constraints limited the project to six Kalvari Class submarines: INS Kalvari, INS Khanderi, INS Karanj, INS Vela, INS Vagir, and INS Vagsheer, expected to be operational by the mid-2030s.
- The Indian Navy adopted the Scorpene submarine design in April 2001, with technology transfer from French naval firm Armaris.
- Construction began between December 2006 and July 2009, but delays occurred due to challenges in technology adoption, infrastructure improvements, and material procurement.

Features of Project-75 (I)



- **Stealth Features:** Submarines under Project-75 (I) are equipped with advanced acoustic absorption techniques, low radiated noise levels, long-range guided torpedoes, tube-launched anti-ship missiles, sonars, and sensor suites.
- **AIP Technology:** While traditional diesel-electric submarines require atmospheric oxygen to recharge their batteries, the AIP technology allows submarines to stay submerged for up to two weeks without surfacing.
- **Indigenisation:** The first submarine must have at least 45% indigenous content, increasing to 60% by the sixth submarine.
- **MSME Development:** The project supports the growth of the core submarine-building industry and enhances the manufacturing sector, particularly for MSMEs involved in producing submarine-related spares, systems, and equipment.
- Submarines under Project-75 (I) may be larger than those under Project-75, accommodating the advanced technologies and systems.

Air Independent Propulsion (AIP) System



- **Functionality:** The AIP system enhances the underwater endurance of submarines, enabling them to remain submerged for longer periods without compromising security.
- **Components:** The system operates with two key components: a fuel and an oxidant, which generate electricity through either a heat engine (e.g., closed cycle diesel, Stirling engine, closed cycle gas turbine) or an electrochemical cell (e.g., lead acid batteries, fuel cells).
- **Working Principle:** Traditional diesel-electric submarines are vulnerable to detection while snorkelling. Nuclear power offers a solution but is expensive.
- AIP technology provides a **cost-effective alternative** for long underwater endurance using fuel cells recharged by the diesel engine.
- DRDO's Naval Materials Research Laboratory (NMRL) has developed a Fuel Cell-powered AIP system, which will be fitted onboard INS Kalvari.
- DRDO and Naval Group (France) have agreed to safely integrate this **indigenous system** into Kalvari-class submarines.

Issues Associated with Project-75 (I)



- The original Project-75 proposal was expected to be completed by 2017, but the lead submarine, INS Kalvari, was only commissioned in 2017.
- Currently, five submarines have been commissioned, with the final one, INS Vaghsheer, expected by 2024.
- The P-75(I) program, budgeted at ₹43,000 crore and equipped with state-of-the-art sensors and weapons, is lagging and stuck in the tendering stage.
- The indigenous AIP system developed by DRDO was not trialed on a submarine before its inclusion in Project-75(I), potentially complicating integration if criteria are not met.
- The Indian Navy faces a shortage of submarines and relies on outdated technology. It operates only 16 functional submarines, many over 30 years old, and lacks nuclear-powered attack submarines (SSNs).
- Early collaborators, including Sweden and France, have exited the P-75(I) program, while Russia has raised concerns about the technical demands, creating uncertainty about the project's future.

Advanced Medium Combat Aircraft (AMCA) Indo-Russian venture delivered 35,000 assault rifles to MoD

Context: As the project for the design and development of the indigenous fifth generation fighter aircraft (FGFA), Advanced Medium Combat Aircraft (AMCA), makes progress, the Defence Ministry is working out a model for bringing in the private sector in a big way, which is important for timely execution of the project, according to official sources.

Key Highlights

- The first prototype is expected to be ready by 2028-29.
- The Defence Ministry has already issued an Expression of Interest (EoI) to the industry and three responses were received. The target is to have the AMCA ready for induction by 2034
- The AMCA project is particularly critical as it is India's only FGFA that is planned for induction at a time when a series of such FGFA development projects are making progress worldwide. China, which has made great

progress in the development and deployment of FGFAs, has recently deployed its twin-engine J-20 FGFA in Tibet bordering India.

- The AMCA project got sanction from the Cabinet Committee on Security (CCS) in March. It is envisaged as a 25-tonne twin-engine stealth aircraft with internal weapons bay and diverterless supersonic intake which has been developed in India for the first time.
- It is intended to have an internal carriage of 1,500 kg of payload and 5,500 kg of external payload with 6,500 kg of internal fuel. Hindustan Aeronautics Limited (HAL), which is the production agency for the project, has already initiated manufacturing activities.

Features of the AMCA

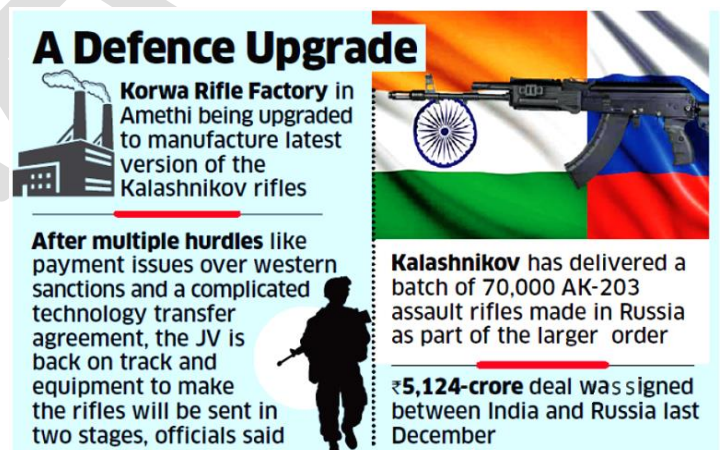
Aspect	Description
Design and Specifications	<ul style="list-style-type: none"> • The AMCA is a 25-tonne twin-engine stealth aircraft. • It features an internal weapons bay to reduce radar cross-section. • It includes a diverterless supersonic intake (DSI), developed indigenously, to improve stealth and aerodynamic performance. • It has a payload capacity of 1,500 kg internally and 5,500 kg externally, with an internal fuel capacity of 6,500 kg.
Stealth and Performance	<ul style="list-style-type: none"> • The aircraft's stealth capabilities are designed to minimize detection by enemy radar. • The twin-engine setup aims to deliver enhanced speed, agility, and overall combat performance.

Indo-Russian venture delivered 35,000 assault rifles to MoD

Context: Indo-Russian Rifles Private Limited (IRRPL), a joint venture between the two countries, has produced and transferred 35,000 Kalashnikov AK-203 assault rifles to the Indian Ministry of Defence.

Key Highlights

- The IRRPL joint venture, co-founded by Roboronexport on the Russian side, has completed the first phase of the project to produce AK-203 Kalashnikov assault rifles in India. To increase the degree of localization, all necessary equipment has been shipped to the Korwa Ordnance Factory in Amethi, Uttar Pradesh state, and production facilities are now fully equipped.
- Under an over ₹5,000 crore contract signed in July 2021, over 6.1 lakh AK-203 assault rifles are to be manufactured in India with technology transfer from Russia, by a joint venture Indo-Russian Rifles Private Limited (IRRPL).
- As per contractual terms, the first 70,000 rifles will be produced in India with a phased increase in the extent of localisation from 5% to 70%. The remaining rifles will be produced with 100% localisation.



A Defence Upgrade

Korwa Rifle Factory in Amethi being upgraded to manufacture latest version of the Kalashnikov rifles

After multiple hurdles like payment issues over western sanctions and a complicated technology transfer agreement, the JV is back on track and equipment to make the rifles will be sent in two stages, officials said

Kalashnikov has delivered a batch of 70,000 AK-203 assault rifles made in Russia as part of the larger order

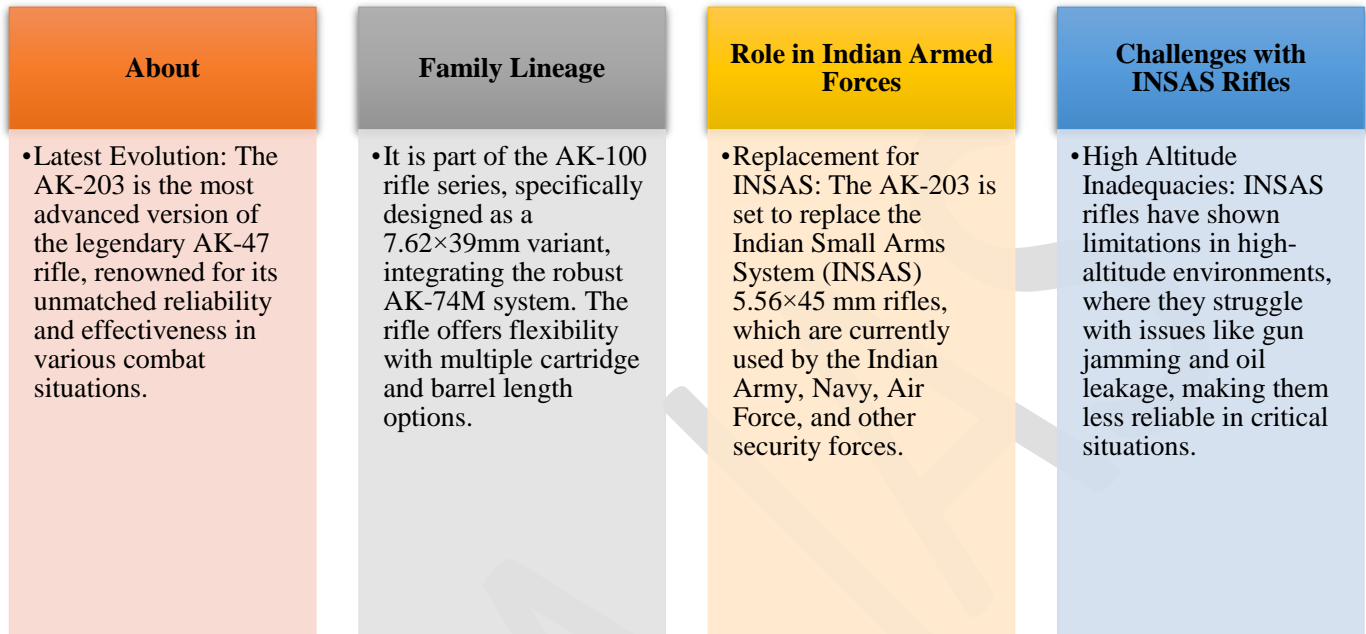
₹5,124-crore deal was signed between India and Russia last December

How Have Indo-Russia Defence and Security Relations Evolved?

- The defence and security relationship between India and Russia has progressed from a traditional buyer-seller dynamic to a more collaborative model involving joint research, development, and production of cutting-edge defence technologies and systems.

- Regular joint military exercises, such as the Tri-Services exercise ‘INDRA,’ underscore the deepening cooperation between the two nations.

About AK 203 Rifles



Military Hardware Acquisitions from Russia



- **S-400 Triumf:** An advanced air defence system providing strategic deterrence.
- **Kamov Ka-226 200:** Utility helicopters that will be manufactured in India, enhancing the country's self-reliance in defence production.
- **T-90S Bhishma:** Main battle tanks forming the backbone of India's armoured forces.
- **INS Vikramaditya:** A Russian-origin aircraft carrier that serves as the flagship of the Indian Navy.

Joint Programme between India and Russia

Key Joint Programmes	Description
BrahMos Cruise Missile Programme	A highly successful joint venture that has developed one of the world's fastest supersonic cruise missiles, enhancing India's strategic strike capabilities.
5th Generation Fighter Jet Programme	A collaborative initiative aimed at developing cutting-edge fighter aircraft to bolster air combat capabilities.
Sukhoi Su-30MKI Programme	A vital programme for maintaining air superiority, with significant Russian assistance in the production of these advanced multi-role fighter jets.
Ilyushin/HAL Tactical Transport Aircraft	A project focused on creating versatile transport aircraft, enhancing the logistical and operational capabilities of the Indian armed forces.
KA-226T Twin-Engine Utility Helicopters	A programme to produce advanced utility helicopters in India, aligning with the Make in India initiative to boost domestic aerospace manufacturing.

Role of Russia in Indian Naval Capabilities

- Russia has been instrumental in bolstering India's naval strength, particularly through its submarine programmes.
- India's first submarine, the 'Foxtrot Class,' was acquired from Russia, marking the beginning of a long-standing naval partnership.
- The Indian Navy's nuclear submarine programme heavily relies on Russian expertise and technology.
- INS Vikramaditya, India's only aircraft carrier, also originates from Russia, reflecting the depth of naval cooperation between the two nations.

Zorawar

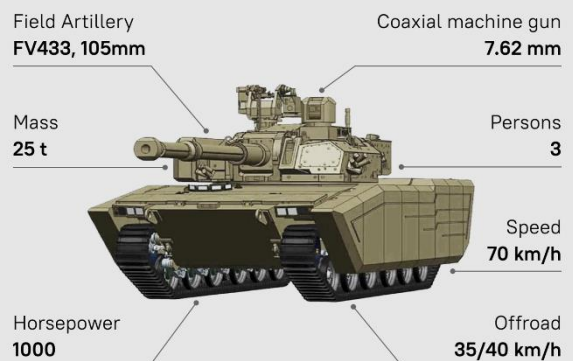
Context: DRDO unveils country's indigenous light tank Zorawar

Key Highlights

- The tank was jointly developed by the Defence Research and Development Organisation (DRDO) along with Larsen & Toubro as the lead integrator. The tank is currently powered by a Cummins engine, and the DRDO has taken up a project to develop a new engine domestically
- The first prototype is ready after factory acceptance. Shortly, it will be subjected to internal trials in the field area and thereafter handed over to the users for trials, the source stated.
- As part of developmental trials, over the next six months, the tank will be tested in various conditions including summer, winter and high altitude
- The tank is planned to be handed over to the Army for user trials by August 2025.
- The DRDO has taken up a project to develop a power pack for the light tank as a new 1,400-HP engine is also under development for the Arjun Mk1A main battle tank, sources added.
- In April 2021, the Army had issued a Request For Information for the procurement of 350 light tanks weighing less than 25 tonnes in a phased manner, along with performance-based logistics, niche technologies, engineering support package, and other maintenance and training requirements.
- Following this, the DRDO and the L&T teamed up to develop a light tank indigenously along with many Micro, Small and Medium Enterprises who have been roped in for various sub-system development to encourage indigenous development of Defence weapon platform through industry.

Indigenous Zorawar Light Tank: Why is It Called 'Brave and Strong'?

Developed by L&T in collaboration with DRDO



Source: DRDO

SPUTNIK

San Fernando becomes first mothership to dock at Vizhinjam seaport

Context: Scripting a new chapter in the maritime history of the country, the first mothership carrying cargo from the Xiamen port in China called at the Vizhinjam international seaport, India's first deep-water container transshipment port.

About Vizhinjam International Port

- Location: The port is located in Vizhinjam, a coastal town in the Thiruvananthapuram District of Kerala.

- Developed by: It was developed under a landlord model with a Public Private Partnership component on a Design, Build, Finance, Operate, and Transfer (DBFOT) basis.
- It was primarily designed to cater to container transshipment, the port also handles multi-purpose and break-bulk cargo.
- It will also be a global bunkering hub, supplying clean, green fuels like hydrogen and ammonia.
- After completion, the port will be one of the world's greenest ports in the world.



Strategic Advantage

- The port is a mere 10 nautical miles (NM) diversion from the international east-west shipping route connecting Europe, the Persian Gulf, and the Far East.
- It is also close to the national and regional road and rail network.
- The port will feature approximately 30 berths, most of which will be capable of handling Mother Vessels.

Significance of the port

- The port is the only transshipment hub in the Indian subcontinent, strategically located close to international shipping routes and centrally on the Indian coastline. Around 95% of India's foreign trade is conducted via the sea route, accounting for 70% of the trade in value terms.
- Nearly 30% of freight movement occurs through the international shipping route south of the Indian peninsula, passing just 10 NM off Vizhinjam.

Indian ship crew win 'exceptional bravery' awards for Red Sea rescue

Context: Captain Avhilash Rawat and his crew of an oil tanker have been named among the winners of the International Maritime Organisation (IMO) 2024 Award for Exceptional Bravery at Sea for their "extraordinary courage" shown in a Red Sea rescue mission.

Key Points

- Captain Rawat and his crew were declared winners by the IMO for the "determination and endurance" demonstrated while coordinating firefighting and damage control efforts to combat a fire that broke out after an anti-ship missile reportedly fired by Iranian-backed Houthi rebels struck their vessel 'Marlin Luanda' earlier this year.
- Captain Brijesh Nambiar and the crew of the Indian Navy ship INS Visakhapatnam have been conferred a Letter of Commendation for their support to the oil tanker when in distress.



International Maritime Organization (IMO)

The IMO is a specialized agency of the United Nations responsible for regulating international shipping and preventing marine pollution from ships. Its primary focus is to ensure that shipping remains safe, secure, and environmentally sound.

Establishment and Membership

- The IMO was established in 1948 following a United Nations conference held in Geneva. However, it officially came into existence in 1958.
- The organization has 175 Member States and three Associate Members. India became a member of the IMO in 1959.

Core Functions

- The IMO's main role is to develop and maintain a comprehensive regulatory framework for the shipping industry.
- This framework aims to be fair, effective, and universally adopted by all member states.
- The regulations cover various aspects of shipping, including safety, environmental concerns, legal matters, technical cooperation, maritime security, and efficiency in navigation.

World Maritime Day

To highlight the significance of shipping and maritime activities, the IMO celebrates World Maritime Day on the last Thursday of September each year. This day is dedicated to raising awareness about the importance of shipping in the global economy and the role of the IMO in promoting safe and sustainable maritime practices.

Environment

New Plant and Fauna species

Context: India identified 641 fauna species, 339 taxa of plants in 2023.

Key Highlights

- A total of 641 species — 442 entirely new to science and 199 newly recorded in the country — were added to Indian fauna in 2023. India added 339 taxa — 326 species and 13 infraspecific taxa — to its plant database.
- Of these, 171 taxa are new to science and 168 new to distributional records from India. Taxa can refer to sub-species or varieties of a plant species.
- Among the new plant discoveries were *Curcuma kakchingense*, a new species of turmeric discovered at Kakching in Manipur, and *Asystasia venui*, a flowering plant discovered in the Acharya Jagdish Chandra Bose Indian Botanic Garden at Howrah in West Bengal.
- Most of the new animal discoveries were reported from southern India.
- Kerala topped the list, with 101 additions — 74 completely new species, 27 new records — followed by West Bengal with 72 new species, and Tamil Nadu with 64.
- Significant animal discoveries include *Capra himalayensis*, which proves that the Himalayan Ibex, distributed in the trans-Himalayan ranges of Jammu and Kashmir, Ladakh and Himachal Pradesh, is a distinct species from the Siberian Ibex. *Miniopterus srinii*, a new species of bent-winged bat, was found in Kodagu district of Karnataka.

Zoological Survey of India (ZSI)

Established in 1916, the Zoological Survey of India (ZSI) operates under the Ministry of Environment and Forests.

As a national center for faunistic surveys and exploration, ZSI advances knowledge on India's exceptionally rich faunal diversity.

Headquarters: Kolkata, with 16 regional stations across various geographic locations in the country.

- West Bengal recorded the highest number of new plant discoveries, with 52 new taxa, followed by Kerala and Uttarakhand.
- The environment minister also rolled out the 'Fauna of India Checklist Portal', a first of its kind. It comprises 121 checklists of all known taxa, covering 36 phyla, and providing information on all the 1,04,561 animal species distributed across India. Endemic, threatened, and scheduled species have also been included in the list.

Fauna of India Checklist Portal

- The portal features records of over 100,000 animal species, compiled by 150+ scientists from the Zoological Survey of India (ZSI) over two years.
- This is the first comprehensive document on India's faunal species, encompassing 121 checklists of all known taxa across 36 phyla, including endemic, threatened, and scheduled species.
- It is a compilation of all animal species documented in India since the 1750s, serving as a crucial resource for conservation and management efforts.
- The checklist is fundamental to all biological sciences, providing essential data for biodiversity conservation.

Significance of the Portal

- India is the first country to prepare a complete checklist of its fauna, covering 104,561 species, positioning itself as a global leader in biodiversity conservation.
- This comprehensive documentation supports Mission LiFE by providing vital data for the preservation of biodiversity.

List of the states and number of species

Category	Region	Number of Species
Total Mammalian Species in India		455
Highest Mammalian Diversity	Meghalaya	163
	West Bengal	161
	Arunachal Pradesh	142
	Tamil Nadu	139
	Assam	138
	Sikkim	137
	Kerala	134
Union Territories with High Mammalian Diversity	Andaman & Nicobar Islands	68
	Ladakh	59
	Delhi	38
High Endemism	Tamil Nadu	23
	Karnataka	19
	Kerala	19
High Endemism Regions	Western Ghats hill streams of Tamil Nadu, Kerala, Karnataka, and Andaman & Nicobar Islands	
Monotypic Genera	Anathana (Madras Treeshrew)	Found only in India
	Latidens (Salim Ali's fruit bat)	Found only in India
	Nilgiritragus	Found only in India
Rare Megabat Species	Latidens salimalii (Salim Ali's fruit bat)	Monotypic genus Latidens

Air pollution

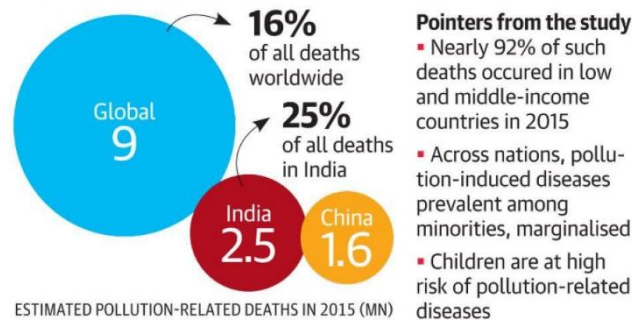
Context: Air pollution spikes may raise death rates in cities with cleaner air, says study.

Key Highlights

- A spike in air pollution in Indian cities that have cleaner air may raise death rates higher than in cities that have higher pollution loads. Thus, the same increase in air pollution in, say, Bengaluru, can raise death rates more than in Delhi, which has much higher background levels of air pollution.
- Overall, however, cities that had high pollution loads saw a greater fraction of annual deaths attributable to air pollution, with 11.5% of Delhi's annual deaths attributable to air pollution, and 4.8% in Bengaluru.
- The latter's population had 30% the exposure to daily air pollution that an average Delhi resident is subjected to, says a first-of-its-kind multi-city analysis in India that studied the health effects of short-term exposure to air pollution, published in the peer-reviewed Lancet Planet Health on Thursday. The scientists analysed pollution and death registry data from Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, Shimla, and Varanasi.
- Nearly 30,000 deaths, or 7.2% of the annual deaths in the 10 cities, were due to short-term PM 2.5. The total daily deaths in these cities rose by 1.42% for every 10 microgram per cubic metre increase in the average PM 2.5 exposure over a two-day period, the study found.

Every breath we take

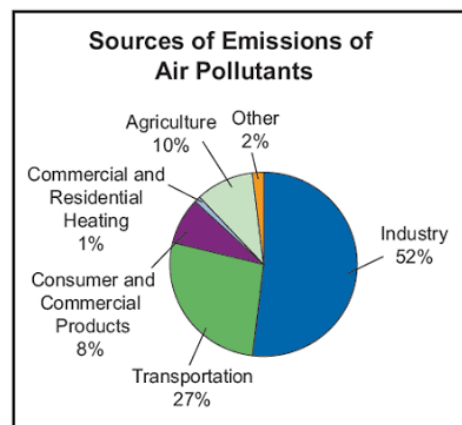
Pollution is the biggest environmental cause of premature death according to a Lancet study. In absolute numbers, India surpassed all countries in such deaths in 2015



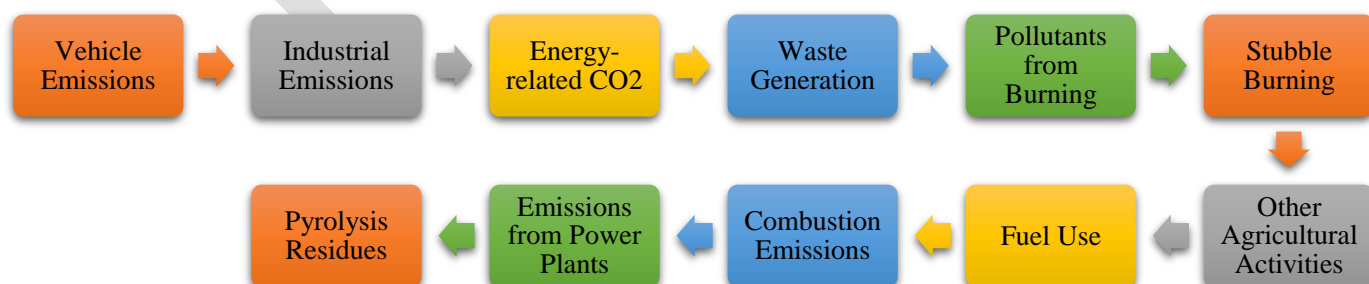
SOURCE: THE LANCET COMMISSION ON POLLUTION AND HEALTH

Air Pollution

- Air pollution involves the presence of harmful substances in the atmosphere, which can include solids, liquids, gases, noise, and radioactive materials. These pollutants can originate from natural sources or human activities and can adversely affect human health, living organisms, property, and environmental processes.
- Air pollution consists of pollutants that are either naturally occurring or man-made. They can come from a variety of sources such as industrial processes, vehicle emissions, agricultural practices, and natural events like wildfires and volcanic eruptions.



Major Factors Driving Air Pollution



- **Vehicle Emissions:** Vehicles are a significant source of air pollution, primarily releasing carbon monoxide (CO), nitrogen oxides (NOx), and non-methane volatile organic compounds (NMVOCs). These account for more than 80% of vehicle-related emissions.
- **Industrial Emissions:** Industries such as iron and steel, sugar, paper, cement, fertilizer, copper, and aluminum contribute to air pollution by emitting suspended particulate matter (SPM), sulfur oxides (SOx), nitrogen oxides (NOx), and carbon dioxide (CO₂).
- **Energy-related CO₂:** Road transport is responsible for approximately 12% of India's energy-related CO₂ emissions, making it a major contributor to urban air pollution.
- **Waste Generation:** India generates over 62 million tons of waste annually, a substantial amount of which is burned either openly or at informal dump sites.
- **Pollutants from Burning:** Open burning of waste releases pollutants such as particulate matter (PM), dioxins, and furans.
- **Stubble Burning:** The practice of burning straw stubble after harvesting crops like paddy and wheat, particularly in states such as Punjab, Haryana, and Uttar Pradesh, significantly contributes to air pollution, especially during winter in the National Capital Region (NCR).
 - **Legal Measures:** In 2023, the Supreme Court suggested excluding farmers who engage in stubble burning from receiving the minimum support price (MSP) to deter this practice.
- **Other Agricultural Activities:** Activities like tilling, fertilizer and pesticide application, and improper livestock management release ammonia, methane, and particulate matter into the air.
- **Fuel Use:** About 62-65% of rural households in India use solid fuels such as biomass, coal, and kerosene for cooking and heating.
- **Combustion Emissions:** Incomplete combustion of these fuels produces harmful pollutants including particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOCs).
- **Emissions from Power Plants:** Coal-based thermal power plants that lack pollution control technology contribute over half of the sulfur dioxide (SO₂) emissions, 30% of nitrogen oxides (NOx), and about 20% of particulate matter (PM) in India.
- **Pyrolysis Residues:** Pyrolysis, a process used to break down synthetic materials, produces fine carbon matter and residues like pyro gas and oil, which contribute to air pollution.
 - **Regulations:** In 2014, the National Green Tribunal banned the burning of used tyres in the open or using them as fuel in brick kilns to reduce pollution.

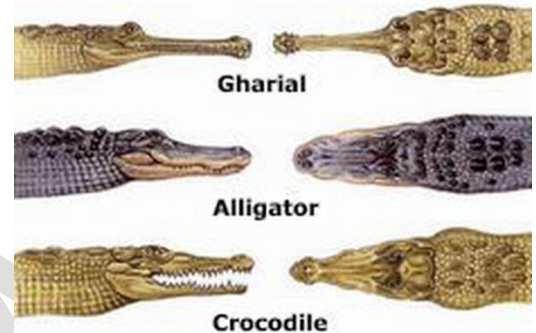


Brahmaputra's female gharial

Context: A lone female gharial has temporarily overshadowed the one-horned rhino in the Kaziranga National Park and Tiger Reserve in eastern Assam.

Key Highlights

- Wildlife officials and specialists are not sure how this gharial came to inhabit a stretch of the Brahmaputra within the national park. But they are certain that the reptile, presumed to be an adult by its size, is the key to repopulating the river with gharials.
- Distinguished from other crocodylians by its elongated snout, the gharial (*Gavialis gangeticus*) was believed to have been wiped out from the Brahmaputra river system during the 1950s, though there were claims of sightings in the 1990s. The female gharial was first spotted in 2021 within the Biswanath Wildlife Division of the 1,307.49-sq. km Kaziranga.
- The gharial, now 2.55 metres in length, was recorded twice, 500 metres apart, in one of the three priority habits chosen during a 10-day survey of aquatic reptiles along the Brahmaputra in January.
- Teams of the Turtle Survival Alliance Foundation India (TSAFI), an NGO specialising in reptiles, and the Assam Forest Department surveyed the Brahmaputra on a 160-km stretch from the Kaliabhomora bridge in the west to the Kamalabari Ghat in Majuli beyond the eastern edge of the Biswanath division.
- The female gharial was found to be the only one of its kind moving between a “sandy shoreline” and a “sandbar with a shoreline water depth of 4.5 metres.



About Garihals

Category	Details
General Information	Gharials, sometimes called gavials, are Asian crocodylians with long, thin snouts. They are part of the crocodylian group, which also includes crocodiles, alligators, and caimans.
Crocodylian Species in India	
Gharial	<ul style="list-style-type: none"> Scientific Name: <i>Gavialis gangeticus</i> IUCN Red List Status: Critically Endangered CITES: Appendix I Wild Life (Protection) Act, 1972: Schedule I
Mugger Crocodile	<ul style="list-style-type: none"> Scientific Name: <i>Crocodylus palustris</i> IUCN Red List Status: Vulnerable CITES: Appendix I Wild Life (Protection) Act, 1972: Schedule I
Saltwater Crocodile	<ul style="list-style-type: none"> Scientific Name: <i>Crocodylus porosus</i> IUCN Red List Status: Least Concern

	<ul style="list-style-type: none"> • CITES: Appendix I (Note: Populations in Australia, Indonesia, and Papua New Guinea are listed in Appendix II) • Wild Life (Protection) Act, 1972: Schedule I
Natural Habitat	Freshwater regions in northern India
Primary Habitat	Chambal River (a tributary of the Yamuna)
Secondary Habitats	Ghagra River, Gandak River, Girwa River (Uttar Pradesh), Ramganga River (Uttarakhand), Sone River (Bihar)
Significance	Gharials are indicators of clean river water
Breeding Centres	Kukrail Gharial Rehabilitation Centre (Lucknow, Uttar Pradesh) National Chambal Sanctuary (Gharial Eco Park, Madhya Pradesh)
Environmental Threats	Increased river pollution Dam construction Large-scale fishing operations Floods
Human-induced Threats	Illegal sand mining Poaching

Kerala village compiles in-depth biodiversity register

Context: The Indian black turtle (Indian pond terrapin) was once a common species in Thazhakara grama panchayat in Kerala's Alappuzha district. However, its numbers have dwindled due to "poaching for meat." Similarly, the populations of Indian garden lizards, barn owls, Indian flying foxes, and plants such as henna and palash have also decreased.

Key Highlights

- The findings published in Nature Communications Earth & Environment, record how photographs taken as part of the 'Air of the Anthropocene' initiative stimulated discussion around the impact of air pollution.
- Air pollution is the leading global environmental risk factor. By painting with light to create impactful images, we provide people with an easy-to-understand way of comparing air pollution in different contexts — making something that was largely invisible visible
- Air of the Anthropocene creates spaces and places for discussions about air pollution, using art as a proxy to communicate and create dialogues about the issues associated with air pollution.

Air of the Anthropocene Initiative

- The "Air of the Anthropocene" is an international project that blends art and science to create visual representations of air pollution.
- Through the use of digital light painting techniques, artists and scientists work together to capture and illustrate the presence of air pollutants.
- This initiative employs low-cost air pollution sensors to produce photographic evidence, making the invisible impact of air pollution visible and engaging to a wider audience.

What is Particulate Matter?

- Particulate Matter (PM) refers to a diverse collection of tiny solid particles and liquid droplets that are found suspended in the air.
- It encompasses a wide range of particles, both organic and inorganic, including dust, pollen, soot, smoke, and liquid droplets.
- These particles vary significantly in size, composition, and sources, with some being directly emitted from natural processes or human activities, while others form in the atmosphere through chemical reactions.

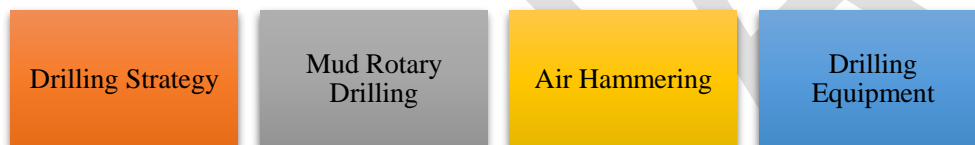
Why is India drilling a 6-km deep hole in Maharashtra?

Context: The Borehole Geophysics Research Laboratory (BGRL) in Karad, Maharashtra, is a specialised institute mandated to execute India's scientific deep-drilling programme. Under BGRL, the aim is to drill the earth's crust and conduct scientific observations to help expand our understanding of reservoir-triggered earthquakes in the Koyna-Warna region.

Scientific Deep-Drilling Technique

- Scientific deep-drilling involves the process of drilling boreholes deep into the Earth's crust to investigate its deeper layers. This method is crucial for exploring the composition and behavior of the Earth's interior.
- Earthquake Study: By accessing the Earth's interior directly, deep drilling provides valuable data for studying and predicting earthquakes, particularly those that occur within tectonic plates.
- Comprehensive Geological Analysis: The technique offers insights into various aspects of the Earth's history, such as rock formations, energy resources, ancient life forms, and climate change patterns, enhancing our understanding of these elements.

Techniques and Methods in Deep Drilling



- **Drilling Strategy:** A hybrid approach combining mud rotary drilling and air hammering is employed to optimize the drilling process.
- **Mud Rotary Drilling:** This method utilizes a rotating rod equipped with a diamond drill bit. The bit is cooled by drilling mud, which also facilitates the removal of rock cuttings by bringing them to the surface.
- **Air Hammering:** This technique uses compressed air to penetrate deeper into the borehole while simultaneously removing debris.
- **Drilling Equipment:** The drilling rig is adaptable, capable of switching between techniques depending on the rock type and other environmental conditions.

Kaziranga's women forest guards help flood-hit animals

Context: Least number of animals have been run over by vehicles in the first year of the deployment of women forest guards for patrolling a highway adjoining the Kaziranga National Park and Tiger Reserve.

Key Highlights

- The 1,307.49 sq. km tiger reserve, considered the world's safest address for the one-horned rhino, recorded the highest level of flood — 87.47 metres — in a decade on July 1 this year. The flood this year killed 174 animals, two of which died after speeding vehicles hit them on National Highway 715.
- The highway stretches for about 60 km along the southern edge of Kaziranga National Park. During floods, the animals flee to the hills of the Karbi Anglong district on the other side of the park. Speed guns and cameras are installed at some of the nine animal corridors on this highway where vehicles are not allowed to move at speeds beyond 40 km per hour.
- "Kaziranga has 108 women forest guards and foresters 1 (equivalent to sub-inspector) posted since September 2023.

- Flood-related deaths of the Kaziranga animals are recorded under four categories – drowning, died under care, vehicle hits, and others. Drowning claimed 158 animals, including 10 rhinos, 13 died under care, vehicles hit two hog deer, and an otter pup died of “other reasons”.
- Records maintained by the tiger reserve authorities show no animal died in 2018, a “low-flood” year for Kaziranga. Between 2019 and 2023, a total of 68 animals were killed by vehicles, 22 of them in 2022.

Kaziranga National Park

Aspect	Details
Location	Situated in the Golaghat and Nagaon districts of Assam, India.
Designation	Declared a national park in 1974 and recognized as a UNESCO World Heritage Site.
Significance	Houses two-thirds of the world population of greater one-horned rhinoceros and is the largest undisturbed area in the Brahmaputra Valley floodplains.
Vegetation	Features a diverse mix of eastern wet alluvial grasslands, semi-evergreen forests, and tropical moist deciduous forests.
Flora	<ul style="list-style-type: none"> - Dense, tall elephant grasses intermixed with small swamplands. - Abundant water lilies, water hyacinths, and lotus. - Rattan Cane (climbing palm) is also present.
Fauna	<ul style="list-style-type: none"> - Key species include one-horned rhinoceros, leopard, fishing cat, other lesser cats, royal Bengal tiger, large Indian civet, small Indian civet, sambar, barking deer, hog deer, gaur, hog badger, capped langur. - Home to the endangered and endemic western hoolock gibbon, India’s only ape species. - Hosts approximately 478 bird species, both resident and migratory. - One of the last refuges of the critically endangered Bengal florican.

New species of dogfish shark discovered in Kerala harbour

Context: ZSI scientist discover new species of dogfish shark *Squalus hima* from India

Key Highlights

- Scientists from the Zoological Survey of India have discovered a new species of deep-water dogfish shark, *Squalus hima*, from the Sakthikulangara fishing harbour in Kerala.
- *Squalus* is a genus of dogfish sharks in the family Squalidae, commonly known as spurdogs, and are characterised by smooth dorsal fin spines.
- The discovery, made by a team of scientists led by scientist Bineesh K. K, was published in the journal Records of the Zoological Survey of India.
- The shark species from the genus *Squalus* and *Centrophorus* are often exploited for their liver oil which is in high demand in pharmaceutical industry.



NESTS

Context: National Education Society for Tribal Students (NESTS) is an autonomous organization that was established under the Ministry of Tribal Affairs (MoTA). On 2nd April 2022, this organization will be celebrating its fourth Foundation Day.

Aim of NESTS

NESTS (National Education Society for Tribal Students) was established four years ago with the mission to provide high-quality education to tribal students across the country within their specific environments.

Milestones of NESTS

- Since its inception in 2019, NESTS has achieved several significant milestones.
- It has approved the construction of 391 new schools.
- Currently, 140 of these schools are under construction, and 123 schools have already commenced operations.

Targets of NESTS

- NESTS, in collaboration with the Ministry of Tribal Affairs, aims to complete the construction of a total of 452 new schools and address the remaining 67 schools from its previous scheme by the year 2025.
- The new schools will feature state-of-the-art facilities, comparable to those of Navodaya Vidyalayas.
- The construction of these schools is being closely monitored by IITs, NITs of the respective states, and dedicated teams from NESTS.

CPCB plans to check violations in plastic waste trading regime

Context: The Central Pollution Control Board has begun a national audit of nearly 800 plastic-waste recyclers across the country, The Hindu has learnt, after it emerged that four firms in Karnataka, Maharashtra, and Gujarat had issued nearly 6,00,000 fake certificates under the Extended Producer Responsibility (EPR) programme.

Key Highlights

- The EPR scheme mandates businesses that use plastic packaging material to recycle a certain percentage of the plastic used in the previous two years.
- Separately, the Board has also filed a complaint with the Delhi Police against unknown “hackers”, for having allegedly stolen several thousand EPR credits from its online portal. The Delhi Police is learnt to have lodged a first information report (FIR) and is investigating the matter.

Facts About CPCB

Aspect	Details
Constitution	Statutory organisation constituted in September 1974 under the Water (Prevention and Control of Pollution) Act, 1974.
Additional Powers	Entrusted with powers under the Air (Prevention and Control of Pollution) Act, 1981.
Technical Services	Provides technical services to the Ministry of Environment, Forests, and Climate Change (MOEFCC) under the Environment (Protection) Act, 1986.
Advisory Role	Advises the Central Government on matters related to prevention and control of water and air pollution, and improvement of air quality.
Principal Functions	- Promote cleanliness of streams and wells through the prevention, control, and abatement of water pollution. - Improve air quality and prevent, control, or abate air pollution in the country.

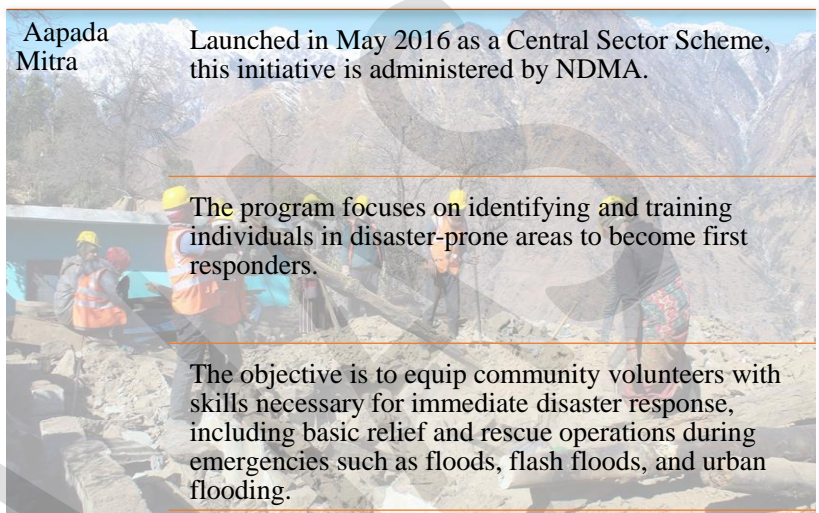
Disaster Management

Assam floods

Context: At least six persons, including two children, drowned, taking the death toll in two waves of floods in Assam since May to 52.

Key Highlights

- Officials of the Assam State Disaster Management Authority (ASDMA) said the water levels of the Brahmaputra and other rivers dipped marginally on Thursday, but the flood situation continued to be grim with 21.13 lakh forced to abandon their homes.
- More than 39,300 people from the flood-hit areas have taken shelter across 247 relief camps. “Western Assam’s Dhubri and northern Assam’s Darrang are the worst affected districts where 6.49 lakh and 1.9 lakh people have been displaced,” an ASDMA spokesperson said.
- Assam Chief Minister Himanta Biswa Sarma said the breaching of at least eight strategic embankments worsened the flood situation, which was caused largely by heavy rainfall in Arunachal Pradesh and Bhutan.
- The impact has been felt in the 1,307.49 sq. km Kaziranga National Park and Tiger Reserve where the floodwaters killed 31 animals — 30 hog deer and one otter pup.
- Heavy rainfall also caused havoc in other northeastern States. Officials in Arunachal Pradesh said at least seven districts in the central and eastern parts of the State had been cut off due to landslides caused by flash floods. The affected districts include Lohit, Changlang, Anjaw, and East Siang.



Aapada Mitra

Launched in May 2016 as a Central Sector Scheme, this initiative is administered by NDMA.

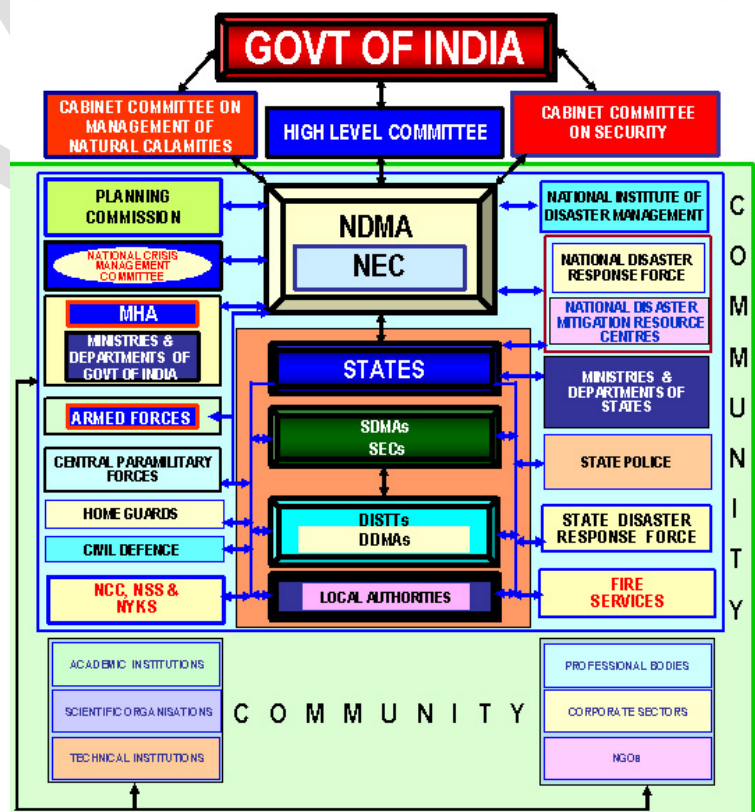
The program focuses on identifying and training individuals in disaster-prone areas to become first responders.

The objective is to equip community volunteers with skills necessary for immediate disaster response, including basic relief and rescue operations during emergencies such as floods, flash floods, and urban flooding.

What is NDMA?

- The National Disaster Management Authority (NDMA) is the premier statutory body in India responsible for disaster management.
- Established on September 27, 2006, under the Disaster Management Act, 2005, NDMA is chaired by the Prime Minister, with nine other members, including a Vice-Chairperson.
- While disaster management primarily falls under the jurisdiction of state governments, the National Policy on Disaster Management creates a supportive framework for coordination among central, state, and district levels.
- The government is implementing a program to establish disaster management

NATIONAL DISASTER MANAGEMENT STRUCTURE



volunteers, known as Aapada Mitra, across 350 districts in the country.

Historical Developments

- Recognizing the importance of disaster management, the Government of India established a High-Powered Committee (HPC) in August 1999 and a National Committee following the Gujarat earthquake in 2001. These committees recommended the preparation of comprehensive disaster management plans and effective mitigation strategies.
- The Tenth Five-Year Plan introduced a dedicated chapter on Disaster Management, and the Twelfth Finance Commission was tasked with reviewing financial arrangements for disaster management.
- On December 23, 2005, the Disaster Management Act was enacted, leading to the formation of NDMA, chaired by the Prime Minister, and State Disaster Management Authorities (SDMAs) led by Chief Ministers. This legislation aimed to implement a unified and integrated approach to disaster management across India.

What are the Functions and Responsibilities of NDMA?

- Approve the National Disaster Plan, which outlines the national approach to disaster management.
- Establish policies for disaster management to ensure a structured and effective response.
- Review and approve plans from Central Government ministries or departments, ensuring they align with the National Plan.
- Provide guidelines for State Authorities in developing their respective State Plans.
- Set guidelines for various Central Government ministries and departments to integrate disaster prevention and mitigation into their development projects.
- Oversee the coordination and implementation of disaster management policies and plans.
- Recommend financial provisions for disaster mitigation efforts.
- Offer support to other countries affected by major disasters as determined by the Central Government.
- Implement measures for disaster prevention, mitigation, preparedness, and capacity building as needed.
- Set broad policies and guidelines for the functioning of the National Institute of Disaster Management.

Economy

White Paper

Context: Amid the stand-off between the Raj Bhavan and the West Bengal government, Governor C.V. Ananda Bose has called upon Chief Minister Mamata Banerjee to table a White Paper on the State's financial situation.

Key Highlights

- Considering the grave nature of the economic scenario in the State, the Governor calls upon the Chief Minister, upon the authority vested in him under Article 167 of the Constitution read with Rule 30 of the Rules of Business for West Bengal framed under Article 166 of the Constitution, to place a comprehensive report on the State's financial situation before the Council of Ministers and issue a White Paper for the information of the people of the State
- The Governor said fiscal stress due to high debt is reducing the State's capacity to spend on development of social and economic services.
- Intra-regional inequality in West Bengal is very high and requires to be addressed through effective decentralisation of fiscal resources within the State.

What is a White Paper?

- A white paper provides detailed information on a particular issue, aiming to inform the public about the problem's nature and scope while offering potential solutions.

- Beyond government use, white papers are also employed by businesses and other organizations to highlight and promote their products or services.
- One of the earliest government white papers was presented in 1922 by British Prime Minister Winston Churchill, outlining his government's policy on Palestine.

Significance of White Paper

The white paper needs to be viewed within the broader political and economic context. Released close to the general elections, it serves as a tool for the current government to highlight its achievements and paint a picture of economic progress. However, it's vital to consider alternative perspectives and critically evaluate the presented data and arguments.

In Indian Context

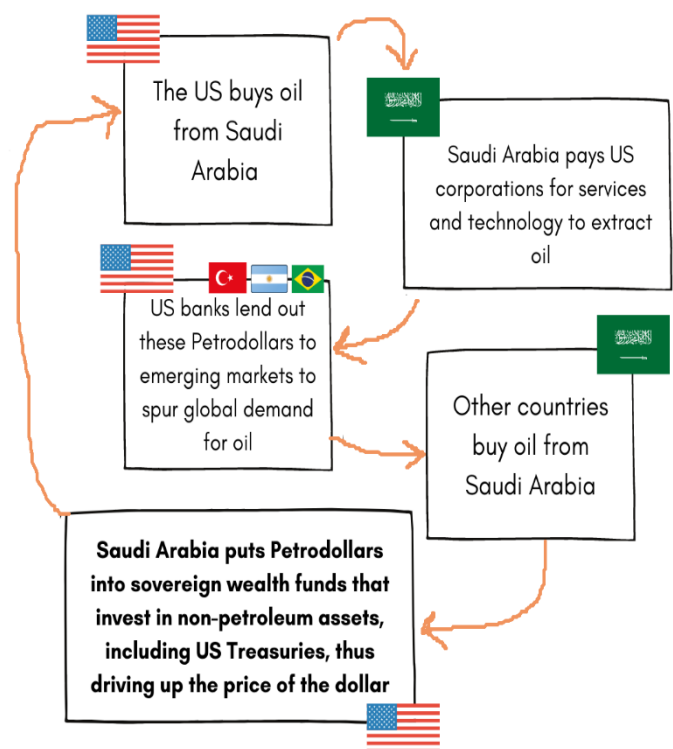
- There are no specific guidelines governing the creation or presentation of white papers.
- The Opposition has the right to request a white paper from the government on issues requiring clarification, such as the recent demands for one on black money and demonetization.
- In the last decade, the current government has tabled only two white papers, including one in 2014 on Railways, addressing freight and fare rationalization, capacity expansion, and more.

End of petrodollar?

Context: A growing group of observers and commentators has been forecasting the end of the U.S. dollar as the world's reserve currency. Also, many of the pundits claim the Chinese yuan would be the one to usurp the coveted position of the world's reserve currency.

Key Highlights

- The argument is built on two fundamental premises:
 - An apparent waning influence of the U.S. economy on a world stage in terms of favourable political and economic pacts as well as a decrease in the number of goods and services traded on a global scale using the U.S. dollar as its medium.
 - An increase in the ambit of Chinese economic and political influence among its neighbouring States and other developing countries predominantly through the Belt and Road initiative.
- A closer examination of the veracity of the first claim regarding the waning influence of the U.S. on the world stage, both economically and politically, shows it is largely misguided. One need only look at how the Russo-Ukraine War prompted the U.S. to be Ukraine's key ally and supporter, representing the West along with its European allies.
- Meanwhile, China has largely stayed out of the conflict, choosing to maintain a neutral position, fearing rebuke from its Western counterparts. Moreover, as a significant portion of the world trades with other currencies, it is



natural as economies expand, they trade among each other, leading to a decline in the total share of trade taking place with the U.S. dollar.

- Over the latter half of the past decade, multiple headlines stated the end of the petrodollar was near and the time of the petroyuan had begun. China has indeed tried to augment its influence in geopolitics by striking economic and political deals with multiple allies and investment deals with developing countries starved of funds via the Belt and Road initiative.
- However, this plan has been riddled with poor economic management and exploitative pacts with partner countries such as Sri Lanka, unable to pay back loans to China, and many others reporting feeling pressured under a phenomenon now come to be known as “Debt-trap diplomacy”.
- This does not bode well for China as this mode of influence is highly volatile and unsustainable, souring diplomatic efforts in the long run. Additionally, domestic Chinese demand suffered since they implemented the zero COVID policy, which placed excessive strain on the Chinese economy along with real-estate collapse. The Chinese yuan is closely monitored, and those holding it cannot manoeuvre freely, a key hurdle preventing it from becoming the world’s reserve currency.
- Since the expansion of the American shale oil revolution and the push for American energy independence, traditional oil-producing allies such as Saudi Arabia tried to seek alliances with countries such as China to, in turn, reduce their exposure to U. S. demand for their oil. However, it must be noted the Saudi Arabian government and wealth funds prefer U.S. treasury bills and American high-skilled technology imports such as Artificial Intelligence.
- It is difficult to envision a world where China, with its heavily restricted markets and low-quality exports, poses a better investment prospect and trade partner than the U.S.

Petrodollars

Petrodollars refer to the revenues earned from crude oil exports, which are denominated in U.S. dollars (USD). The term gained prominence in the mid-1970s, when rising oil prices led to significant trade and account surpluses for oil-exporting nations.

Petrodollar Recycling

Petrodollar recycling refers to the process by which oil-exporting countries, holding surpluses in US dollars from their oil sales, reinvest these funds back into the global economy.

This recycling can occur in several ways:

By channeling the dollars back into their own domestic economies

By lending them to other countries, or investing them in the US economy.

Countries might use these funds:

To purchase assets and securities such as Treasury bills, which helps maintain low interest rates and inflation

Also to avoid currency conversion losses and associated risks.

What is on the agenda for the 16th Finance Commission?

Context: The 16th Finance Commission (FC) has begun its work, established under Article 280 of the Indian Constitution, primarily focusing on the devolution of the consolidated fund.

Key Highlights

- Since the 73rd and 74th constitutional amendments, local bodies have gained significant recognition within the federal system. These amendments introduced sub-clauses 280 (3) (bb) and (c), which mandate the FC to recommend measures to augment State consolidated funds for supporting panchayats and municipalities.
- The National Commission on Urbanisation in the mid-80s described cities as “engines of growth.” Although this view is somewhat narrow, the reality is that cities contribute around 66% of India’s GDP and about 90% of total government revenues. Cities, thus, are an important spatial zone for the overall development of the country.
- However, our economic scale is insufficient to meet rising needs. The World Bank estimates that \$840 billion is needed for basic urban infrastructure in the next decade.
- The introduction of the Goods and Service Tax (GST) has reduced ULBs’ tax revenue (excluding property tax) from about 23% in 2012-13 to around 9% in 2017-18. IGTs from States to ULBs are very low, with State Finance Commissions recommending only about 7% of States’ own revenue in 2018-19.
- Increasing the quantum of IGTs as a percentage of GDP is necessary. Despite the 74th constitutional amendment’s aim to financially strengthen ULBs, progress over three decades has fallen short.
- The 13th Finance Commission observed that “parallel agencies and bodies are emasculating local governments both financially and operationally.” Local governments require support from Union and State governments through funds, functionaries, and technical aid.
- However, the growth of parallel agencies has distorted local governments’ roles. Programs like the Member of Parliament Local Area Development Scheme and the Member of Legislative Assembly Local Area Development Scheme exacerbate this issue, distorting the federal structure.
- In the absence of the 2021 Census, reliance on 2011 data is inadequate for evidence-based fiscal devolution. India has approximately 4,000 statutory towns and an equal number of Census towns, with an estimated 23,000 villages, all of which are effectively urban. These figures must be captured by the 16th FC, including the significant migration to Tier-2 and 3 cities.
- Thus, the 15th FC’s nine guiding principles require a revisit. Not all of them but reference to enhancement in property tax collection in tandem to the State’s GST; maintenance of accounts; resource allocation for mitigating pollution; focus on primary health care, solid waste management, drinking water, etc., deserve attention.
- The 16th FC must consider India’s urbanisation dynamism and ensure IGTs to urban areas are at least doubled. A McKinsey Global Institute report warns that if India continues investing in urban infrastructure at current rates, urban infrastructure will fall short, leading to water supply issues and untreated sewage.

Finance Commission of India

- The Finance Commission in India is a quasi-judicial body established by the President of India under the Constitution.
- As it is constituted directly under the Constitution, it holds the status of a Constitutional Body.
- The Finance Commission is not a permanent institution; it is reconstituted every five years or earlier as deemed necessary by the President.
- The key role of the Finance Commission is to provide recommendations on the distribution of financial resources between the Union and State Governments.

Constitutional Provisions Related to Finance Commission

Provisions	Description
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Article 280	Concerns the creation and establishment of the Finance Commission.
Article 281	Pertains to the recommendations provided by the Finance Commission.

Composition of the Finance Commission of India (FCI)

- The Finance Commission is composed of a Chairman and four other members, all appointed by the President.
- The tenure of the Chairman and members is specified by the President in their appointment order.
- Members are eligible for reappointment.

Qualifications for Members of the Finance Commission (FC)

- The Chairman must have experience in public affairs.
- The four other members are selected from the following backgrounds:
 - A judge or someone qualified to be a judge of the High Court.
 - A person with specialized knowledge of government finance and accounts.
 - A person with extensive experience in financial matters and administration.
 - An individual with specialized knowledge of economics.

Key Aspects of Finance Commission Recommendations

- **Vertical Devolution:** Refers to the share of States in the central tax pool, crucial for promoting fiscal autonomy among States.
- **Horizontal Distribution:** Allocates resources among States based on a formula ensuring equitable distribution and balanced regional development.
- **Grants-in-aid:** Additional transfers to specific States or sectors needing assistance, promoting inclusive growth and reducing regional disparities.
- The recommendations are advisory in nature, meaning they are not binding on the government. The Union Government decides whether to implement them.

Functions of the Finance Commission (FC)

- The Finance Commission makes recommendations to the President on:
- Distribution of net proceeds of taxes between the Centre and States, and allocation among States.
- Principles governing grants-in-aid to States from the Consolidated Fund of India.
- Measures to augment the Consolidated Fund of a State to support Panchayats and Municipalities based on State Finance Commission recommendations.
- Any other financial matters referred by the President in the interest of sound finance.

Role of the Finance Commission (FC)



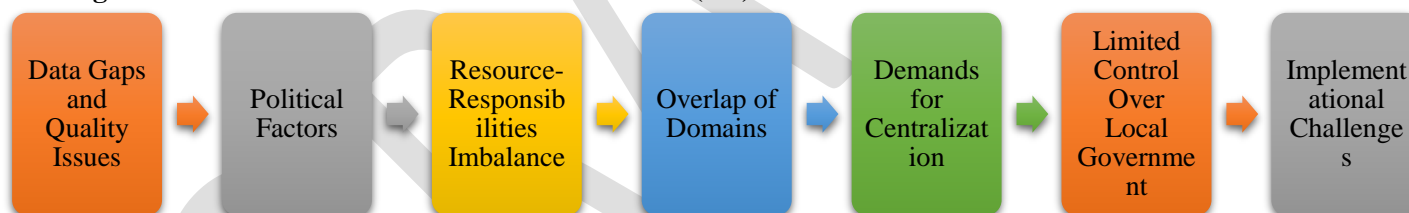
- **Equitable Resource Distribution:** Ensures fair allocation of revenues considering factors like population, area, and economic backwardness.
- **Promotes Social Welfare:** Recommends grants-in-aid for essential services, reducing fiscal imbalances.

- **Empowers State Governments:** By increasing financial resources, the Commission enhances the financial autonomy of States.
- **Strengthens Local Self-Government:** Suggests measures to augment State funds for Panchayats and Municipalities, ensuring local bodies have adequate resources.
- **Strengthened Federalism:** Fosters cooperation between central and state governments on financial matters, promoting a healthy federal structure.
- **Fiscal Consolidation and Discipline:** Recommends measures for fiscal stability, aiding in sound economic growth.
- **Incentivizing Reforms:** Encourages States to adopt best practices by linking financial allocations to reform milestones.
- **Addressing Contemporary Challenges:** Helps tackle new fiscal challenges, such as those arising from the introduction of GST.

Finance Commission and Fiscal Federalism

- **Understanding Fiscal Federalism:** It refers to the division of fiscal responsibilities and financial resources between different levels of government within a federal system.
- **Role in Promoting Fiscal Federalism:** The Finance Commission acts as a balancing wheel of fiscal federalism in India by:
 - Bridging financial imbalances between the Centre and States.
 - Promoting fiscal autonomy and efficiency among States.
 - Reducing inequality by allocating more resources to backward States.
 - Facilitating cooperative federalism through consultation with central and state governments.

Challenges and Limitations of the Finance Commission (FC)



- **Data Gaps and Quality Issues:** Incomplete, inconsistent, or outdated data can hinder accurate fiscal assessments.
- **Political Factors:** Balancing diverse stakeholder interests while considering the changing political and economic scenario.
- **Resource-Responsibilities Imbalance:** Limited resources versus virtually unlimited responsibilities.
- **Overlap of Domains:** Intersections between Finance Commission and GST Council affecting tax revenue distribution.
- **Demands for Centralization:** The Commission must balance between demands for centralization and state autonomy.
- **Limited Control Over Local Government:** Recommendations for local governments are based on State Finance Commission inputs, limiting the Finance Commission's role.
- **Implementational Challenges:** As recommendations are advisory, ensuring proper implementation and monitoring is challenging.

NCAER

Context: At almost 82% of GDP, India's public debt is very high, but the country doesn't face debt-sustainability issue on account of high growth rate and higher share of local-currency debt, NCAER said.

Key Highlights

- The high debt levels are sustainable for now because of higher real or nominal GDP and as most of the debt is held in rupee.
- The States together hold one-third of the total debt, and in the ‘business-as-usual’ situation, their debt levels will only increase further over the next five years
- In a handful of States like Punjab and Himachal Pradesh, Debt-to-GDP ratio could increase by 50%
- The States, including the most indebted ones, also don’t face sustainability issue as they have implicit guarantee of the Centre and as States cannot hold debt in foreign currency or floating rate.

National Council for Applied Economic Research (NCAER)

- Established in 1956, NCAER is India’s oldest and largest independent, non-profit economic policy research institute.
- The institute specializes in conducting grant-funded research and commissioned studies for both government and industry.
- NCAER is notable for its dual role as a think tank and a primary data collector, making it one of the few global organizations to undertake such comprehensive work

NCAER’s thematic area Growth, Macro, Trade, and Economic Policy

Investment Climate, Industry, Infrastructure, labor, and Urban

Agriculture and Rural Development, Natural Resources, and Environment

Poverty, Equity, Human Development, and Consumers

As sugar stocks rise, ISMA calls for the lifting of export curbs

Context: The Indian Sugar and Bio-Energy Manufacturers Association (ISMA) estimates the current sugar season to end in September with a stock of 91 lakh tonnes.

Key Highlights

- ISMA in a statement said the sugar marketing season (October to September) every year ends with about 55 lakh tonnes. But this year, it is likely to be higher by 36 lakh tonnes. This “can potentially lead to additional costs for millers on account of idle inventory,” it said.
- The opening stock in October last year was about 56 lakh tonnes and expected domestic consumption for the current season is about 285 lakh tonnes.
- “ISMA has urged the government to reconsider permitting export of surplus sugar after due consideration of domestic demand and supply.
- The government has raised Fair and Remunerative Price (FRP) of sugarcane for 2024-2025 sugar season by ₹25 per quintal to ₹340 per quintal. This will hike the cane cost and the cost of sugar production and the mills will have to pay for cane supplies within 14 days.

Fair and Remunerative Price (FRP)

- FRP is the price set by the government that sugar mills are required to pay to farmers for the sugarcane they supply.
- The FRP is determined by the Union Government, specifically by the Cabinet Committee on Economic Affairs (CCEA).
- The FRP is based on recommendations made by the Commission for Agricultural Costs and Prices (CACP).
- The payment of FRP is regulated under the Sugarcane Control Order, 1966.
- Mills are required to pay the FRP to farmers within 14 days of the cane’s delivery.
- Mills have the option to enter into agreements with farmers to pay the FRP in instalments.
- In case of delayed payment, interest charges of up to 15% per annum may apply.

About Indian Sugar Mills Association (ISMA)

- ISMA is the leading sugar organization in India.
- It serves as a bridge between the government and the sugar industry, representing both private and public sugar mills.
- Founded in 1932, ISMA is the oldest industrial association in the country.
- It is recognized as the apex body for the sugar industry by both the Central and State Governments.
- ISMA works to protect the interests of sugar mills by promoting favorable and growth-oriented government policies.

Red flags raised over runaway silver imports from UAE through GIFT

Context: In a major disruption for the bullion market, almost all of India's silver imports are now being handled by a few private players bringing the white metal from Dubai through the GIFT City exchange, which could cause significant revenue losses for the exchequer over time.

Key Highlights

- India's imports of gold and silver from the UAE had jumped 210% in 2023-24 to \$10.7 billion. Total silver imports stood at \$5.4 billion.
- In May, 87% of India's global silver imports came from Dubai at a reduced 8% duty and were cleared through the GIFT City exchange in Gandhinagar, which has been clearing all silver imports from the UAE since December 2023. Imports from other countries and ports are virtually abandoned.
- Earlier attempts by some banks to import silver from the UAE through other ports were questioned for not meeting rules of origin of the India-UAE free trade deal, think tank Global Trade Research Initiative (GTRI) flagged in a report.
- The key concern is how the imports cleared through GIFT City meet the rules of origin requirements specified in the India-UAE CEPA [Comprehensive Economic Partnership Agreement] when importers from other ports fail to meet these
- India levies a 15% import duty on silver and only allows institutions nominated by the Reserve Bank of India (RBI) and the Directorate General of Foreign Trade (DGFT) to import the precious metal. However, the GIFT City exchange does not limit imports to RBI/DGFT-nominated agencies, registers private traders, and has found no rules of origin issues as flagged by customs elsewhere.
- Under the CEPA signed in 2022, India has agreed to reduce the duty on silver imports to 0% over 10 years, subject to Dubai exporters meeting the rules of origin conditions.
- GTRI has mooted a renegotiation of the CEPA terms to nullify the duty arbitrage, and more rigorous check on Dubai exporters' value addition claims by the GIFT City exchange and a "thorough investigation into the

Concrete Plans

KEY ADDITIONS

- 1 Social hub
- 2 Central park
- 3 International class retail, recreational zone

Entertainment, retail zone spread over

20.5 acres



Construction of **GIFT Eye**, a large ferris wheel

158 m Highest point of **GIFT Eye**, as against London Eye's overall height of **135 m**

2nd phase plan with town planning is expected to be unveiled after state gov's review, public feedback



relationships between export and import firms to identify and address any potential conflicts of interest or familial ties.

Understanding GIFT City



- GIFT City, or Gujarat International Finance Tec-City, is strategically located in Gandhinagar, Gujarat. It is designed as a hub for financial and technology services, not only catering to India but with a global perspective.
- The city features a multi-service Special Economic Zone (SEZ) that includes India's first International Financial Services Centre (IFSC) and a dedicated Domestic Tariff Area (DTA). This unique combination makes GIFT City a significant player in both international and domestic markets.
- GIFT City is envisioned as an integrated center for financial and technological services. It aims to be a one-stop destination for businesses worldwide, offering advanced infrastructure and regulatory support.
- The International Financial Services Centres Authority (IFSCA) acts as the unified regulator, overseeing the development and regulation of financial products, services, and institutions within India's IFSCs, particularly in GIFT City.
- The city is equipped with comprehensive social infrastructure, including schools, medical facilities, and a proposed hospital. GIFT City also boasts a business club with a range of indoor and outdoor sports amenities.
- Well-planned residential housing projects further enhance the city's appeal, supporting the "Walk to Work" concept, where residents can easily access workplaces within the city, promoting a balanced and convenient lifestyle.

India shows good progress on SDGs: NITI Aayog report

Context: NITI Aayog on Friday released its fourth evaluation report of India's progress on the 16 sustainable development goals (SDGs) adopted in 2015 by all United Nations member countries, giving India a score of 71 out of 100, as compared to 57 in 2018.

Key Highlights

- Income and gender inequality were the SDGs which have seen a drop in the score.
- The report noted a slight drop from 0.75 last year to 0.73 in the ratio of women's earnings compared to men.
- The report's release comes ahead of the High-level Political Forum on Sustainable Development to be held under UN auspices in New York on July 18.

Sustainable Development Goals (SDGs)

- The Sustainable Development Goals (SDGs) are formally titled Transforming Our World:





The 2030 Agenda for Sustainable Development.

- This agenda outlines a global blueprint to achieve a better and more sustainable future for all by 2030.

Goals

- There are 17 Sustainable Development Goals designed to address global challenges and ensure sustainable development.
- The SDGs include 169 specific targets that detail what each goal aims to achieve.
- To measure progress, there are 304 indicators that track advancements towards achieving the targets.

Purpose

The SDGs aim to tackle a wide range of global issues including poverty, inequality, climate change, environmental degradation, peace, and justice. They provide a comprehensive framework for countries to align their policies and actions towards sustainable development.

Boosts financing for green projects

Context: The Finance Minister's Budget speeches have been giving increasing emphasis to green growth. This has followed PM Modi's announcement at COP26 that India would have 500GW fossil fuel-free capacity by 2030 and become net zero by 2070.

Key Highlights

- Affirmation of the commitments in the Budget speech would send the right signals. For reaching net zero, the sooner the use of fossil fuels peak, plateau and then begin to dip, the lower would be the cost of getting to net zero for firms and the economy.
- Investors need to appraise options through this prism for major investment decisions. This would prevent sub-optimal, lumpy, capital investments in fossil-fuel economy.
- Renewable Energy (RE) capacities are being created by private investment with declining costs in a competitive industry structure. RE, combined with storage for round-the-clock supply, is now cheaper than new thermal power. Scaling up and achieving 500 GW of fossil fuel-free capacity by 2030 requires a huge increase in the capacities for which RE bids need to be invited.
- This intention with numbers should be announced. RE now requires large-scale storage as its generation is intermittent and inflexible whereas the demand to be met is variable. An ambitious plan for creating storage by the invitation of bids should also be in the Budget Speech. This would get potential investors to prepare for the large storage market that would be created. Both river and off-river hydro pump storage are attractive options.

Carbon Border Adjustment Mechanism (CBAM)

- The CBAM is a new European tax on imports based on the carbon content throughout the entire production value chain.
- This mechanism is intended to encourage industries to reduce their carbon footprint and promote the use of greener technologies.

Opportunity

- Indian firms, particularly Micro, Small, and Medium Enterprises (MSMEs), can benefit from this policy by receiving government support to lower their carbon emissions.
- Embracing the CBAM, rather than viewing it as a barrier, can provide a competitive edge in the global market by aligning with Europe's environmental standards.

The technology of concentrated solar thermal energy being stored in molten salt to run a conventional thermal turbine has also become mature and cost effective. These storage projects have a large capital cost, a very long life and nominal running costs.

Hydrogen Mission

- The National Hydrogen Mission is designed to advance the use of green hydrogen, produced at globally competitive costs, to foster downstream carbon-free production.
- The mission aims to position India as a leading hub for green manufacturing, enabling a significant leap forward in sustainable industrial practices.

Carbon-Free Electricity Supply

- It is essential to mandate the real-time supply of carbon-free electricity, even if it comes at a higher price, to meet industrial demands and support EV charging infrastructure.
- Small firms could utilize carbon-free electricity for production processes, while EV charging stations can also be powered by this clean energy, enhancing the sustainability of supply chains.

Capital Investment and Support

- Establishing dedicated financing facilities to support capital investments in green technologies can facilitate progress.
- The government could offer credit guarantees and interest subsidies to stimulate investment in low-carbon technologies and infrastructure.
- This support is aimed at boosting exports of low-carbon goods and fostering a surge in international competitiveness.

WPI

Context: WPI inflation soars to 16-month high

Key Highlights

- Inflation in wholesale prices accelerated to a 16-month high of 3.4% in June, from May's 2.6%, led by a spike in food inflation to a 22-month high of 8.7% and a near-doubling in manufactured products' price gains to 1.43%.
- Inflation in wholesale vegetable prices surged to a 10-month high of 38.8%, from May's 32.4% pace, with onion and potato prices rising year-on-year by 93.4% and 66.4%, respectively.
- Inflation in pulses (21.6%), paddy (12.1%), fruits (10.1%) and cereals (9.3%) were other contributors to the wholesale inflation print that lifted primary food articles inflation to 10.9%.
- On a month-on-month basis, wholesale prices rose 0.4%, with the Food Index rising 2.5%, the fastest since August and more than fourfold the 0.6% pace recorded in May.
- The rise in the Wholesale Price Index suggests that retail prices may face further upward pressures.
- For producers beyond food items, a five-month peak of 9.6% inflation in minerals, and a 12.6% uptick in crude petroleum and natural gas prices, the highest in nine months, were also a major cause for concern over upward pressure on input costs.

Wholesale Price Index (WPI)

- The Wholesale Price Index (WPI) measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses. It reflects the price trends of goods at the wholesale level.
- The WPI is calculated and published by the Office of Economic Advisor, which is part of the Department of Industrial Policy and Promotion in the Ministry of Commerce and Industry.

- The index is published monthly, providing an estimate of the overall price level for that particular month, rather than for a specific date.
- Analysts use WPI data to track the supply and demand dynamics in various sectors such as industry, manufacturing, and construction.
- An upward surge in the WPI indicates inflationary pressure in the economy, while a decline suggests easing price levels.
- The rate of increase in the WPI from month to month is used to measure the level of wholesale inflation in the economy.

Differences between the Wholesale Price Index (WPI) and Consumer Price Index (CPI)

Aspect	WPI (Wholesale Price Index)	CPI (Consumer Price Index)
What it Tracks	Tracks the wholesale prices of goods sold and traded in bulk between businesses.	Measures the average price paid by households for a basket of goods and services.
Scope	Limited to goods only.	Includes both goods and services.
Inflation Measurement	Used in some economies as a key measure of inflation, particularly in the wholesale sector.	Used by the Reserve Bank of India (RBI) as the primary measure of inflation for setting monetary and credit policy.
Policy Use in India	The RBI no longer uses WPI for policy purposes, such as setting repo rates.	The RBI uses CPI, also known as retail inflation, as the key measure for determining monetary policy, including the setting of repo rates.

Tea industry seeks higher RoDTEP rates

Context: The tea industry has sought higher rates under the RoDTEP scheme to make exports competitive in overseas markets.

Key Highlights

- Leading industry body Indian Tea Association (ITA), in its pre-budget memorandum, said the present Remission of Duties and Taxes on Exported Products (RoDTEP) rate for bulk tea is 1.7% subject to a cap of ₹6.70 per kilogram.
- ITA urged the government to increase the reward base rate under RoDTEP for black tea in bulk to remain competitive.
- The RoDTEP scheme ensures exporters receive refunds on embedded duties that were previously non-recoverable.
- Another industry body Tea Association of India (TAI), in its pre-budget proposal sought an anti-dumping duty on imports of Nepal tea. TAI said this measure would prevent the dumping of cheap and duty-free tea from Nepal and boost exports of genuine Darjeeling tea.

Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme

- **Introduction:** The RoDTEP Scheme was launched by the Ministry of Commerce & Industry on January 1, 2021, to replace the Merchandise Exports from India Scheme (MEIS).
- **Purpose:** It aims to provide refunds on embedded taxes and duties that were previously non-recoverable for exporters.
- **Objective:** The scheme is designed to boost India's export performance by ensuring that exporters receive refunds on taxes and duties embedded in their products, which were not recoverable under the previous MEIS.

Need for RoDTEP Scheme

- **WTO Challenges:** The United States challenged several of India's key export subsidy schemes in the World Trade Organization (WTO), arguing that they were detrimental to American workers and violated trade norms.
- **WTO Ruling:** A WTO dispute panel ruled against India, stating that certain export subsidy programs, including MEIS and other related schemes (Export Oriented Units Scheme, SEZ Scheme, Duty-Free Imports for Exporters Scheme), violated WTO regulations.
- **Compliance:** The panel's recommendation to withdraw these export subsidy programs prompted the introduction of the RoDTEP Scheme to ensure compliance with WTO rules and to maintain India's export competitiveness in a global market.

PPF returns still languishing lower than formula-based rates, says RBI

Context: The interest rates offered by the Union government on two of India's most popular small savings schemes — the Public Provident Fund and five-year recurring deposits — continue to languish below the rates they should have earned as per a formula-based system adopted since April 2016, the Reserve Bank of India (RBI) has indicated.

Key Highlights

- The PPF rate has been static at 7.1% since April 2020. The return on the five-year recurring deposit (RD), which had been frozen at 5.8% from April 2020 to March 2023, had been hiked gradually over the first three quarters of 2023-24, taking it to 6.7% by last October.
- At the time, the RBI had reckoned that the returns on the PPF were 41 basis points (bps) lower than their formula-based rates, while the five-year RD rate was 21 bps lower, for the October to December 2023 quarter. One basis point equals 0.01%.
- The formula for quarterly resets of small savings rates, mooted by a panel led by former RBI Deputy Governor Shyamala Gopinath, links them to secondary market yields on government securities of comparable maturities over a three-month period prior to each quarter.
- The PPF rate was last hiked in October 2018, when it was pegged at 8% ahead of the 2019 Lok Sabha election. After that poll, the government reduced the rate to 7.9% from July 2019, and slashed it further to 7.1% at the onset of 2020-21, when it cut rates on all small savings instruments in the range of 0.5 and 1.4 percentage points (or 50 to 140 bps).
- Before the 2024 Lok Sabha election, the Union government announced a hike in rates on most small savings schemes for six successive quarters, culminating in the January to March 2024 quarter, when the returns on the Sukanya Samriddhi Account Scheme (SSAS) were raised from 8% to 8.2%, and the three-year time deposit from 7% to 7.1%. While there have been no changes effected in rates since the PPF rate has been excluded from the ambit of all these hikes.

Benefits of a PPF Account



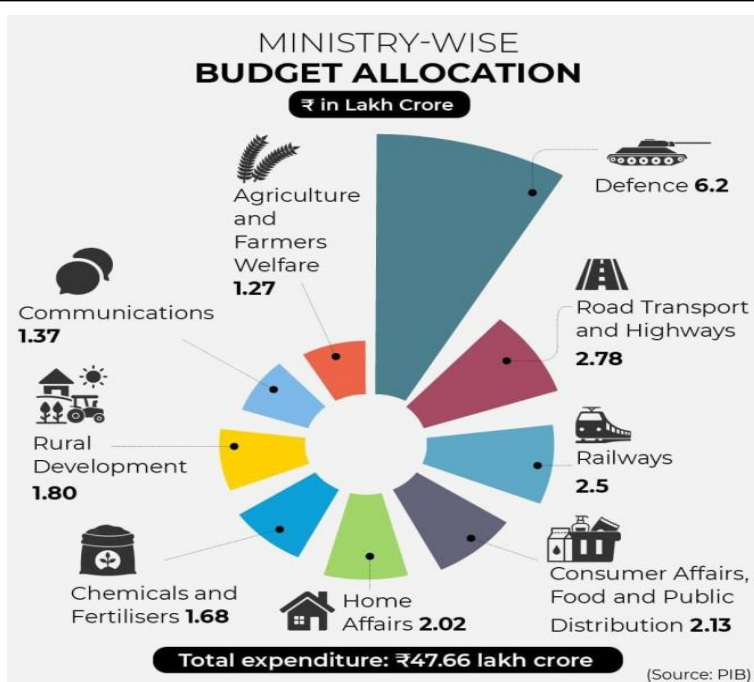
Economy likely to grow by 7% this year: Survey Small servings, many plates

Context: Budget 2024 released

Key Highlights

- At a briefing after her roughly 90-minute speech, which appeared to acknowledge and begin addressing the perceived disenchantment among specific voter groups like the young, the salaried class, farmers, and small entrepreneurs, Ms. Sitharaman made it clear that the overarching theme of Budget was 'EMPLOYMENT'.

- Used as an acronym, the theme was spelt out — Employment and Education; Micro, Small and Medium Enterprises (MSMEs); Productivity; Land; Opportunities; Youth; Middle Class; Energy Security; New Generation Reforms; and Technology.
- Her speech referred to ‘employment’ 23 times, up sharply from three mentions of the word in the 2023-24 Budget, and seven (four of which were about past achievements rather than the future) in the Interim Budget presented this February.
- References to growth slipped to 10, from a combined 34 mentions in the last two Budget speeches. Jaitley’s third Budget had also slashed growth references, but the similarities with that speech don’t end there. While he had released a plan to ‘Transform India’ based on action points around nine pillars, Ms. Sitharaman on Tuesday laid out nine priorities for generating ample opportunities for all. Five of those are, in fact, similar to Jaitley’s list that led with the promise to double farmers’ incomes in five years. Ms. Sitharaman said that her first priority would be to raise productivity and resilience in agriculture, followed by employment and skilling, inclusive human resource development and social justice.
- Infrastructure and next generation reforms also figure in the priorities, with the Minister promising more details about the latter through an economic policy framework to be formulated later, with a focus on fixing factors of productivity, including land, labour, capital, and entrepreneurship. She also announced a review of the Income Tax and Customs Acts and a simplification of Foreign Direct Investment norms.
- The Finance Minister did provide some indirect support to private investments by accelerating the fiscal consolidation process, armed with a ₹2.1 lakh crore surprise dividend from the central bank. The fiscal deficit target for this year has been pegged at 4.9% of GDP from the 5.1% projected in the Interim Budget, and the 5.6% of GDP achieved last year.
- As is the case with many initiatives of this Budget, more details will emerge over time. But, Ms. Sitharaman will be hoping that the lens change reflected in the Budget’s focus areas will not be lost on voters gearing up to cast their ballots in the upcoming State Assembly elections.



UNION BUDGET 2024

Revised tax slabs in new tax regime

Upto ₹3 lakh:	Nil
₹3-7 lakh:	5%
₹7-10 lakh:	10%
₹10-12 lakh:	15%
₹12-15 lakh:	20%
₹15 lakh+:	30%

THE HINDU

Priorities of 2024-25 Budget

Sector	Initiatives and Allocations
Agriculture	- Productivity & Resilience: Introduction of 109 high-yielding crop varieties, promotion of natural farming, and establishment of 10,000 bio-input centers.

	<ul style="list-style-type: none"> - Financial Provision: Rs 1.52 lakh crore allocated. - Digital Infrastructure: Implementation of Digital Public Infrastructure (DPI).
Employment & Skilling	<ul style="list-style-type: none"> - New Schemes: Employment Linked Incentive and initiatives to skill 20 lakh youth over 5 years. - Upgradation: Revamping 1,000 Industrial Training Institutes. - Financial Support: Revised Model Skill Loan Scheme offering loans up to Rs 7.5 lakh with government guarantee.
Inclusive Human Resource Development & Social Justice	<ul style="list-style-type: none"> - Support for Marginalized Groups: Enhanced support for tribal communities and women entrepreneurs. - Purvodaya Initiative: Comprehensive development of the eastern region. - Pradhan Mantri Janjatiya Unnat Gram Abhiyan: Socio-economic development in 63,000 tribal villages.
Manufacturing & Services	<ul style="list-style-type: none"> - MSME Support: New self-financing guarantee fund, increased Mudra loan limits, and support for labour-intensive manufacturing. - Food Processing: 50 food irradiation units, 100 food quality labs, and E-Commerce Export Hubs. - Internships: Scheme to provide internships in 500 top companies, benefiting 1 crore youth over 5 years.
Urban Development	<ul style="list-style-type: none"> - PM Awas Yojana Urban 2.0: Rs 10 lakh crore allocated for housing 1 crore urban poor and middle-class families. - Infrastructure: Promotion of water supply, sewage treatment, and solid waste management in 100 large cities. - Street Food Hubs: 100 weekly street food hubs (haats) to be established annually over the next five years.
Energy Security	<ul style="list-style-type: none"> - PM Surya Ghar Muft Bijli Yojana: Installation of rooftop solar plants for 1 crore households. - Nuclear Energy: Emphasis on nuclear energy in India's energy mix.
Infrastructure	<ul style="list-style-type: none"> - Capital Expenditure: Rs 11,11,111 crore allocated, 3.4% of GDP. - Rural Connectivity: Phase IV of PMGSY to connect 25,000 rural habitations with all-weather roads. - Regional Projects: Rs 11,500 crore for projects in Bihar, including the Kosi-Mechi intra-state link and flood management in Assam, Himachal Pradesh, Uttarakhand, and Sikkim.
Innovation, Research & Development	<ul style="list-style-type: none"> - Anusandhan National Research Fund: Rs 1 lakh crore for basic research and prototype development. - Space Economy: Rs 1,000 crore venture capital fund to expand space economy fivefold in the next decade.
Next Generation Reforms	<ul style="list-style-type: none"> - Economic Policy Framework: Labour reforms and simplification of FDI regulations. - Jan Vishwas Bill 2.0: To improve Ease of Doing Business.

Science & Technology

Study finds gene mutation that turns familiar faces into strangers

Context: Researchers demonstrated that unrelated individuals who performed poorly in face recognition tests were more likely to carry independent mutations in the MCTP2 gene. Their first-degree relatives who shared their mutation also shared the impairment.

Key Highlights

115

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- This disorder is called prosopagnosia, or face blindness. Its prevalence worldwide is estimated to be 1.8-2.9% in the general population. Prosopagnosia is one form of visual agnosia, or inability to identify everyday items just by looking at them.
- The MCTP2 gene is thus the first found to be required for a higher form of visual social cognition in humans.
- The researchers identified a family of 35 individuals spread across three generations. The members of its eldest generation were all older than 60 years. Nine members of the family had daily problems with recognising faces. They also performed very poorly on a standardised face recognition test. Another nine performed normally in the tests, yet they too had difficulty recognising faces.
- The remaining 17 — including nine who married into the family — performed normally in the tests and had no difficulty recognising faces.
- By charting the family tree, the researchers inferred that a great-grandparent of the eldest generation must have carried the mutation. The eldest members then passed on the mutation to their affected children and grandchildren.
- Examining the genome of the affected family members revealed they had all inherited the same genome segment in one copy of their chromosome no. 15. Recall that we inherit two copies of each chromosome, one from each parent, and in this way each one of us possesses 23 pairs of chromosomes.
- By sequencing the genomic DNA, the researchers found that the MCTP2 gene, located in this segment, had been altered by a mutation. As a result, one amino acid in the protein encoded by the MCTP2 gene had been replaced by another. The researchers didn't find this mutation in any of the hundreds of thousands of human genome sequences stored on different databases.
- They came to their conclusion on the basis of a population screen. The researchers recruited a cohort of 2,904 individuals (743 male and 2161 female, all around 19 years of age) to answer an online questionnaire. The questionnaire incorporated elements of the face recognition test. Seventy-eight individuals scored very poorly: that is, their scores deviated by two standard deviations or more from the average score.
- The researchers sequenced the genome of 75 of the poor scorers and found seven of them carried one of five other sequence alterations in the MCTP2 gene. This demonstrated that unrelated individuals who performed very poorly in face recognition tests were more likely to carry independent mutations in the MCTP2 gene compared to the general population.
- Additionally, the team found that the individuals' first-degree relatives, such as a parent, a child or a sibling, who shared their mutation also shared the facial recognition impairment.
- These findings implicated the MCTP2 gene in face recognition.

What is Prosopagnosia?

- It is also known as Face Blindness
- It is a cognitive disorder of face perception in which the ability to recognize familiar faces, including one's own face (self-recognition), is impaired, while other aspects of visual processing (e.g., object discrimination) and intellectual functioning (e.g., decision-making) remain intact.
- A math tutor [Glenn Alperin](#), who suffered from prosopagnosia described his condition as ***"Imagine that every person has a camera inside their head. Every time they meet somebody for the first time, they take a picture with their camera, develop the picture, and file it away for future use. ...For me, I take a picture with my camera, but I never store it away."***

How common is this condition?

- The exact prevalence of this condition is unclear, particularly for acquired prosopagnosia, as there is little to no data available.
- For congenital prosopagnosia (also known as developmental prosopagnosia), some studies suggest that up to 2.5% of people may experience it to some extent.

- However, there is disagreement about the accuracy of this percentage. This is partly because diagnosing the condition is challenging, and also because there is no clear distinction between this condition and simply having a below-average ability to recognize faces.

Prosopagnosia: Symptoms, Causes, and Contagion

Category	Details
Forms of Prosopagnosia	<ul style="list-style-type: none"> • Apperceptive Prosopagnosia: Inability to recognize facial expressions or non-verbal cues. • Associative Prosopagnosia: Inability to recognize familiar faces, but can identify people through other cues such as voice or walk.
Causes of Prosopagnosia	<ul style="list-style-type: none"> • Acquired Prosopagnosia: Resulting from brain lesions due to various factors. • Congenital Prosopagnosia: Genetic mutations, either inherited or spontaneous, sometimes linked to developmental conditions like autism spectrum disorder.
Acquired Prosopagnosia Causes	<ul style="list-style-type: none"> • Alzheimer's disease • Brain tumors (cancerous and non-cancerous) • Dementia • Developmental disorders • Traumatic brain injuries (TBIs) • Cerebral hypoxia (oxygen deprivation) • Infections (e.g., encephalitis) • Seizures and epilepsy • Stroke • Toxins (e.g., carbon monoxide poisoning)
Congenital Prosopagnosia Causes	<ul style="list-style-type: none"> • Genetic mutations, sometimes running in families • "De novo" mutations (spontaneous, non-inherited) • Possible connection to developmental conditions like autism spectrum disorder
Is it contagious?:	<ul style="list-style-type: none"> • Prosopagnosia is not contagious. Although some infections that cause it may be contagious, having the infection does not guarantee the development of the condition.

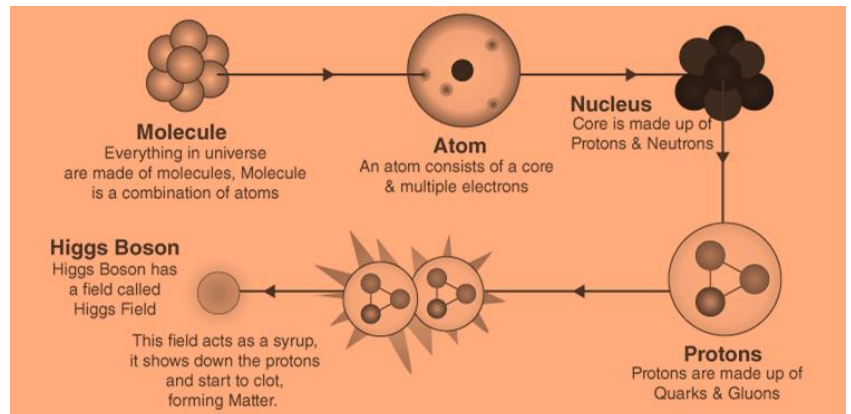
Why are scientists looking for the Higgs boson's best friend?

Context: The top quark is the universe's heaviest elementary particle. Each one weighs three-times as much as a copper atom. Its high mass implies that of all elementary particles, it interacts most strongly with the Higgs boson particle — and this makes physicists wonder whether our universe is unstable.

Key Highlights

- The Greek philosopher Empedocles surmised 2,400 years ago that matter could be broken up into smaller and smaller pieces until we're left with air, earth, fire, and water. Since the early 20th century, physicists have broken up matter into smaller and smaller pieces to find many different subatomic particles instead — as many as to fill a zoo.

- Rather than a ‘smaller’ particle, contemporary particle physicists are concerned with elusive particles.
- More energetic particles often break down into ones with less energy. The greater the difference in energy between that of a particle and the products of its decay, the less time the particle exists in its original form and more quickly it breaks down. By the mass-energy equivalence, a more massive particle is also a more energetic particle. And the most massive particle scientists have found to date is the top quark.



- It is 10-times heavier than a water molecule, about three-times as much as a copper atom, and 95% as much as a full caffeine molecule.
- As a result, the top quark is so unstable that it could break up into lighter, more stable particles in less than 10–25 seconds.
- The top quark’s mass is very important in physics. A particle’s mass is equal to the sum of masses contributed from multiple sources. An important source for all elementary particles is the Higgs field, which pervades the entire universe. A “field” is like a sea of energy and excitations in the field are called particles. This way, for example, an excitation of the Higgs field is called the Higgs boson just as an electron can be considered to be an excitation of an ‘electron field’.
- All these fields engage with each other in specific ways. When the ‘electron field’ interacts with the Higgs field at energies much less than 100 GeV, for example, the electron particle will acquire some mass. The same thing goes for other elementary particles. (GeV, or giga-electron-volt, is a unit of energy used in the context of subatomic particles: 1 joule = 6.24 billion GeV.)
- If the top quark is the most massive subatomic particle, it is because Higgs bosons interact most strongly with it. By measuring the top quark’s mass as precisely as possible, then, physicists can learn a lot about the Higgs boson as well.

Higgs Boson

- The Higgs boson is a crucial particle in the realm of particle physics, acting as the fundamental force-carrying particle of the Higgs field. This field is responsible for giving fundamental particles, such as electrons and quarks, their mass.
- The concept of the Higgs field was first introduced in the mid-1960s by physicist Peter Higgs, after whom the particle is named.
- The Higgs boson was finally discovered on July 4, 2012, at the Large Hadron Collider (LHC), the most powerful particle accelerator in the world, located at CERN, the European particle physics laboratory in Switzerland.

Understanding Bosons and Their Role

- A boson is a type of particle known as a "force carrier," which facilitates interactions between other particles. For instance, when two electrons interact, they exchange a photon, the force-carrying particle of the electromagnetic field.
- Quantum field theory describes the behavior of particles at the microscopic level, where bosons can also be understood as waves in a field. For example, a photon is both a particle and a wave arising from an excited electromagnetic field, while the Higgs boson is the particle or "quantized manifestation" that emerges from the Higgs field when it is excited.

- The discovery of the Higgs boson confirmed the existence of the Higgs field and the mechanism by which particles acquire mass, completing the Standard Model of particle physics.

Significance in the Standard Model

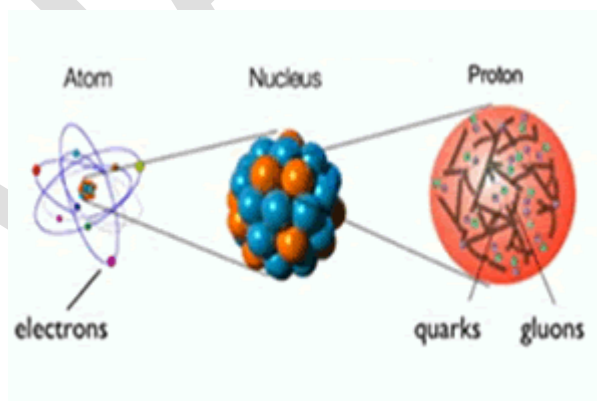
- The Higgs boson is one of the 17 elementary particles that make up the Standard Model of particle physics, which is the most accurate theory explaining the behavior of the universe's fundamental components.
- Due to its essential role in subatomic physics, the Higgs boson is often referred to as the "God particle," highlighting its importance in the field.

Key Features of the Higgs Boson

- The Higgs boson has a mass of approximately 125 billion electron volts, making it about 130 times more massive than a proton.
- It is unique among elementary particles because it is chargeless and has zero spin, which is the quantum mechanical equivalent of angular momentum.
- The Higgs boson is the only elementary particle with no spin, distinguishing it from other particles in the Standard Model.

Higgs Field and Mass Generation

- The Higgs field generates mass through its interaction with other particles, a process known as the Brout-Englert-Higgs mechanism, named after the physicists who proposed it.
- Particles that interact or "couple" more strongly with the Higgs field are given greater masses. Interestingly, the Higgs boson itself acquires its mass through its interaction with the Higgs field.
- However, not all particles gain mass through the Higgs field. For instance, the photon, the basic particle of light, does not acquire mass from the Higgs field because spontaneous symmetry breaking does not occur for photons as it does for other force-carrying particles.
- The mass-granting mechanism of the Higgs field primarily applies to fundamental particles like electrons and quarks. In contrast, composite particles like protons, which are made up of quarks, derive most of their mass from the binding energy that holds their constituent particles together.



META launches new AI text-to-3D generator

Context: Meta has introduced a new AI tool that can generate or retexture 3D objects in under a minute.

Key Highlights

- The tool combines two of Meta's existing models, AssetGen that generates 3D objects and TextureGen for texturing. The combination of the two makes higher-quality 3D generation for immersive content.
- Retexturing 3D objects essentially means applying details and relighting objects to make them hyper-realistic.
- In the first 30 seconds, AssetGen generates a 3D object with texture and Physical Based Rendering (PBR) from a prompt. Then, TextureGen optimises the texture of the generated object within the next 20 seconds. Users can also give additional textual inputs for retexturing previously made 3D shapes.

- While Adobe Firefly and Midjourney have similar tools to generate 3D objects, Meta’s 3D Gen can build 3D models with underlying mesh structures that support physically based rendering -- meaning these objects can be used in real-world modelling and application rendering.

Spiral galaxies evolved 4 billion years sooner than expected

Context: An important idea in astronomy is that as the young universe cooled, it accumulated hot gas that clumped and gravitated to form galaxies. As these early galaxies cooled, they formed hot, thick disks that ultimately became thinner and formed spiral arms.

Key Highlights

- A new study has revealed more spiral galaxies in the universe’s youth than astronomers had expected.
- The universe is about 13.8 billion years old and is home to different kinds of galaxies, from spiral to elliptical and those with or without bulges. Astronomers previously believed spiral galaxies formed about 6 billion years ago, but a new study by a group of astronomers from the University of Missouri in the U.S. has called this belief into question.
- An important idea in astronomy is that as the universe cooled down from a dense plasma state, it contained more and more hot gas. They formed clumps of matter that eventually gravitated to become galaxies. These early galaxies had irregular shapes and lacked disks. But as they cooled as well, they formed hot, thick disks that later became thinner and finally spiral ‘arms’ — a process that took billions of years.
- This theory is now suspect. Astronomers routinely see stars forming in real-time but since all the galaxies have already formed, they use a sort of astronomical archaeology to study them.
- The first step is to use light of the infrared and optical wavelengths to detect galaxies in the early universe. Since older galaxies are harder to detect, we need powerful telescopes. Ideally, astronomers would like to observe light emitted when the universe was around 500 million years old, when the galaxies were thought to be forming.
- NASA’s James Webb Space Telescope, launched in 2021, has helped astronomers gaze much deeper into the universe’s past than before. The University of Missouri team used the telescope to study a cohort of 873 galaxies individually and identified at least 216 spiral galaxies. Some of them dated to 1.5 billion years after the universe’s birth.
- For the study, all six authors went through each image to classify it as spiral or non-spiral. Prerana Biswas, a postdoctoral researcher at the Indian Institute of Astrophysics, Bengaluru, who wasn’t involved in the study, said the method is crude but shows the result is free of human bias.
- Given the uncertainty in many of these models’ parameters, astrophysicists also use observations to refine them — and such refinements are often crucial.
- The Hubble Space Telescope is famed for its clear images of distant celestial objects and astrophysicists have used it to refine many models. But then some studies found signs that the early universe had many galaxies with disks. Astronomers think such galaxies were actively forming new stars.



- The new findings could also affect what astronomers understand about the rate of the formation of stars in the universe. For earth-like planets to form around stars, spiral galaxies should host a sufficient amount of elements heavier than iron in their spiral arms. When heavier stars die and blow up as supernovae, they throw out these elements into the arms. But if something else gets in the way of star formation — such as the influence of black holes — then not enough stars will form in the first place.
- As the universe aged, spiral galaxies became more populous even around the time star formation peaked. Over time, spiral gases have less and less gas in their spiral arms, slowing the formation of more stars. But collisions between galaxies, like the one predicted to occur between our Milky Way and its neighbouring Andromeda in about 5 billion years, could restart this process into a second life while also creating an elliptical galaxy.

Spiral Galaxies



Spiral galaxies are a type of galaxy characterized by their twisting, spiral structure, which often makes them visually striking. They are predominantly composed of hot, young stars and are the most common type of galaxy observed in the universe.

- **Prevalence and Examples:** About 60% of all known galaxies are spiral galaxies. The Milky Way, which includes Earth and our solar system, is a prominent example of a spiral galaxy.
- **Central Bulge:** The center of a spiral galaxy features a bulge composed of older, dimmer stars. This region may also contain a supermassive black hole.
- **Bar Structure:** Around two-thirds of spiral galaxies, including the Milky Way, have a bar-shaped structure running through their center.
- **Spiral Arms:** Extending from the central bulge, the galaxy's disk is divided into spiral arms. These arms are rich in gas, dust, and young, bright stars that often burn out quickly.
- **Evolution:** Spiral galaxies are believed to gradually transform into elliptical galaxies as they age, losing their distinctive spiral structure over time.



What is the Hubble Space Telescope?

- Named after the renowned astronomer Edwin Hubble, the Hubble Space Telescope is a large, space-based observatory launched by NASA.
- Launch and Deployment: It was deployed by the space shuttle Discovery in 1990.
- Observation Range: Hubble observes across a broad spectrum, from ultraviolet through visible light to near-infrared, revolutionizing our understanding of the universe with its extensive imaging and data collection capabilities.

Radiation biodosimetry

Context: After a large-scale radiological event, such as an Improvised Nuclear Device or reactor accident, it is important to identify those individuals who have received a significant dose of radiation and would benefit from one of the drugs that have been recently approved to treat radiation sickness.

Key Highlights

- Biodosimetry Allows one to determine the amount of radiation to which an individual was exposed based on changes in blood, urine, or hair. It would be particularly useful in a radiological event where the exposed individuals do not carry any personal radiation monitoring devices.
- The gold standard biodosimetry assay is measurement of chromosome aberrations, in white blood cells. When irradiated, DNA in the blood cells gets broken and is repaired within a few hours. In some cases, there is an incorrect repair, joining fragments from different chromosomes, forming a ‘DicentricChromosome (DC)’ – a chromosome with two centromeres. Because a DC can only be formed by radiation, measuring these chromosomes is a specific and sensitive indicator of past radiation exposure. In order to measure DC, lymphocyte from the exposed individuals is cultured to begin division and then the chromosomes are spread on a slide and stained.
- The DC are then counted either while looking down a microscope directly or in images captured at high magnification. Due to the need for culturing the cells followed by the analysis of few hundred metaphases, the overall time taken to produce a result is about 2-3 days. Over the past decades, the DicentricChromosome Assay (DCA) has been successfully employed in many radiation accidents, where the number of exposed people is small. However, as implemented in a clinical cytogenetic lab, the DCA is tool intensive to be practically applied in a larger event, with a throughput of a few tens of samples per day.
- A second, slightly simpler, assay is the Cytokinesis Block Micronucleus Assay (CBMN), where the white blood cells are made to divide, but arrested before division is complete. This forms a cell with two nuclei. Following radiation exposure some DNA will be ejected during division forming a “micronucleus”. This assay is slightly simpler to perform and score but overall time to answer is longer (~3 days), as it requires longer culturing of the cells.
- Measurement on the phosphorylated form of specific histone protein, an inherent component of chromosomes known as the “gamma-H2AX” assay, has the potential to segregate the exposed from that of unexposed and those exposed to low dose versus high dose without culturing cells, within 6-8 hours of time. This assay needs to be performed within 24 hours owing to the kinetics of histone phosphorylation.
- Over the last 20 years the Center for Radiological Research at Columbia University has developed automatable versions of the major biodosimetry assays, performed in 96-well plates. The use of 96-well plates allows a significant increase in throughput as 96 samples are processed simultaneously.
- The first iteration of the Rapid Automated Biodosimetry Tool (RABiT) used custom robotics to perform the CBMN assay with a target throughput of 6000 samples per day per machine. More recently we have implemented both the CBMN and DCA assays on several commercial High Throughput Screening (HTS) platforms, dubbed “RABiT-II”. HTS systems use robotics, liquid handling devices and automated microscopes to quickly conduct millions of chemical, genetic, or pharmacological tests. In the pharmaceutical industry, these systems leverage automation to quickly assay the biochemical activity of many drug-like compounds. In academia, the same systems are increasingly used to arrive at fundamental biological insights rather than drug candidates.

What is Biodosimetry?

Biodosimetry assesses radiation exposure by examining biological changes in samples such as blood, urine, or hair. It is particularly valuable when individuals lack personal radiation monitoring devices.

- The broad deployment of HTS platforms would allow significantly increased throughput for performing biodosimetry, with each machine capable, in principle, of analyzing thousands of samples per day. A second major advantage is reliability. A commercial system with such diverse deployment capabilities undergoes rigorous quality control during development, manufacture and most importantly maintenance.
- Indeed, the quality of HTS data is very high and often better controlled than data generated by lower-throughput biological tests. Because these systems are in continuous operation, they also have a broad base of trained users and maintenance personnel ensuring successful operation during a crisis. This would obviously not be the case with a custom robotic system which would likely be in storage for years or decades before use.

Traditional Biodosimetry Technique

Technique	Description	Advantages	Limitations
Dicentric Chromosome Assay (DCA)	Known as the "gold standard," this technique measures chromosomal aberrations in white blood cells to assess radiation exposure.	- Highly specific and sensitive	- Labor-intensive, making it less suitable for large-scale events.
Cytokinesis-Block Micronucleus Assay (CBMN)	This method detects micronuclei that form due to DNA ejection during cell division following radiation exposure.	- Faster than DCA	- Requires extended cell culturing, with results taking about three days.

AI comes to the rescue of elephants

Context: Recent deployment of Gajraj by Indian Railways has highlighted the use of technology in elephant conservation efforts.

Key Highlights

- The elephant population in India stands at 25,000 to 30,000, earning the species an “endangered” status. Their range today is estimated to be only 3.5% of what it was earlier, being restricted to the Himalayan foothills, the northeast, some forests of central India, and hilly forests of Western and Eastern Ghats.
- Of particular concern is the fragmentation of their habitat: small, forested areas providing sustenance for elephants, interspersed with human-developed landscapes. Fragmentation can also lead to restricted breeding choices. This creates genetic bottlenecks and, in the long term, a reduction in the fitness of the herds.
- Frequent movement of elephants between their habitable zones brings them into contact with roads and railway lines. The range of a female elephant covers about 500 sq. km, and traveling over so much distance in the age of fragmented habitats makes a road or railway crossing very likely.
- Fortunately, not all elephant tracks pose these hazards. The elephants of Bandipur, Mudumalai and Wayanad go on a seasonal summer migration. They head for the Kabini Dam backwaters for both water and green grass. Studies have identified that 18 elephant routes exist between Tamil Nadu and Kerala.
- In a Canadian study attempting to mitigate animal-train collisions, train-triggered warning systems comprising flashing lights and bell sounds were installed at various locations along the tracks. These signals, activated 30 seconds before train arrival, were aimed at conditioning animals to associate the warnings with approaching trains.
- Cameras recorded animal responses to trains with and without warning signals, on both straight and curved tracks. Large animals, such as elks (from the deer family) and grizzly bears left the tracks about 10 seconds before the train arrived when there was no warning system, and about 17 seconds before the train arrived when warning bells and lights were deployed (Transportation Research, vol 87, 2020).

- The response to an approaching train is less in curved sections of the track, probably due to reduced visibility. In such places, sound is used by animals. However, the ability to hear an approaching train is significantly influenced by factors such as high train speed.
- Wildlife corridors are a solution—these managed lands allow for migration with minimal human contact. One good example is the Motichur-Chilla corridor in Uttarakhand, which allows the flow of elephant genes between the Corbett and the Rajaji National Parks. However, there is always the risk of conflict with humans, with elephants occasionally feasting on crops, or crossing roads and railway tracks.

Functionality of Gajraj Software

- The software leverages AI and OFC to monitor the area within 200 meters of the railway tracks. It triggers alerts when any questionable movement is detected.
- Vibrations caused by the movement of elephants along the railway tracks create variations in the optical signals carried by the OFC. These signal disruptions are recognized by the software as potential threats.
- Gajraj can accurately distinguish between different types of movements, identifying whether the activity is caused by elephants, other animals, or humans.
- The system is also capable of determining the number of animals present at the site of detection.
- Alerts generated by the software are promptly sent to the locomotive pilot, control room personnel, and the section station master, ensuring a swift response.

Gajraj Software

- Gajraj is an indigenous software developed to enhance the safety of railway operations by detecting and alerting locomotive pilots of any suspicious activity on or near railway tracks.
- The software utilizes advanced technology, including optical fibre cable (OFC) and artificial intelligence (AI), to monitor and identify potential threats, particularly in regions where elephant movements are common.

Urgency of Implementing Gajraj

- Data from the Railway Ministry reveals that 45 elephants have died due to train accidents in the past three years alone.
- Over the last decade, approximately 200 elephants have lost their lives in collisions with trains, highlighting a critical threat to both wildlife and railway safety.
- A recent tragic incident in Alipurduar district, West Bengal, where a goods train collided with a mother elephant and her two calves, underscores the urgency of implementing protective measures like Gajraj.

Implementation of Gajraj Software

- The AI-based Gajraj software has undergone successful testing in Assam and is set to be deployed across 700 kilometers of elephant corridors in various states over the next eight months.
- The implementation is estimated to cost Rs 181 crore, reflecting the commitment to protecting wildlife while maintaining the efficiency of railway operations.

Significance of Gajraj

- Gajraj Suraksha is a type of Intrusion Detection System (IDS) based on an AI algorithm that boasts a 99.5% success rate in detecting potential collisions, offering a crucial solution to the problem of elephant-train collisions.
- One of the key strengths of this technology is its cost-effectiveness. Despite covering an extensive network of 700 kilometers of railway tracks, the total implementation cost is Rs 181 crore, making it a viable option for widespread deployment across Indian Railways.

- The Indian Railways plans to extend this solution to all elephant corridors in the country within the next eight months, marking a significant step forward in wildlife protection and railway safety.
- The introduction of this indigenous technology represents a major advancement in balancing modern infrastructure with environmental conservation, demonstrating how innovative solutions like Gajraj Suraksha can help preserve India's rich biodiversity.

LUCA

Context: As mysteries go, a close second to the origin of life is how life-forms started to evolve. Researchers believe bacteria, archaea, and eukarya all originated from the last universal common ancestor. There is no fossil evidence of its existence, but the fact that modern genomes share so many features provides some clues.

Recent Research Findings on LUCA's Age and Genome

- Researchers at the University of Bristol and Exeter have estimated that the Last Universal Common Ancestor (LUCA) originated approximately 4.2 billion years ago. This estimate is nearly 1 billion years earlier than previously believed.
- The evidence for this earlier origin was derived from the Candelabra hydrothermal vent located 3.3 km deep on the Mid-Atlantic Ridge.
- LUCA is believed to have had a small genome consisting of about 2.5 million bases. This genome encoded approximately 2,600 proteins, which were sufficient for LUCA's survival in its unique environmental niche.
- The metabolites produced by LUCA may have contributed to the formation of a secondary ecosystem that supported other microbial life forms.
- The presence of immunity genes in LUCA's genome suggests that it had to defend itself against viruses, indicating an early evolutionary arms race.

Evidence Verification using the Miller-Urey Experiment

- In 1952, Stanley Miller and Harold Urey conducted an experiment at the University of Chicago. They simulated lightning strikes on a mixture of methane, ammonia, and water, conditions thought to resemble those of early Earth.
- The experiment resulted in the formation of amino acids, demonstrating that complex organic compounds could arise from inorganic compounds under certain conditions. This experiment supports the idea that LUCA could have originated from such primordial conditions.

Which is Older: LUCA or Fossils?

- The estimated origin of LUCA at 4.2 billion years ago suggests that it predates the earliest fossil records by almost 1 billion years.
- Fossil evidence from the Pilbara Craton in Australia indicates that life emerged around 3.4 billion years ago. However, the study's findings push back the origin of life on Earth, suggesting that LUCA existed well before these fossils were formed.

Internal Security

At ₹1.27 lakh crore, defence production registered a new high in 2023-24, says Centre

Context: India has recorded the highest-ever growth in indigenous defence production in value terms in the financial year (FY) 2023-24.

Key Highlights

- As per the data received from all Defence Public Sector undertakings (DPSUs), other PSUs manufacturing defence items, and private companies, the value of defence production in the country has gone up to a record-

high figure of ₹1,26,887 crore, reflecting a growth of 16.7% over the defence production of the previous financial year

- The feat has been achieved due to the policy reforms, initiatives and ease of doing business brought in by the government in the past 10 years with a focus on attaining self-reliance
- The Make in India programme is crossing new milestones, year after year, under the leadership of Prime Minister Narendra Modi.
- The government is committed to creating more conducive regime for developing India as a leading global defence manufacturing hub,” Defence Minister Rajnath Singh said
- In addition, the spiralling defence exports have contributed tremendously to the overall growth in indigenous defence production
- In the past five years (since 2019-20), the value of defence production has been increasing steadily, and has grown by over 60%.

Make in India Programme

- Launched in 2014, the Make in India programme is a transformative initiative aimed at positioning India as a leading global hub for manufacturing and investment.
- The initiative is spearheaded by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry, Government of India.
- Make in India serves as an open invitation to investors and partners worldwide, encouraging them to contribute to and benefit from the growth story of a ‘New India.’
- The programme has achieved significant milestones across 27 sectors under the Make in India 2.0 initiative, which includes strategic focus areas in both manufacturing and services.

Indigenisation of Defence

- Defence indigenisation refers to the process of developing and manufacturing defence equipment within a country to reduce reliance on imports and achieve self-reliance in military capabilities.
- The Defence Research and Development Organisation (DRDO) and Defence Public Sector Undertakings (DPSUs) are the primary organizations driving the vision of Atma Nirbhar Bharat (self-reliant India) in the defence sector.

Historical Milestone

The year 1983 marked a pivotal moment in India's defence indigenisation efforts with the government's approval of the Integrated Guided Missile Development Program (IGMDP). This program aimed to develop five key missile systems:

- Prithvi: Surface-to-surface missile.
- Akash: Surface-to-air missile.
- Trishul: Naval version of the Prithvi missile.
- Nag: Anti-tank missile.
- Agni: Ballistic missile.

Challenges Related to the Defence Sector in India



- **High Dependence on Imports**
 - **Issue:** India's defence sector heavily relies on imported equipment, making it vulnerable to delays caused by geopolitical tensions.
 - **Example:** The ongoing Russia-Ukraine conflict has delayed the delivery of S-400 Air Defence Systems, part of a deal signed in 2018. Additionally, India is awaiting new deals, including 12 Sukhoi-30MKI aircraft and 21 MiG-29 fighter jets for the Indian Air Force.
- **Limited Private Sector Participation**
 - **Problem:** The private sector's role in defence production is limited by an inadequate financial framework, restricting the sector's access to modern design, innovation, and product development.
- **Lack of Critical Technology**
 - **Challenge:** The absence of robust design capabilities, insufficient investment in research and development (R&D), and the inability to manufacture critical subsystems and components hinder indigenous manufacturing efforts.
 - **Relationship Weakness:** The fragile relationship between R&D institutions, production agencies (public or private), and end-users exacerbates this issue.
- **Fragmented Stakeholder Coordination**
 - **Obstacle:** India's defence manufacturing capacity is hampered by overlapping jurisdictions between the Ministry of Defence and the Ministry of Industrial Promotion, leading to inefficiencies in decision-making and implementation.

Recent Indigenous Initiatives

Initiative	Description
INS Vikrant	India's first homegrown aircraft carrier, representing a significant achievement in the nation's shipbuilding expertise.
Dhanush	A long-range artillery gun designed to boost India's land warfare firepower.
Arihant	A nuclear-powered submarine, highlighting India's strategic underwater capabilities.
Prachand	A light combat helicopter built for flexible operations across diverse and challenging environments.

Health

Bird flu cases in Alappuzha call for urgent measures, Minister tells Kerala Assembly

Context: Drawing attention to the grave situation in Alappuzha district arising from the bird flu outbreak, Minister for Animal Husbandry J. Chinchurani informed the Kerala Assembly that urgent measures were needed to tackle the situation.

H5N1 Bird Flu

- Avian influenza A(H5N1), commonly known as H5N1 Bird Flu, is a highly contagious virus that primarily affects birds but can also infect mammals.
- The H5N1 virus was first identified during an outbreak in China in 1996 and quickly mutated into a highly pathogenic strain.
- Since 2020, H5N1 has spread extensively across continents, including Europe, Africa, Asia, North and South America, and even reaching mainland Antarctica.
- India encountered its first H5N1 outbreak in 2015, with cases reported in the states of Maharashtra and Gujarat.

Impact on Animals

- The virus has had a devastating impact on wildlife, particularly affecting wild bird species, including endangered ones like the California condors.

- While chickens were initially the primary species affected, the virus has now spread to other species, including marine mammals such as sea lions and dolphins, leading to mass fatalities in areas like Chile and Peru.
- Land mammals, including foxes, pumas, bears in North America, and farmed minks in Spain and Finland, have also contracted the virus.

Human Risk and Factors Influencing Spread

- Though rare, humans can become infected with H5N1 Bird Flu, usually through direct contact with infected birds.
- The spread of the virus may be exacerbated by climate change, which alters bird migration patterns and increases interactions among different bird species, facilitating the virus's transmission.

World Health Organization (WHO) Risk Assessment

- The H5N1 virus does not easily infect humans, but sporadic cases have been reported, primarily linked to exposure to infected poultry.
- Human-to-human transmission remains rare, though the potential for additional cases persists, particularly in regions where the virus is endemic among poultry.
- WHO assesses the overall risk to the general population as low, but underscores the importance of ongoing surveillance and risk management to prevent outbreaks.

Preventive Measures and Recommendations

- WHO advises the public to avoid high-risk environments, such as live animal markets, and to practice proper hand hygiene to reduce the risk of infection.
- It is crucial to report any sick animals promptly and to avoid consuming poultry that appears sick or unwell.
- Individuals who have been exposed to infected birds or contaminated environments should seek medical attention immediately to prevent complications.

Two vaccines that brought us to the brink of eradicating polio

Context: In 1948, microbiologists John F. Enders, Thomas Weller, and Frederick Robbins were trying to find a method to grow different viruses in cell cultures. In a routine experiment involving human muscle and skin cells, they decided to test one more virus along with the ones they were already testing, since a vial containing that virus was in their freezer. To their surprise, the virus proliferated and grew well with their method. Their work eventually solved one of the most important scientific problems of the time.

Key Highlights

- In the mid-20th century, researchers widely believed the poliovirus could only be grown in cultures of nerve cells. This misconception was propagated by their inability to infect rhesus macaques by the oral route, and only by directly injecting the virus into the nervous system. At the time, they didn't know the problem was with the poliovirus strains they were using.
- The poliovirus has only one natural host — humans — and many of the early strains of the virus were isolated from humans and wouldn't infect non-human primates. Since scientists kept passing the virus through the brain tissues of macaques, it adapted to that mode of infection.
- The inability to culture polio in non-nerve cells was a major roadblock to developing a polio vaccine. But thanks to Enders and his team, the poliovirus could now be mass-produced for vaccine research.
- Polio eradication is one of the top priorities of the World Health Organisation (WHO). Since Africa was declared polio-free in August 2020, the wild poliovirus has been restricted to rural pockets of Afghanistan and Pakistan. But according to a recent report in Science, the virus is beginning to reappear in big cities in these two countries.

- This reemergence is a result of vaccine hesitancy due to misinformation, conflict, poverty, and limited access to these isolated regions. The WHO's Global Polio Eradication Initiative is thus set to miss its deadline of eradicating polio by the end of 2024.
- The initiative's failure in Afghanistan and Pakistan casts a long shadow on an otherwise remarkable achievement: polio having been eradicated everywhere else. This feat was driven by two vaccines, both invented within a year of each other. They are administered differently, provide distinct levels of protection, contain different components, and target different compartments of the immune system. Yet they both played equally invaluable roles in the global fight against polio.
- In late 1949, Enders received a letter requesting the starting material and the procedure his team had perfected to grow the poliovirus in culture. At the time, Enders & Co. were discussing their own future work. While his younger colleagues, Weller and Robbins, wanted to use the method to foray into vaccine research, Enders said such a job was ill-suited for basic science researchers like themselves. They handed over the sample and the procedure to the letter's author, the director of the Virus Research Laboratory at the University of Pittsburgh, Jonas Salk.
- Salk made the first successful vaccine for polio. He grew the virus using the method Enders and his team had developed, inactivated it by treating it with formaldehyde, and injected it into his test subjects. The fragments of the inactivated virus were able to induce immunity in their bodies. Importantly, since the vaccine was introduced into the muscle, it generated systemic immunity.
- The immune system has two main parts: the systemic and the mucosal. The systemic component includes the blood, the brain, and all other organ systems. The mucosal component includes the inner linings of the digestive and respiratory systems, the urogenital tract, and the eyes. These regions are lined with mucous membranes that provide an additional layer of protection, as they frequently come into contact with the external environment.
- Soon after Salk made his inactivated polio vaccine (IPV), Albert Sabin developed another vaccine that contained live polio strains weakened by growing them serially in macaque cells, making them unfit for human infection. Since Sabin's vaccine contained live virus particles, it had to rely on its natural mode of infection and was therefore administered orally. This was the oral polio vaccine (OPV).
- Since the OPV went into the stomach, it induced a powerful protective mucosal immune response right where the virus would have to begin its infection.
- The OPV had multiple advantages over the IPV. First, the vaccine induced a protective response at the viral entry site — the gut— allowing it to provide a much greater degree of protection relative to the IPV. Second, the OPV was administered orally and didn't require syringes or trained personnel for its administration.

Polio

Polio, also known as poliomyelitis, is described by the World Health Organization (WHO) as a highly contagious viral illness that primarily targets young children. This disease attacks the nervous system, leading to severe disability and, in some cases, can be life-threatening. Polio is caused by the poliovirus, which can result in paralysis and other serious health complications.

What is polio

- Poliomyelitis (polio) is a highly infectious viral disease, mainly affecting children
- According to WHO, the virus is transmitted from person-to-person, mainly through the faecal-oral route

STRAINS

- There are three types of polio virus strains — P1, P2 and P3
- P2 was eradicated globally in 1999
- India attained a polio free status in 2014 after successfully eliminating the wild P1 and P3 strains



VACCINATION SCHEDULE

- OPV:** At 6 weeks, 10 weeks and 14 weeks
- IPV:** At 6 weeks and 14 weeks
- OPV booster:** Between 16 and 24 months

- The world has used both vaccines in the fight against polio. While some countries, such as Norway, Sweden, Finland, and Iceland, relied exclusively on the IPV, most countries have used a combination of the two. The latter countries prefer the OPV for its superior protection and ease of administration. When the number of natural polio cases drops to zero, they switch to IPV for its enhanced safety.

Development of the Inactivated Polio Vaccine (IPV)

- Jonas Salk pioneered the first successful polio vaccine by growing the poliovirus, inactivating it, and then injecting it into test subjects.
- The IPV worked by generating systemic immunity, as it was administered into the muscle, which allowed the body to build defenses against the virus without the risk of causing the disease.

Development of the Oral Polio Vaccine (OPV)

- Albert Sabin advanced the development of the OPV, which used live, weakened strains of the poliovirus that were administered orally.
- The OPV was particularly effective because it induced a strong protective mucosal immune response in the gut, the primary site where the poliovirus begins its infection, thereby preventing the virus from establishing itself in the body.

Comparison of Inactivated Polio Vaccine (IPV) and Oral Polio Vaccine (OPV)

Aspect	Inactivated Polio Vaccine (IPV)	Oral Polio Vaccine (OPV)
Advantages	- Safety: Made from killed or inactivated poliovirus, eliminating the risk of causing polio.	- Cost-Effective: Less expensive to produce and administer than IPV.
	- Immunocompromised Use: Safe for use in immunocompromised individuals as it does not contain live virus.	- Dosing Efficiency: Requires fewer doses (often just one or a few) to provide effective immunity.
	- Long-Lasting Immunity: Provides durable immunity with fewer booster doses needed.	- Mucosal Immunity: Offers stronger mucosal immunity in the gut, which is crucial for interrupting virus transmission.
Disadvantages	- Higher Cost: More expensive to produce and administer compared to OPV.	- Risk of VDPV: Contains live, weakened poliovirus, which in rare instances can mutate and lead to vaccine-derived poliovirus (VDPV) outbreaks.
	- Multiple Doses Required: Generally requires a series of 2-4 shots to achieve full immunity.	- Not for Immunocompromised Individuals: OPV is not recommended for use in immunocompromised individuals due to the risk posed by the live virus.
	- Limited Mucosal Immunity: Does not provide as strong a mucosal immune response as OPV, potentially limiting its ability to stop virus transmission.	- Shorter Duration of Immunity: Immunity derived from OPV may not last as long as that from IPV, requiring more frequent administration to maintain protection.

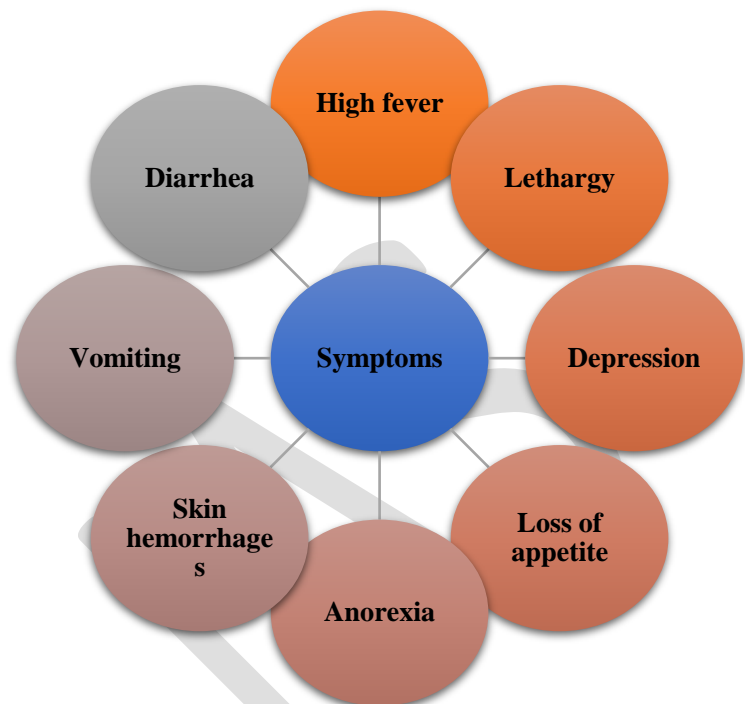
African Swine Fever outbreak reported in Kerala's Thrissur

Context: As many as 310 pigs at Madakkathara grama panchayat in Kerala's Thrissur are set to be culled after an outbreak of African Swine Fever was reported at a private farm in the 14th ward of the local body. The highly contagious swine disease has been confirmed in the pigs at the farm in Veliyanthara.

African Swine Fever (ASF)

- African Swine Fever (ASF) is a highly contagious and fatal disease affecting both domestic and wild pigs.

- It leads to a severe form of hemorrhagic fever.
- First identified in Africa during the 1920s, ASF has historically caused outbreaks across Africa, parts of Europe, South America, and the Caribbean.
- Since 2007, ASF has been reported in numerous countries across Africa, Asia, and Europe, impacting both domestic and wild pig populations.
- The disease has a high mortality rate, ranging between 95% and 100%. There is no cure, so controlling its spread requires culling affected animals.
- ASF does not pose a threat to human health as it only transmits between animals.
- The World Organisation for Animal Health (OIE) includes ASF in its Terrestrial Animal Health Code.



Clinical Signs of ASF

- ASF can manifest in three forms: chronic, sub-acute, or acute.
- In the acute form, pigs may exhibit:
 - A high fever (around 40.5°C or 105°F)
 - Lethargy and loss of appetite
 - Vomiting
 - Diarrhea, which may be bloody
 - Reddening or darkening of the skin, especially on the ears and snout
 - Mucous discharge from the eyes
 - Difficulty in breathing and coughing
 - Abortion, stillbirths, or weak litters
 - General weakness and reluctance to stand.

About World Organisation for Animal Health (WOAH)

Formerly known as the Office International des Epizooties (OIE), WOA is an intergovernmental organization dedicated to enhancing global animal health.

It has 182 member countries, including India.

WOAH creates normative documents to help member countries protect against diseases and pathogens.

One of its key publications is the Terrestrial Animal Health Code.

WOAH's standards are recognized by the World Trade Organization (WTO) as international sanitary rules.

The organization is headquartered in Paris, France.

Transmission of ASF

- Direct contact with infected pigs, their feces, or body fluids.
- Indirect contact through contaminated equipment, vehicles, or individuals moving between pig farms with poor biosecurity.
- Consumption of infected pig meat or meat products.
- Biological vectors, such as ticks from the *Ornithodoros* species, can also transmit the disease.

Vector-borne diseases

Context: The Municipal Corporation of Delhi (MCD) on Wednesday launched an awareness campaign at Inderpuri in Karol Bagh to raise awareness about the detection and prevention of vector-borne diseases, including dengue, malaria, and chikungunya. However, the BJP hit out at the AAP-led MCD over its failure to submit weekly reports about vector-borne diseases, a practice which was discontinued in September last year.

Key Highlights

- Vector-borne diseases are human illnesses caused by bacteria, viruses, or parasites that are transmitted by vectors. Vectors are living organisms that can carry pathogens from one host organism to another, such as mosquitoes, ticks, fleas, and sandflies.
- The National Vector Borne Disease Control Programme (NVBDCP) is a centrally sponsored scheme of the Government of India that aims to prevent and control six vector-borne diseases in India:
- Malaria, Dengue, Chikungunya, Japanese Encephalitis, Kala-azar, and Lymphatic Filariasis.
- The Directorate of National Vector Borne Disease Control Programme (NVBDCP) is the central nodal agency for the NVBDCP.

Vectors

- Vectors are living organisms that play a crucial role in the transmission of infectious pathogens between humans or from animals to humans.
- These vectors often include bloodsucking insects, which ingest disease-causing microorganisms while feeding on the blood of an infected host, whether human or animal.
- After consuming the pathogen, it replicates within the vector, making the vector capable of transmitting the pathogen to a new host during subsequent bites or blood meals.
- Once a vector becomes infectious, it can continue to spread the pathogen throughout its lifespan with each new bite.

Vector-borne Diseases

- Vector-borne diseases are illnesses in humans caused by parasites, viruses, and bacteria that are spread by vectors.
- These diseases lead to over 700,000 deaths annually, with major diseases including malaria, dengue, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease, yellow fever, Japanese encephalitis, and onchocerciasis.
- The impact of these diseases is most severe in tropical and subtropical regions, where they disproportionately affect the poorest communities.
- Since 2014, there have been significant outbreaks of diseases such as dengue, malaria, chikungunya, yellow fever, and Zika, which have devastated populations, claimed numerous lives, and overwhelmed healthcare systems across many countries.
- Other vector-borne diseases like chikungunya, leishmaniasis, and lymphatic filariasis cause chronic pain, long-term morbidity, disability, and sometimes lead to social stigma.

- The spread of vector-borne diseases is influenced by a complex mix of demographic, environmental, and social factors. Global travel and trade, unplanned urbanization, and environmental changes have all contributed to the changing distribution of these diseases.

List of Vector borne diseases and Vectors

Vector	Disease Caused	Type of Pathogen
Mosquito		
Aedes	Chikungunya	Virus
	Dengue	Virus
	Lymphatic filariasis	Parasite
	Rift Valley fever	Virus
	Yellow Fever	Virus
	Zika	Virus
Anopheles	Lymphatic filariasis	Parasite
	Malaria	Parasite
Culex	Japanese encephalitis	Virus
	Lymphatic filariasis	Parasite
	West Nile fever	Virus
Aquatic Snails	Schistosomiasis (bilharziasis)	Parasite
Blackflies	Onchocerciasis (river blindness)	Parasite
Fleas	Plague (transmitted from rats to humans)	Bacteria
	Tungiasis	Ectoparasite
Lice	Typhus	Bacteria
	Louse-borne relapsing fever	Bacteria
Sandflies	Leishmaniasis	Parasite
	Sandfly fever (phlebotomus fever)	Virus
Ticks	Crimean-Congo haemorrhagic fever	Virus
	Lyme disease	Bacteria
	Relapsing fever (borreliosis)	Bacteria
	Rickettsial diseases (e.g., spotted fever and Q fever)	Bacteria
	Tick-borne encephalitis	Virus
	Tularaemia	Bacteria
Triatome Bugs	Chagas disease (American trypanosomiasis)	Parasite
Tsetse Flies	Sleeping sickness (African trypanosomiasis)	Parasite

National Vector Borne Disease Control Programme (NVBDCP)

The NVBDCP was established in 2003-04 through the consolidation of several previous programs, including the National Anti-Malaria Control Programme, National Filariasis Control Programme, and Kala Azar Control Programmes. It also includes initiatives for the prevention and control of Japanese B Encephalitis and Dengue/Dengue Hemorrhagic Fever. The Directorate of the National Anti-Malaria Programme (NAMP) serves as the primary agency overseeing the prevention and control efforts for major vector-borne diseases.

Legislations Under NVBDCP

National Anti-Malaria Programme	}	• Focuses on the prevention, control, and elimination of malaria.
Kala Azar Control Programme	}	• Aims to control and eventually eliminate Kala Azar, also known as visceral leishmaniasis.
National Filaria Control Programme	}	• Addresses the control and elimination of lymphatic filariasis.
Japanese Encephalitis Control Programme	}	• Targets the prevention and management of Japanese Encephalitis outbreaks.
Dengue and Dengue Hemorrhagic Fever Programme	}	• Focuses on controlling and managing outbreaks of Dengue Fever and Dengue Hemorrhagic Fever.

Fourth case of amoebic infection surfaces in Kerala

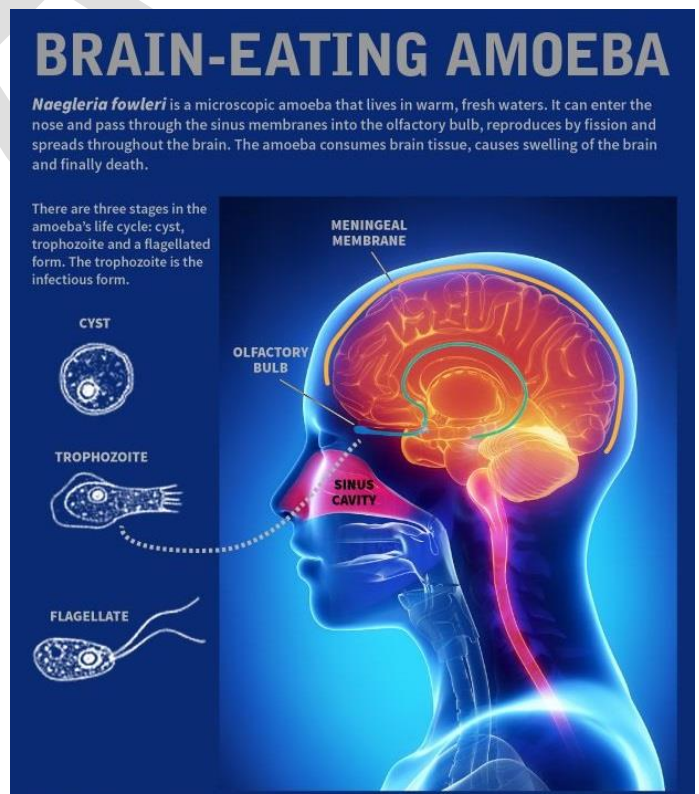
Context: Containment steps are on in Thikkodi grama panchayat and nearby Payyoli municipality in Kozhikode district after a 14-year-old boy was diagnosed with the fatal primary amoebic meningoencephalitis.

Key Highlights

- This is the fourth case of the infection in Kerala in the past two months — two children from Kozhikode and one each from Malappuram and Kannur. Three children have died of the disease in Kozhikode.
- Sources said, the boy is undergoing treatment at a private hospital in Kozhikode city. His condition is reported to be stable. The boy, a native of Thikkodi, had taken bath in a pond in an area in the the Payyoli municipality limits a few days ago. He was admitted to the hospital six days ago after he complained of uneasiness.

Primary Amoebic Meningoencephalitis (PAM)

- Primary Amoebic Meningoencephalitis (PAM) is a rare but often fatal brain infection caused by the amoeba *Naegleria fowleri*, commonly referred to as the "brain-eating amoeba."
- PAM is non-communicable, meaning it cannot be spread from person to person.



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(WhatsApp)

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Causative Agent

- **Naegleria fowleri:** This free-living amoeba is typically found in warm freshwater environments, such as lakes, rivers, hot springs, and inadequately maintained swimming pools.
 - The amoeba thrives in higher temperatures, up to 115°F (46°C), and can survive for short periods in these warm conditions.

What is an Amoeba?

- An amoeba is a single-celled organism that can change its shape by extending and retracting pseudopods.
- It is adaptable to various environments, particularly warm waters, which support its growth.

Mode of Infection

- **Entry Point:** The amoeba usually enters the human body through the nose, often during swimming or diving in contaminated water.
- **Pathway to the Brain:** Once inside the nasal passages, the amoeba travels up the olfactory nerve to the brain. This journey causes severe inflammation and destruction of brain tissue.
- The disease progresses rapidly, with death often occurring within about 5 days of symptom onset.

Symptoms

- **Early Symptoms (1-9 days after infection):**
 - Intense headache
 - Fever
 - Nausea and vomiting
- **Later Symptoms:**
 - Stiff neck
 - Confusion
 - Loss of balance
 - Seizures
 - Hallucinations

Diagnosis

- **Clinical Suspicion:** PAM is considered when a patient shows symptoms similar to meningitis but does not respond to conventional bacterial treatments.
- **Laboratory Tests:** Diagnosis is confirmed through the detection of *Naegleria fowleri* in cerebrospinal fluid (CSF), biopsy samples, or tissue specimens.

Treatment

- **Antimicrobial Therapy:** Treatment usually involves a combination of antifungal and antimicrobial drugs, including amphotericin B, rifampin, and miltefosine.
- **Supportive Care:** Intensive supportive care in a hospital setting is essential to manage the symptoms and improve chances of recovery.
- PAM cases are extremely rare, with approximately 381 cases reported worldwide since the disease was first identified in 1966. Despite treatment attempts with antifungal and antimicrobial drugs, success rates have been limited.

Prevention

- **Avoiding Contaminated Water:** Avoid swimming in warm freshwater bodies, especially during periods of high temperature.
- **Nasal Protection:** Use nose clips or avoid submerging the head in potentially contaminated water.
- **Water Treatment:** Ensure proper chlorination and maintenance of swimming pools and other recreational water sources to reduce the risk of contamination.

Environmental Factors

- **Warm Water:** *Naegleria fowleri* thrives in warm water conditions, with increased activity in higher temperatures.
- **Stagnant and Unhygienic Water:** Stagnant and poorly maintained water bodies are more likely to harbor the amoeba.

74-year-old man dies after Zika infection

Context: A 74-year-old resident of Shivamogga, who was found infected with Zika virus earlier, died on Friday. However, officials of the Health Department say the death could be owing to “other factors”, as he was under treatment for urinary infection and breathing problem. First fatal human case of H5N2 bird flu identified.

Zika Virus

- The Zika virus is a flavivirus transmitted primarily by mosquitoes, especially the *Aedes* species, with *Aedes aegypti* being a major vector.
- It can also be spread from mother to fetus during pregnancy, through sexual contact, and via blood transfusions and blood products.
- The Zika virus contains an RNA genome, which gives it a high potential to mutate.

Genomic Lineages



History

- The Zika virus was first discovered in 1947 in the Zika forest of Uganda from infected monkeys. Human cases were first recorded in 1952 in Uganda and Tanzania.
- Since 2007, outbreaks have been reported across Africa, the Americas, Asia, and the Pacific.
- Recent significant outbreaks have occurred in Indian states such as Kerala and Karnataka.

Symptoms	Zika virus infection is often asymptomatic, meaning many people do not show symptoms.
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Association with Other Conditions

- The Zika virus is linked to Guillain-Barre syndrome, a serious autoimmune disorder that affects the peripheral nervous system, leading to muscle weakness and other neurological symptoms.
- It is also associated with neuropathy and myelitis.
- The interaction between Zika and dengue viruses can complicate disease severity. Exposure to one virus can exacerbate the impact of the other, which poses challenges for vaccine development and public health management.

When symptoms are present, they typically include	Fever
	Joint pain
	Muscle pain
	Headache
These symptoms generally last between 2 to 7 days.	

Complications

- Infection with Zika virus during pregnancy can result in congenital malformations, including microcephaly, where the baby is born with a smaller than normal head and an underdeveloped brain.

Treatment and Prevention

- There is no specific treatment available for Zika virus. Management focuses on symptomatic relief and medical care to address worsening conditions.
- No vaccine exists to prevent Zika virus infection. Prevention strategies emphasize:
 - Protection from mosquito bites
 - Eliminating mosquito breeding sites
 - Implementing public health initiatives to control mosquito populations.

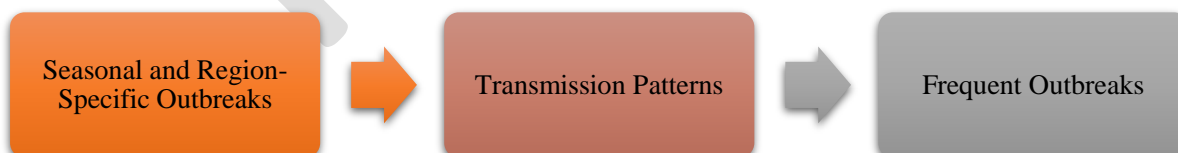
Nipah monoclonal antibody

Context: Nipah monoclonal antibody trials may begin in India in 2025

Key Highlights

- If the Indian drug regulator greenlights it, a human clinical trial to test the safety and efficacy of a novel Nipah monoclonal antibody MBP1F5, which might offer immediate protection to people at risk of infection against the deadly disease, might begin next year. A similar trial will be carried out in Bangladesh as well. Though trials on many vaccines are currently under way, there is no approved vaccine against the Nipah virus anywhere in the world. The Nipah virus has a 40% to 75% mortality rate in people who are infected.
- India and Bangladesh have been chosen for the trial as Nipah virus outbreaks have been reported in these two countries in recent years. Nipah outbreaks have occurred in Kerala in 2018, 2019, 2021 and 2023. In the case of Bangladesh, Nipah outbreaks have been occurring since 2001; the virus has been reported from 34 of 64 districts in Bangladesh with 341 cases detected so far and 242 deaths.
- The novel Nipah monoclonal antibody is currently undergoing a phase-1 clinical trial in the U.S., which is carried out by the U.S. Department of Defence.
- The trial in India and Bangladesh will begin “upon completion of the U.S. Department of Defence Phase-1 trial in the U.S”. “ServareGMP, Mapp and CEPI have already initiated discussions with public health and regulatory authorities in India and Bangladesh about the desire to conduct this trial.
- The number of participants who will be recruited for the clinical trial will depend on whether the clinical trial begins as a phase-1 or phase-2 trial in India. “But the intention is to recruit at least 200 participants
- Preclinical studies for pre-exposure prophylaxis have been completed. In these studies, conducted in animal models, the monoclonal antibody has demonstrated high potency against the Nipah virus, proving it effective at preventing the virus from entering the host cell and causing Nipah virus disease. In preclinical studies, this Nipah monoclonal antibody has been shown to be safe at all dose levels tested.
- The monoclonal antibody is designed to bind to the Nipah virus F protein, preventing the virus from entering a host cell and causing infection in people. This mechanism will offer protection against both known strains of Nipah virus (Bangladesh and Malaysia) and its closely related viral cousin, Hendra virus, for at least six months — enough time for vaccine immunity to build.

Current Trends in Nipah Virus (NiV) and India's Response



- Nipah virus outbreaks are frequently seasonal and region-specific, with recent concerns about increased human-to-human transmission making the virus potentially more contagious.

- Early outbreaks involved transmission from bats to pigs and then from pigs to humans.
- Recent outbreaks, particularly in India, have shown direct bat-to-human and human-to-human transmission.
- Bangladesh experienced multiple NiV outbreaks from 2001 to 2015.
- India, especially Kerala, has seen significant outbreaks, including the 2018 outbreak with 17 fatalities and the September 2023 outbreak with confirmed cases and two deaths.

India's Strategy for Nipah Virus Outbreaks



- Kerala's Health Department mobilized 19 core committees with support from the Indian government for containment and mitigation.
- Over 53,000 houses were surveyed during active house-to-house surveillance in containment zones.
- Nine villages in Kozhikode faced movement restrictions, mandatory mask-wearing, and social distancing measures.
- Tests were conducted on suspected cases and environmental samples by multiple laboratories.
- Emergency rooms were equipped with isolation rooms, ICU beds, and ventilators to manage cases effectively.
- Efforts included press releases, expert videos, a call center, and anti-fake news measures to inform the public.
- Response measures were developed with assistance from the WHO, building on strategies used during the 2018 outbreak.

Comprehensive Prevention Strategies



- Quarantine should be implemented in outbreak areas to prevent further transmission. Hospitals should follow strict infection control practices.
- Invest in technologies like drones for surveillance of bat populations and other innovative techniques to curb virus spread.
- Develop and enhance tools for early detection of the virus in communities and livestock.
- Adhere to strict guidelines in healthcare settings to prevent person-to-person transmission.
- Educate high-risk populations about the signs, symptoms, and risks of NiV.
- In areas with flying fox habitats (genus Pteropus), implement precautionary measures similar to those in known NiV outbreak zones.

Vasco da Gama's toxic legacy is now a 'pandemic' that kills 8 million globally

Context: Originally cultivated by Native Americans, tobacco, was introduced to South Asia by European traders. They were instrumental in spreading tobacco use in the region though smoking was alien to Indian ethos and culture.



Cultivation and Production of Tobacco



- **Origin and Spread:** Tobacco was originally cultivated by Native Americans and was introduced to Europe in the 16th century. European traders and colonizers, notably the Portuguese, Dutch, and British, later brought tobacco to South Asia.
- **Drought Tolerance and Livelihood:** Tobacco is a drought-tolerant crop that plays a crucial role in providing livelihoods to many people.
- **Exports and Employment:** It accounts for approximately 2% of India’s agricultural exports and supports over 45 million jobs across the country.
- **Taxation and Exports:** The tobacco industry is a significant source of revenue for the government, contributing over ₹22,000 crores annually through taxes and exports.

Implications Of Tobacco Use On Human Health

Category	Details
Health Issues	<p>Cancers: Major contributor to cancers such as lung, mouth, throat, oesophagus, pancreas, and bladder.</p> <p>Respiratory Diseases: Leads to Chronic Obstructive Pulmonary Disease (COPD), emphysema, and chronic bronchitis.</p> <p>Cardiovascular Problems: Increases risk of heart disease, stroke, and hypertension.</p> <p>Other Health Conditions: Linked to diabetes, infertility, weakened immune system, and pregnancy complications.</p>
Addiction	<p>Nicotine Dependency: Nicotine is highly addictive, significantly altering brain function and leading to severe addiction.</p>
Health Crisis	<p>Mortality and Morbidity: Responsible for over 1.2 million deaths annually in India and accounts for 27% of all cancers.</p> <p>Economic Costs: Healthcare and productivity losses due to tobacco-related illnesses amount to approximately ₹1.82 trillion annually.</p>

Report & Index

Education ‘remains the most effective contraceptive’

Context: According to United Nations estimates, India’s population which is currently 1.4 billion, will peak at 1.7 billion or so in 2064 before settling at 1.53 billion in 2100. But even though these numbers are staggering, data indicates that population growth is slowing —the total fertility rate has dipped below the replacement level of 2.1 and is projected to dip further.

Key Highlights

- With World Population Day (July 11) around the corner, experts say India’s thrust should be on ensuring the sexual and reproductive health of its young people.
- A study that referenced the National Family Health Surveys (NFHS) concluded that there is a significant association between years of schooling and total unmet needs for family planning and unmet needs for spacing.
- The results of the study are contained in the paper ‘Changes in discourse on unmet need for family planning among married women in India: evidence from NFHS-5.’ It was published in the Scientific Reports journal last year. According to the study: “The demand for unmet needs for spacing and limiting was the highest among the women in the age categories 15–19 (17.8%) and 20–24 (17.3%).”

- There is an urgent need to focus on young people, both men and women, and on their sexual and reproductive health through culturally sensitive behaviour change communication, and by offering them a basket of contraceptive options to meet their needs. She reiterated that women’s education continues to be the most effective contraception.

Findings of National Family Health Surveys (NFHS)

- **Education and Family Planning:** There is a strong link between educational attainment and the unmet needs for family planning among married women in India.

This emphasizes the critical role of education in addressing reproductive health challenges.

- **High Demand for Family Planning:** A significant demand for family planning services persists, especially among young women aged 15-24. This indicates that reproductive health needs are not being fully met across all age groups.

National Family Health Survey (NFHS)

- The NFHS is an extensive and multi-round survey conducted across a representative sample of households throughout India. It gathers critical data on various health and family welfare indicators.
- The Ministry of Health and Family Welfare (MoHFW) oversees the NFHS, with the International Institute for Population Sciences (IIPS) in Mumbai serving as the nodal agency. IIPS is responsible for coordinating and providing technical guidance for the survey.
- To ensure effective implementation, IIPS collaborates with multiple Field Organizations (FOs) across the country, facilitating the collection of data on the ground.

Challenges faced by disadvantaged sections of society

Limited Access to Family Planning Services

Teenage Pregnancies and Early Marriages

Social Stigma and Cultural Norms

- **Limited Access to Family Planning Services:** Women from marginalized communities often encounter obstacles in accessing contraceptives and family planning services. These barriers are often rooted in social norms, limited education, and cultural taboos surrounding contraception.
- **Teenage Pregnancies and Early Marriages:** High incidences of teenage pregnancies and early marriages pose health risks for young women. These challenges are exacerbated by a lack of awareness about sexual and reproductive health rights and options.
- **Social Stigma and Cultural Norms:** Pervasive societal attitudes and stigmas related to sexual activity, contraception, and abortion restrict open conversations and access to comprehensive sexual education and healthcare, particularly for unmarried individuals.

What can India do to improve social conditions?

Enhancing Education and Awareness

Addressing Cultural Norms and Stigma

Expanding Healthcare Access

Reforming Legal Frameworks

- **Enhancing Education and Awareness:** Expanding access to comprehensive sex education in schools and communities is vital. This education will empower young people with knowledge about contraception, family planning, and reproductive health rights.

- **Addressing Cultural Norms and Stigma:** Efforts must be made to challenge societal taboos and misconceptions surrounding contraception and sexual activity. This can be achieved through culturally sensitive communication and advocacy.
- **Expanding Healthcare Access:** Ensuring equitable access to affordable and quality healthcare services, particularly in rural and underserved areas, is crucial. This includes providing comprehensive reproductive health services.
- **Reforming Legal Frameworks:** There is a need to reform laws and policies related to reproductive rights and access to safe abortion services. This will ensure that women have autonomy over their reproductive decisions and can access safe and legal abortion services without unnecessary restrictions.

Government initiatives related to health

Government Initiative	Objective	Key Features	Launch Year
Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)	To provide health coverage to a large segment of the Indian population.	- Offers up to Rs. 5 lakh per family per year for secondary and tertiary care hospitalization. - Over 4.68 crore cards issued, covering more than 500 million people.	2018
Comprehensive Primary Health Care (CPHC) through Ayushman Bharat-Health and Wellness Centres (HWCs)	To bring a broader range of healthcare services closer to communities.	- Focuses on services such as care for non-communicable diseases, palliative and rehabilitative care, oral, eye, ENT care, and mental health services. - Part of the Ayushman Bharat initiative.	2018
Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)	To reduce regional disparities in access to affordable and reliable tertiary healthcare services and improve medical education facilities in India.	- Establishment of new AIIMS institutions. - Upgradation of existing medical colleges to improve the quality of education and healthcare facilities.	2003

India's garment export woes self-inflicted: Report

Context: Global Trade Research Initiative (GTRI) published its report.

Key Highlights

- Exports from India's labour-intensive garment sector, which have been losing ground to rivals such as Vietnam and Bangladesh and were lower than the 2013-14 levels last year, have been dented more by the country's high duties and barriers on raw material imports along with difficult customs and trade procedures, rather than other nations' competitive strengths, a research report has flagged.
- India's garment exports in 2023-24 stood at \$14.5 billion, compared with \$15 billion in 2013-14. Between 2013 and 2023, garment exports from Vietnam have grown nearly 82% to hit \$33.4 billion while that of Bangladesh has grown nearly 70% to hit \$43.8 billion. China exported about \$114 billion of garments in the same year, nearly a quarter lower than a decade earlier.
- A production-linked incentive (PLI) scheme for textiles launched by the Centre in 2021 has failed to gain traction with investors and needs significant modifications to be effective, the think tank, Global Trade Research Initiative (GTRI), has noted in a report titled "How Complex Procedures, Import Restrictions and Domestic Interests Hinder India's Garments Exports".

- The report has also raised concerns about a steady rise in India's garments and textiles imports in recent years, which had grown to almost \$9.2 billion in the calendar year 2023. It warned that this tally could rise faster if the export slide is not arrested, especially with firms like Reliance Retail expected to kick off sales of Chinese brands such as Shein in the country.
- The report, based on interactions with small, medium-sized, and large garment exporters, pointed out that recent quality control orders, or QCOs, issued for fabric imports have complicated the process of bringing in essential raw material. This is pushing up costs for exporters who have to rely on pricier options from domestic firms who dominate the market for raw materials like polyester staple fibre and viscose staple fibre.
- "This scenario forces exporters to use expensive domestic supplies, making Indian garments overpriced," it explained.

Key Highlights of the Report on India's Garment Export Sector



- **Comparative Decline**
 - **Vietnam:** Garment exports grew by 82%, reaching \$33.4 billion.
 - **Bangladesh:** Exports increased by 70%, totaling \$43.8 billion.
 - **India:** In contrast, India's garment exports decreased, indicating a decline in performance relative to its regional competitors.
- **Import Restrictions**
 - **High Duties:** Elevated tariffs and complex import procedures for raw materials, particularly synthetic fabrics, are significant obstacles for Indian exporters.
 - **Impact:** These restrictions hinder the competitiveness of Indian garments in the global market.
- **Domestic Issues**
 - **Quality Control Orders:** Increased costs due to quality control requirements for fabric imports have led exporters to depend on more expensive domestic supplies.
 - **Cost Implications:** This shift results in higher production costs and reduced competitiveness.
- **Procedural Complexity**
 - **Outdated Procedures:** The need for meticulous tracking of all imported materials, compounded by outdated customs and trade procedures, adds to the administrative burden on exporters.
 - **Impact on Efficiency:** These complexities create inefficiencies and further challenges for the export sector.
- **PLI Scheme Ineffective**
 - **Lack of Investment:** The production-linked incentive (PLI) scheme for textiles, launched in 2021, has failed to attract significant investment.
 - **Need for Revision:** The scheme requires revision to better support and incentivize growth in the sector.
- **Rising Imports**
 - **Growth in Imports:** India's imports of garments and textiles surged to nearly \$9.2 billion in 2023.
 - **Future Trends:** Further increases in imports are anticipated if the decline in exports is not addressed effectively.

Economy likely to grow by 7% this year: Survey

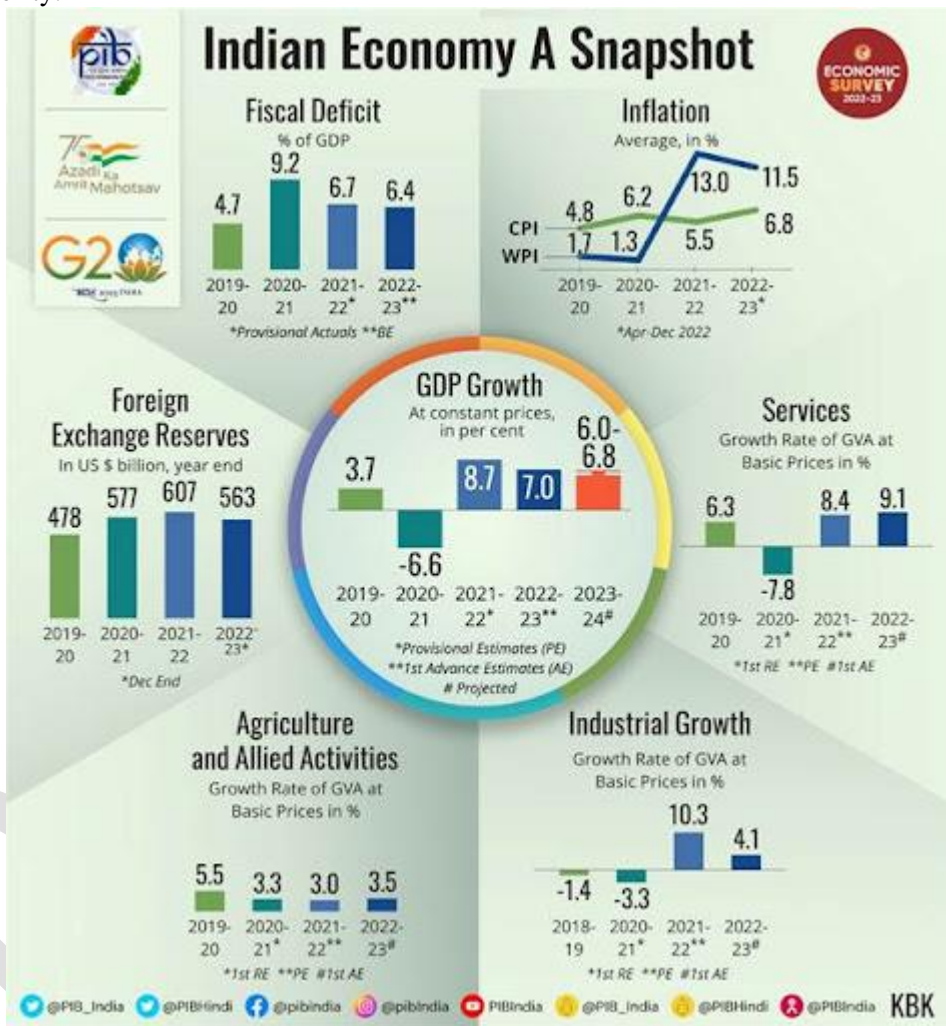
Context: Economic Survey for 2023-24 released

Key Highlights

- The Indian economy has broadly caught up with pre-COVID growth trends, averting any permanent scarring, and is likely to grow by 6.5% to 7% this year with prospects of clocking 7%-plus growth in coming years, as

per the Economic Survey for 2023-24 that also drew attention to the need to address inequality and unemployment as a policy priority.

- Chief Economic Adviser (CEA) V. Anantha Nageswaran, the lead author of the Survey, made a pitch for the Union and State governments to let go of their myriad regulatory powers to ease the burden on businesses.
- They also sought a reboot of skilling initiatives to help the industry find people with the “right attitude and skills”.
- The corporates benefit from the higher demand generated by employment and income growth, while the financial sector benefits from channelling household savings for investment purposes, but “short-termism” can weaken these linkages, the CEA sought to convey to the industry.
- “For India’s working-age population to be gainfully employed, they need skills and good health. Social media, screen time, sedentary habits, and unhealthy food are a lethal mix that can undermine public health and productivity and diminish India’s economic potential. The private sector’s contribution to this toxic mix of habits is substantial, and that is myopic,” he asserted.
- Arguing that structural reforms such as the GST and the Insolvency and Bankruptcy Code have matured and are delivering envisaged results, the Survey’s authors said such supply side reforms must now make way for “next-gen reforms that are bottom-up in nature to yield strong, sustainable, balanced and inclusive growth”.
- The Economic Survey highlights that the National Health Accounts estimates for the financial year 2019-20 show an increase in the share of government health expenditure (GHE) in the GDP and in the total health expenditure.
- The Survey says the share of primary healthcare expenditure has increased from 51.3% of the GHE in 2014-15 to 55.9% in 2019-20. The share of primary and secondary care rose from 73.2% to 85.5%. The share of primary and secondary care in private health expenditure has declined from 83% to 73.7%, which the Survey attributes to rising tertiary disease burden and utilisation of government primary healthcare facilities.
- It notes an increase in the social security expenditure on health, from 5.7% in 2014-15 to 9.3% in 2019-20. It notes a decline in out-of-pocket expenditure as a percentage of total health expenditure.



- Acknowledging mental health as a principally impactful driver of individual and national development, the Economic Survey, for the first time, extensively highlights its significance and implications on policy recommendations.
- The Survey mentions that at an aggregate economic level, mental health disorders are associated with significant productivity losses due to absenteeism, decreased productivity, disability, increased healthcare costs, and so on. There is also evidence of poverty exacerbating the risk of mental health due to stressful living conditions, financial instability, and lack of opportunities for upward mobility, which contribute to heightened psychological distress, it adds.
- Alarming, the Survey states that according to the National Mental Health Survey (NMHS) 2015-16, 10.6% of adults in India suffer from mental disorders, while the treatment gap ranges between 70% and 92% for different disorders. Further, the prevalence of mental morbidity is higher in urban metropolitan regions (13.5%) than in rural areas (6.9%) and urban non-metro areas (4.3%).
- Citing a study of mental health and well-being of school students by the National Council of Educational Research and Training, the Survey highlights an increasing prevalence of poor mental health among adolescents exacerbated by the COVID-19 pandemic. During the study, 11% of students reported feeling anxious, 14% extreme emotion, and 43% mood swings.
- Recognising mental health as a fundamental aspect of overall well-being, the Survey recommends proper implementation of healthcare programmes to accelerate improvements made in mental healthcare on the ground, and addressing gaps in existing programmes to maximise their effectiveness.
- It lists out key initiatives and policies taken by the government, including the National Mental Health Programme, the National Tele Mental Health Programme, increasing the number of mental health personnel, the Rashtriya Kishor Swasthya Karyakram's adolescent-friendly health clinics and peer education programmes.

Key Takeaways from the Economic Survey for 2023-24

- **Real GDP Growth:** India's real GDP grew by 8.2% in FY24, exceeding 8% in three out of four quarters.
- **Retail Inflation:** Decreased from 6.7% in FY23 to 5.4% in FY24.
- **Current Account Deficit (CAD):** Improved to 0.7% of GDP from 2.0% in FY23.
- **Tax Revenue:** Direct taxes contributed 55%, with indirect taxes making up 45%.
- **Capital Spending:** Increased, with the government providing free food grains to 81.4 crore people.
- **Monetary Policy:** RBI maintained a steady repo rate at 6.5% throughout FY24. Core inflation declined by around 4%.
- **Credit Growth:** Disbursal by Scheduled Commercial Banks (SCBs) reached Rs 164.3 lakh crore, a 20.2% growth.
- **Banking Sector:** Gross and net non-performing assets at multi-year lows; GNPA ratio at 2.8%, a 12-year low.
- **Insolvency and Bankruptcy Code:** Effective in resolving 31,394 corporate debtors involving Rs 13.9 lakh crore.
- **Inflation Trends:** 29 States and UTs had inflation below 6%; core services inflation at a nine-year low. Food inflation rose to 7.5%.
- **Price Cuts:** LPG, petrol, and diesel price cuts kept retail fuel inflation low.
- **Future Projections:** RBI forecasts inflation to decline to 4.5% in FY25 and 4.1% in FY26.
- **Exports:** Services exports grew by 4.9% to USD 341.1 billion, with significant contributions from IT/software.
- **Remittances:** India is the top global recipient, with USD 120 billion in remittances in 2023.
- **External Debt:** Ratio of external debt to GDP at 18.7%.
- **Logistics Performance:** Improved to 38th in the World Bank Logistics Index.
- **Tourism:** Increased share in world tourism receipts from 1.38% in 2021 to 1.58% in 2022.
- **Growth Strategy:** Aimed at sustaining 7%+ growth with a tripartite compact involving the Union Government, State Governments, and the private sector.

- **Key Focus Areas:** Job and skill creation, agriculture, MSME bottlenecks, green transition, education-employment gap.
- **Renewable Energy:** Non-fossil sources at 45.4% of installed electricity capacity as of May 2024.
- **Energy Needs:** Projected to grow 2 to 2.5 times by 2047.
- **Investment in Clean Energy:** Rs 8.5 lakh crore attracted between 2014 and 2023.
- **Welfare Expenditure:** Grew at a CAGR of 12.8% between FY18 and FY24.
- **Healthcare:** 34.7 crore Ayushman Bharat cards issued.
- **Housing:** 2.63 crore houses constructed under PM-AWAS-Gramin.
- **Rural Infrastructure:** 15.14 lakh km of roads constructed under Gram Sadak Yojana.
- **Unemployment Rate:** Declined to 3.2% in 2022-23.
- **EPFO Payroll Additions:** More than doubled to 13.15 million in the past five years.
- **Youth Unemployment:** Fell from 17.8% in 2017-18 to 10% in 2022-23.
- **Female Labor Force Participation:** Rising for six consecutive years to 37.0%.
- **Gig Economy:** Workforce expected to reach 2.35 crore by 2029-30.
- **Agricultural Growth:** 4.18% annual growth rate at constant prices over the last five years.
- **Credit and Micro Irrigation:** Rs 22.84 lakh crore credit disbursed; 90 lakh hectares covered under micro-irrigation.
- **Kisan Credit Cards:** 7.5 crore cards issued with a Rs 9.4 lakh crore limit.
- **Industrial Growth:** Economic growth of 8.2% supported by a 9.5% industrial growth rate.
- **Pharmaceutical and Clothing Sectors:** Pharmaceutical market valued at USD 50 billion; second-largest clothing manufacturer.
- **Electronics Manufacturing:** Accounts for 3.7% of the global market share; domestic production increased to Rs 8.22 lakh crore.
- **Sector Contribution:** 55% of the economy; 7.6% growth in FY24.
- **Digital Services:** Increased global share to 6% in 2023.
- **Aviation:** 15% YoY increase in total air passengers in FY24.
- **E-commerce:** Expected to cross USD 350 billion by 2030.
- **Start-ups:** Increased from around 2,000 in 2014 to 31,000 in 2023.
- **National Highways:** Construction pace increased from 11.7 km/day in FY14 to 34 km/day in FY24.
- **Railways:** Capital expenditure increased by 77% over five years.
- **Aviation:** 21 new airport terminal buildings operationalised in FY24.
- **Logistics:** Improved rank to 22nd in the International Shipments category.
- **Space:** 55 active space assets, including 18 communication and 20 earth observation satellites.
- **Digital Infrastructure:** DigiLocker platform with 26.28 crore users and over 674 crore documents issued.
- **Telecommunication:** Teledensity increased to 85.7%; internet density at 68.2%.
- **Global Strategies:** Current strategies are flawed; need for tailored approaches for developing countries.
- **India's Ethos:** Emphasizes harmonious relationship with nature.
- **Mission LiFE:** Focuses on mindful consumption and sustainable housing.

Important Places in News

Places	Details
Kozhikode	Kozhikode has been recognized as one of the 350 UNESCO Creative Cities globally. This status highlights the city's cultural contributions, particularly in terms of its creativity and traditions. Kozhikode's representatives, including the Mayor and Corporation Secretary, participated in the UNESCO Creative Cities Network (UCCN) annual conference, marking a proud moment for the city. This city has secured 'City of Literature' by UNESCO.

Places	Details
Gwalior	Gwalior has been awarded the title of “City of Music” by UNESCO, recognizing its rich musical heritage and cultural significance. As a new member of the UCCN, Gwalior will have the opportunity to showcase its traditions and culture at the conference.
Bharat Mandapam, New Delhi	Bharat Mandapam in New Delhi serves as the venue for the 46th session of the UNESCO World Heritage Committee, underscoring its significance as a premier center for international heritage discussions. This world-class convention center is equipped with state-of-the-art infrastructure and technology, making it ideal for hosting large-scale events such as conclaves, summits, and cultural gatherings.
Mecca, Saudi Arabia	Mecca is the most sacred city in Islam and the destination for the Hajj pilgrimage, one of the five pillars of Islam. Every Muslim who is physically and financially able is required to undertake the Hajj at least once in their lifetime. This pilgrimage is deeply rooted in Islamic history and tradition, dating back to the Prophet Muhammad's own pilgrimage in 632 AD.
Samayapuram, Tamil Nadu	Samayapuram is a village in Tamil Nadu that is home to the Mariamman Temple, dedicated to the goddess Mariamman, an incarnation of Goddess Durga. The temple, believed to have existed since the Chola period and later expanded by the Vijayanagara King Vijayaraya Chakkaravarthi in the 18th century, is a significant religious site. It is also one of the wealthiest temples in Tamil Nadu and hosts the Chithirai Ther Thiruvizha (Chariot Festival), a major annual event.
Puri, Odisha	Puri is home to the Jagannath Temple, one of the most revered Hindu shrines dedicated to Lord Jagannath, an incarnation of Vishnu. The temple is part of the Char Dhams, one of the four most important pilgrimage sites in Hinduism. The Ratna Bhandar, a treasure vault within the temple, contains invaluable jewelry and has been sealed for 46 years. The temple's architecture, history, and religious significance make it a vital cultural and spiritual landmark in India.
Teesta River	The Teesta River, originating in the Himalayas near Chunthang in Sikkim, India, flows through the Siwalik Hills and the plains of West Bengal before entering Bangladesh. It serves as a crucial tributary of the Jamuna River (Brahmaputra River) in Bangladesh, covering a course of about 320 km. The Teesta plays a significant role in the region's ecology and water management, affecting agriculture, irrigation, and the livelihoods of millions in both India and Bangladesh. The river is central to ongoing discussions regarding water-sharing between the two countries, given its importance for irrigation, drinking water, and hydroelectric power generation in West Bengal and the agricultural productivity in Bangladesh.
Bhojshala Temple-Kamal Maula Mosque Complex	The Bhojshala Temple-Kamal Maula Mosque complex in Dhar, Madhya Pradesh, originally a temple dedicated to the goddess Sarasvati, was built by King Bhoja of the Gurjara-Pratihara dynasty in the 11th century AD. The current structure includes a mosque constructed using materials from the original temple. The site is significant for its religious history and the ongoing debate over its heritage, as well as its architectural features that date back to the Paramara dynasty.
Krishnaraja Sagar (KRS) Dam	The Krishnaraja Sagar (KRS) Dam is a crucial gravity dam across the Kaveri River in Karnataka. Constructed between 1911 and 1931, it plays a vital role in irrigation, providing drinking water to Mysore, Mandya, and Bengaluru, and supporting hydroelectric power generation. The dam, designed by Sir M. Visvesvaraya, is a key infrastructure element in southern India.

Places	Details
Almatti Dam	The Almatti Dam, also known as the Lal Bahadur Shastri Dam, is a significant hydroelectric power and irrigation project on the Krishna River in Karnataka. It serves multiple districts, including Bijapur and Bagalkot, and is vital for water management in the region, supporting both power generation and downstream irrigation needs. The dam is also ecologically significant, hosting migratory birds in its backwaters.
Kaveri River	The Kaveri River is a sacred river in southern India, rising from Brahmagiri Hill in the Western Ghats, Karnataka. It flows for 765 km through Karnataka and Tamil Nadu, descending the Eastern Ghats in a series of notable waterfalls. Revered as "Dakshina Ganga" or the "Ganges of the South," the Kaveri River is highly regarded in Tamil literature and is considered holy along its entire course. It holds deep spiritual significance for devout Hindus. Before emptying into the Bay of Bengal near Cuddalore, Tamil Nadu, the river forms a wide, fertile delta known as the "garden of southern India." This delta is crucial for agriculture and is supported by extensive irrigation canal projects, making the Kaveri a vital resource for the region's agricultural productivity.
Banni Grasslands, Kutch	The Banni grasslands are under consideration as a potential site for cheetah conservation as part of India's Project Cheetah. This vast area, covering nearly 3,500 square kilometers, offers significant space for cheetah habitation. However, the current lack of sufficient prey species poses a challenge for sustaining a viable cheetah population. The absence of leopards in Banni is seen as a positive factor, making it a long-term candidate for cheetah breeding and conservation.
Braga, Portugal	Braga is the host city for the UCCN annual conference. Located in northern Portugal, it serves as the venue where representatives from UNESCO Creative Cities gather to discuss and share ideas on building sustainable cities and integrating youth into future planning.
Kuno National Park, Madhya Pradesh	Kuno National Park is the primary site for Project Cheetah in India. Since September 2022, 20 adult cheetahs have been introduced to the park, with 13 surviving along with 13 cubs. The park has a limited capacity in terms of available prey, supporting only 21 adult cheetahs. Future plans involve introducing additional cheetahs to maintain and grow the population.
Palk Strait	The Palk Strait is a crucial maritime region between India and Sri Lanka that has been the focus of a long-standing fisheries conflict. The issue centers on illegal, unreported, and unregulated (IUU) fishing, particularly the use of destructive bottom-trawling methods by Indian fishermen in Sri Lankan waters. This ongoing conflict has led to diplomatic tensions between the two nations, highlighting the need for sustainable fishing practices and resolution of the dispute.
Imphal Valley, Manipur	The Imphal Valley is the primary residence of the Meitei community, the largest ethnic group in Manipur. The valley is significant as a cultural and political center in the state, with the Meitei Hindus being the dominant group in the region. Understanding the ethnic composition of the valley is crucial for addressing the socio-political dynamics of Manipur.
Russia (Far East Region)	The Far East region of Russia is a focus of bilateral cooperation with India. Discussions include projects in this region and the development of connectivity routes, which are vital for enhancing trade and economic relations between India and Russia. This area is significant for future economic and strategic collaborations.

Places	Details
Line of Actual Control (LAC)	The LAC is a contentious boundary between India and China, marking the areas of control and potential disputes. It is divided into three sectors: Eastern, Middle, and Western. The LAC is crucial for understanding the geopolitical tensions between India and China, especially in border negotiations and military engagements.
Doha, Qatar	Doha is the capital of Qatar, situated on the east coast of the Qatar Peninsula in the Persian Gulf. It is home to more than two-fifths of Qatar's population. Historically, Doha was an important local port due to its shallow bay. The completion of a deepwater port in the 1970s expanded its capacity to handle larger vessels, enhancing its role in maritime trade. Doha is a key venue for high-level diplomatic interactions between India and Qatar. These meetings address a broad spectrum of issues, including trade, investment, energy, and technology, reflecting Qatar's significant role in India's foreign policy and economic strategy.
Acharya Jagdish Chandra Bose Indian Botanic Garden	As India's largest botanical garden, it serves as a major center for botanical studies and research. The garden's work in taxonomy supports broader conservation and environmental efforts in India. The garden plays a crucial role in the discovery and documentation of new plant species. For example, <i>Asystasia venui</i> was identified here, underscoring its importance in plant taxonomy.
Kodagu (Coorg), Karnataka	The discovery of the new bat species <i>Miniopterus srinii</i> highlights the biodiversity of the Western Ghats. Known for its coffee production, Kodagu is a major coffee-growing region in India, significantly impacting the local and national economy. Home to the native Kodava language speakers and famous for its unique cultural heritage and brave warriors.
Kakching, Manipur	Known as the "granary of Manipur," Kakching is a key area for food grain production in the state, contributing significantly to local agriculture. The discovery of <i>Curcuma kakchingense</i> , a new species of turmeric, underscores Kakching's rich biodiversity. This highlights the region's importance in botanical research and conservation, particularly in northeastern India.
Podkamennaya Tunguska River Central Siberia, Russia	The Tunguska event is one of the most significant and well-studied impact events in modern history. The event occurred on June 30, 1908, it involved a massive explosion that flattened about 2,000 square km of forest in Siberia. It has been a focal point for studies on impact events, the effects of cosmic collisions, and their potential consequences on human settlements and ecosystems.
Amaravati, Andhra Pradesh	Amaravati, the capital city of Andhra Pradesh, is situated on the Krishna River and holds historical and religious significance. Known as the "Abode of the Gods," it features the Amaravati stupa, a major Buddhist site from the 2nd century BCE with intricate sculptures depicting the Buddha's life. The city was a key center of Buddhist learning under the Satavahanas and later supported by the Ikshvaku dynasty. It also hosts the Amareswara Temple, dedicated to Shiva, part of the Pancharama temples. Recently, Amaravati has been the focus of an ambitious development plan, with completion expected by 2026, despite past political and legal challenges.
Katchatheevu Island	Katchatheevu Island, located in the Palk Strait between Tamil Nadu, India, and northern Sri Lanka, is historically significant due to its strategic location and role in regional fishing activities. The island, along with Imaravan, has been a point of contention between India and Sri Lanka over maritime boundaries and fishing rights. Despite being uninhabited, Katchatheevu's importance is highlighted by its impact on Indo-Sri Lankan relations and its relevance in discussions on maritime disputes and regional cooperation.

Places	Details
Astana, Kazakhstan	Astana plays a crucial role in regional diplomacy and international relations. As the capital of Kazakhstan, it has hosted significant events like the SCO Council of Heads of State, underscoring its strategic importance in Eurasian politics. The city's development from a Soviet military outpost to a modern capital highlights its significance in Kazakhstan's political and economic strategies, with major infrastructure projects designed by international architects enhancing its global profile. Astana's role in facilitating discussions on economic and security issues in regional and international forums reflects its central position in shaping policy and fostering international dialogue.
Jamaica	Jamaica, a Caribbean island nation, is strategically significant due to its location and size as the third largest island in the Caribbean Sea. The capital, Kingston, is a key cultural and economic center. Jamaica's current vulnerability to Hurricane Beryl underscores the broader implications of climate change on Caribbean nations, emphasizing the need for robust disaster preparedness and infrastructure. Additionally, Jamaica's historical and geographical context, being situated near major Caribbean and Central American landmasses, makes it crucial for understanding regional dynamics and environmental challenges.
Jharkhand	Created in 2000 from Bihar, Jharkhand's statehood resulted from a long struggle by tribal communities seeking better representation and development. The state is a key example of how regional and ethnic demands can lead to administrative changes. Additionally, Jharkhand's demographic, with a significant tribal population, and its rich mineral resources are vital for understanding regional development issues, socioeconomic challenges, and the dynamics of state formation in India. Recently, Soren took oath as CM of Jharkhand for third time
Rajkot	Rajkot, located in Gujarat, is historically significant as the former capital of the princely state of Rajkot and the Western India States Agency. Today, it is a key commercial and industrial hub in the region, known for its production of cotton and woolen textiles, ceramics, diesel engines, and water pump sets. Rajkot is also renowned for its traditional handicrafts, including silver work, embroidery, and patola weaving, making it an important center for both industrial and artisanal activities in Gujarat.
Imphal	Imphal, the capital of Manipur, is significant for its rich cultural heritage and historical importance. The city, divided into Imphal East and Imphal West districts in 1997, is renowned for its classical Manipuri dance forms such as Ras Lila and Pung Cholom, which reflect its unique cultural traditions. Surrounded by picturesque hills and green valleys, Imphal is also a notable tourist destination with its historical sites and forts. Its strategic location, bordered by Thoubal, Senapati, and Bishnupur districts, adds to its regional significance in Manipur.
Assam	Assam, located in northeastern India, is strategically positioned between Bhutan, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Bangladesh, Meghalaya, and West Bengal. Its historical significance stems from the Ahom kingdom, which ruled the region from the 13th to 19th centuries. The state's capital was moved from Shillong to Dispur in 1972 to enhance administrative efficiency. Assam is known for its rich cultural heritage, tea industry, and biodiversity, including the famous Kaziranga National Park, which is a UNESCO World Heritage Site. The state's strategic location makes it a crucial player in India's northeastern regional dynamics.
Brahmaputra River	The Brahmaputra River, flowing from the Himalayas through Tibet, India, and Bangladesh, is a major river in Central and South Asia. It covers about 2,900 km and

Places	Details
	converges with the Ganges before emptying into the Bay of Bengal. In India, it traverses Arunachal Pradesh and Assam, providing vital inland waterways and supporting agriculture with its fertile alluvial soil. However, it also poses challenges due to frequent and severe flooding. Its strategic importance is underscored by its role in regional hydrology, agriculture, and disaster management.
Myanmar	Myanmar, located in mainland Southeast Asia, was renamed from the Union of Burma to the Union of Myanmar in 1989. The capital shifted from Yangon to Nay Pyi Taw in 2006. Myanmar's geographical position is strategic, bordered by China, Laos, Thailand, the Andaman Sea, Bangladesh, and India. This location plays a significant role in regional geopolitics and trade. The country's new capital, Nay Pyi Taw, is part of the government's effort to centralize administrative functions. Understanding Myanmar's political and geographical shifts is crucial for grasping its regional dynamics and strategic importance.
Haiti	Haiti, located in the Caribbean Sea, occupies the western third of Hispaniola Island, with Port-au-Prince as its capital. It shares the island with the Dominican Republic and is strategically positioned near Cuba, Jamaica, and The Bahamas. Haiti, the first independent Caribbean nation and the second in the Americas after the U.S., has faced persistent economic and social challenges, compounded by natural disasters. Its geopolitical significance is underscored by its historical role in colonial liberation and its current strategic location in the Caribbean region. Understanding Haiti's historical context and its current struggles provides insight into regional stability and international relations.
South China Sea	The South China Sea, a major marginal sea of the western Pacific, is crucial for geopolitical, economic, and environmental reasons. It borders several Southeast Asian nations and features significant maritime routes connecting the Pacific and Indian Oceans. The sea's complex physical geography includes deep basins, shallow shelves, and numerous reefs and shoals, influencing regional navigation and resource exploitation. Its rich resources, including fisheries and potential hydrocarbon reserves, and its role as a strategic naval route make it a focal point of international territorial disputes. Understanding its geographical and strategic significance is key for analyzing regional power dynamics and global maritime policies.
Manila	Manila, the capital of the Philippines, is central to the country's economic, political, and cultural landscape. Located on Luzon Island along Manila Bay and the Pasig River, it serves as the principal international port and a hub for industrial activity. Manila's historical significance spans over four centuries, making it a key player in regional trade and diplomacy. The city was heavily rebuilt after World War II and is now part of Metropolitan Manila, a major urban agglomeration facing challenges such as pollution and congestion. Its strategic location and economic role underscore its importance in Southeast Asian geopolitics and commerce.
United Kingdom	The United Kingdom (UK), comprising England, Scotland, Wales, and Northern Ireland, is a major global player in commerce, culture, and history. London, its capital, stands as a leading international financial and cultural center. The UK's historical evolution from the early Anglo-Saxon period to its formation through various Acts of Union highlights



Places	Details
	its complex political landscape. The UK's global influence extends through its cultural exports and historical ties to the Commonwealth and NATO. Its recent departure from the European Union, known as Brexit, marked a significant shift in its international relations and economic strategy. The UK's diverse heritage and ongoing geopolitical role make it a key focus in global and regional studies.
Iran	Iran, located in southwestern Asia, is known for its ancient cultural heritage dating back to the Achaemenian Empire of 550 BCE. The country's modern political system, established in 1979 as an Islamic republic, has evolved into a theocratic authoritarian regime. The 2022 protests, sparked by the death of Jina Mahsa Amini under controversial circumstances, highlighted significant social and political unrest. These protests, coupled with ongoing instability and economic challenges, underscore the complexities of Iran's domestic governance and its impact on regional dynamics. The succession of the long-standing Supreme Leader, Ali Khamenei, remains a critical issue in Iran's political landscape.
Vizhinjam International Port	Vizhinjam International Port, located in Thiruvananthapuram District, Kerala, is a crucial infrastructure project developed through a Public-Private Partnership on a DBFOT basis. Designed primarily for container transshipment, it will handle multi-purpose and break-bulk cargo while also serving as a global bunkering hub for clean fuels like hydrogen and ammonia. Strategically situated 10 nautical miles from major international shipping routes and connected to national and regional transport networks, it will be one of the world's greenest ports. Its strategic location makes it a vital transshipment hub for the Indian subcontinent, enhancing India's maritime trade, which constitutes around 70% of the country's trade by value.
Chandravalli Caves	Chandravalli, located west of Chitradurga, is an archaeological site with a history extending back around 3000 years, reaching the Satavahana period and earlier. Discoveries at this site include Satavahana lead coins, Roman silver coins, and gold, silver, and copper ornaments. The area features prehistoric caves and temples, highlighting its significance in ancient trade and cultural exchanges. Its findings offer valuable insights into early settlement patterns and interactions between ancient civilizations.
France	France, located in northwestern Europe. As Europe's leading agricultural producer and a major industrial power, it serves as a key economic and linguistic bridge between northern and southern Europe. France's historical importance is marked by its former global colonies and its central role in shaping European and world affairs. The country combines a strong state with a high degree of individualism, emphasizing both national unity and personal liberty. Its generous social programs and central authority reflect its commitment to protecting individual rights and ensuring societal welfare.
Yemen	Yemen, located at the southwestern corner of the Arabian Peninsula, is strategically significant due to its position at the entrance of the Red Sea. Historically known as Arabia Felix for its fertility and trade in valuable commodities like frankincense and myrrh, Yemen was also the origin of commercial coffee cultivation. The modern Republic of Yemen emerged from the unification of North and South Yemen in 1990, with Sanaa as the political capital and Aden as the economic center. Despite its historical wealth and strategic location, Yemen faces chronic economic hardship and political instability, exacerbated by internal divisions and a legacy of colonial influence. The country's rugged terrain and isolated regions contribute to its unique physical and cultural landscape.

Important Editorials of the Month

Court on climate right and how India can enforce it

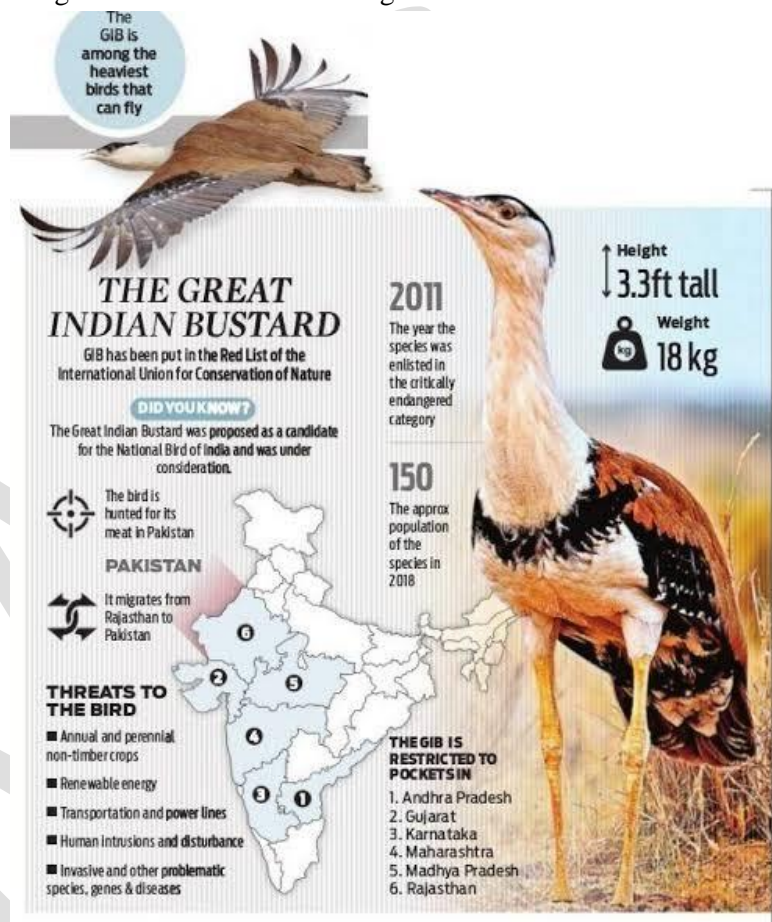
Why in News?

Through its recent judgment in M.K. Ranjitsinh and Ors. vs Union of India & Ors., the Supreme Court of India has dropped a large rock into the relatively placid waters of India's nascent climate change jurisprudence. It has read into the Constitution of India the right to 'be free from the adverse effects of climate change', identifying both the right to life and the right to equality as its sources. As a new government considers its imperatives and agenda, Ranjitsinh provides an intriguing opportunity to think through and possibly enact much more systematic governance around climate change.

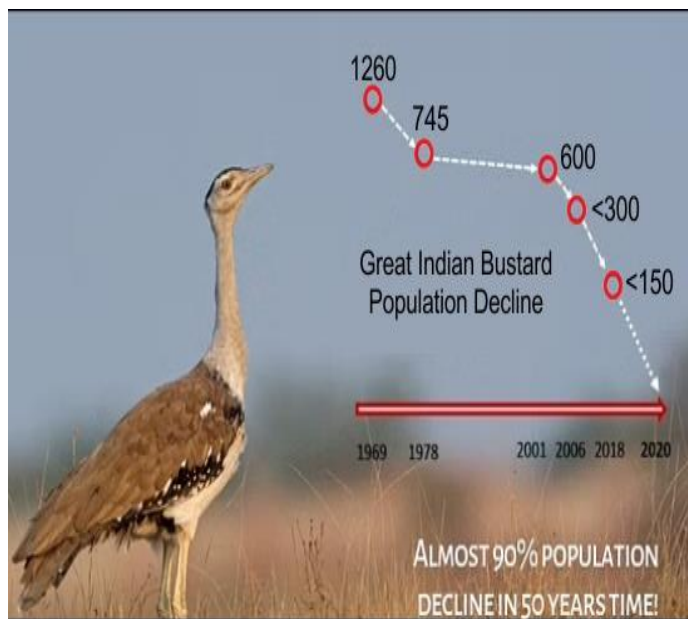
Key Highlights

- Scholars and legal practitioners are still unpacking the judgment. The issue before the Court was whether and how electricity transmission lines can be built through the habitat of the critically endangered Great Indian Bustard.
- The government claimed that a previous court order protecting the bird's habitat had affected the country's renewable energy potential.
- Modifying this order, the Court prioritised transmission infrastructure to enable accelerated development of renewable energy to address climate change. But the more seismic aspect of the judgment was the newly minted 'climate right' rooted in the constitutionally guaranteed right to life (Article 21) and right to equality (Article 14).
- Reading this right into the Constitution potentially opens the door to climate litigation, empowering citizens to demand from the government that this right be protected.
- But the judgment also leaves unresolved questions. Does the Court overstate the large-scale clean energy agenda as the main pathway to avoiding climate harms and, correspondingly, understate climate adaptation and local environmental resilience? Just how will this right against the adverse effects of climate change be protected? And what might it mean for the agenda of the newly formed government? One way forward is the slow accretion of judicial decisions around this right. But another is new legislation to actively realise a right against the adverse effects of climate change.
- The former approach, the proliferation of court-based action through enhanced litigation around climate claims, will likely lead, slowly and over time, to an incomplete patchwork of (judiciary-led) protections.
- As with many other well-meaning judicial orders directing the protection of fundamental rights, realising climate rights could become contingent on the passage of several subsequent policy actions.
- Moreover, a patchwork approach is less likely to chart an overarching framework to guide future policy.
- Is the latter approach, climate legislation, then a preferred approach to protect climate rights? The judgment itself states that there is no 'umbrella legislation' in India that relates to climate change. And in so doing, seems to implicitly recognise the merits of an overarching, framework legislation.
- Drawing from the experience of other countries, framework legislation can bring several advantages. It can set the vision for engaging with climate change across sectors and regions, create necessary institutions and endow them with powers, and put in place processes for structured and deliberative governance in anticipation of and reaction to climate change.
- These are important advantages, and good reasons for India to consider climate legislation. But at the same time, it is essential that Indian climate legislation not blindly copy other countries, and is tailored to the Indian context.

- Undoubtedly, India needs to transition to a low-carbon energy future, an imperative that is highlighted in the Ranjitsinh judgment. But this, by itself, is not nearly enough to enforce a right against the adverse effects of climate change.
- Climate legislation should also create a supportive regulatory environment for more sustainable cities, buildings, and transport networks. It should enable adaptation measures such as heat action plans sensitive to local context. It should provide mechanisms for shifting to more climate-resilient crops.
- It should protect key ecosystems such as mangroves that act as a buffer against extreme weather events. And, it should actively consider questions of social equity in how it achieves these tasks.
- In brief, it should provide a way of mainstreaming and internalising climate change considerations into how India develops. Nothing less is required to make progress toward avoiding the adverse effects of climate change.
- But having a single, omnibus law that covers all these areas is not feasible, particularly in the face of an existing legal framework that legislates on most of these issues. It is impossible to anticipate upfront all the ways in which society can and should prepare for climate change. So, what is the way forward?
- Climate laws in many countries, often following the example of the United Kingdom, focus narrowly on regulating carbon emissions, for example, by setting regular five yearly national carbon budgets and then putting in place mechanisms to meet them. This sort of approach, which has unfortunately become somewhat of a template for countries to follow, is ill-suited to India.
- Instead, because India is still developing, is highly vulnerable, and yet to build much of its infrastructure, what the country needs is a law that enables progress toward both low-carbon and climate resilient development. The distinction between a regulatory law, such as the U.K.'s, and an enabling one, like, for example in Kenya, is important to understand.



- A regulatory law focuses, in a narrow way, on emissions and how they can be limited. An enabling law can be written to stimulate development-focused decisions in a range of sectors across the economy — urban, agriculture, water, energy and so on — by systematically asking whether each decision moves the country closer to or further from low-carbon growth and climate resilience. Importantly, this approach emphasises adaptation as much as mitigation.
- An enabling law is likely to be a more procedurally-oriented law, one that systematically creates the institutions, processes and standards for mainstreaming climate change across diverse ministries and different parts of society. For example, such a law would build in procedures to support knowledge-sharing, ensuring transparency and avenues for public participation and expert consultation, prompting meaningful setting (and revision) of targets and timelines and reporting against these.



- There is another dimension essential for a climate law tailored to India: ensuring that the law works effectively within Indian federalism. Many areas relevant to climate action, from urban policy to agriculture and water fall under the authority of sub-national governments — States or local levels, and electricity also is a concurrent subject.
- An Indian climate law must simultaneously set a framework for coherent national action while decentralising sufficiently to empower States and local governments, and enable them with information and finance to take effective action.
- Finally, the enabling role should ideally also extend beyond government. Business, civil society and communities, particularly those on the frontlines of climate impacts, have essential knowledge to bring to energy transition and resilience.
- Finding ways of enabling participation in decision making would enable all these sections of society to bring their knowledge to the table in addressing climate change. An effective Indian climate law based on enabling procedures would also provide opportunities for voice to diverse segments of society.
- These broad ideas provide a set of principles for a climate law tailored to India, one that provides a basis for taking forward and fulfilling the promise of the Ranjitsinh judgment.

The Great Indian Bustard (*Ardeotis nigriceps*)

The Great Indian Bustard (*Ardeotis nigriceps*), Rajasthan's State bird, is regarded as India's most critically endangered bird. As a flagship species of grasslands, it serves as an indicator of the health of grassland ecosystems. The majority of its population is found in Rajasthan and Gujarat, with smaller groups present in Maharashtra, Karnataka, and Andhra Pradesh.

Right to Life and Equality in Indian Context

Right	Description
Right to Life	The right to life is a fundamental human right guaranteed by the Indian Constitution under Article 21. It protects individuals from unlawful and intentional deprivation of life by any person, including the State. This right also encompasses the entitlement to live with dignity and protection from actions or neglect that could lead to unnatural or premature death.



Right to Equality

The Right to Equality is enshrined in Articles 14 to 18 of the Indian Constitution. It ensures that every individual is treated fairly and without discrimination. This right is crucial in upholding the principle of equal treatment and opportunity, prohibiting discrimination based on race, religion, caste, sex, place of birth, or any other status. It aims to ensure that no person or group is denied societal privileges or opportunities available to others.

Supreme Court's Ruling on Climate Rights in India

Background of the Case: In the recent landmark judgement, M.K. Ranjitsinh and others vs Union of India & others, the Supreme Court has made a significant contribution to India's evolving climate change jurisprudence. The case addressed the issue of constructing electricity transmission lines through the habitat of the critically endangered Great Indian Bustard. The government argued that protecting the bird's habitat would hinder the country's renewable energy development. The Court, while modifying a previous order, emphasized the need to prioritize transmission infrastructure for renewable energy to combat climate change. Most notably, the Court introduced the concept of the 'climate right' into the Indian Constitution, linking it to the fundamental rights to life and equality.

Implications of the Supreme Court's Recognition of the Climate Right



- The recognition of a 'climate right' empowers citizens and civil society to file lawsuits demanding governmental action to safeguard this right. This could lead to a rise in climate-related cases, prompting the judiciary to more rigorously interpret and enforce climate responsibilities.
- As more climate-related cases are heard, a body of jurisprudence will develop, shaping future legal interpretations and policymaking. This will gradually define the 'climate right' and establish standards for climate protection.
- The judiciary may hold the government accountable for inadequate climate action or policies that worsen environmental conditions. This includes scrutinizing projects and assessing the effectiveness of government measures in addressing climate change.
- The 'climate right' necessitates a review and reform of existing policies to align with constitutional mandates, impacting sectors like energy, transport, urban development, and agriculture.
- There may be a push for comprehensive climate legislation to provide a cohesive framework for addressing climate change. This would ensure coordinated action at both national and sub-national levels.
- Governments may be required to develop and implement detailed climate action plans outlining specific measures for climate protection, including both mitigation and adaptation strategies.

Unresolved Questions and Their Impact on Government Agenda



- The Court's emphasis on large-scale clean energy projects raises concerns that other crucial aspects, like climate adaptation and local resilience, might be understated.

- There remains ambiguity regarding the methods and effectiveness of protecting the right against climate change effects.
- Judicial decisions might establish precedents gradually, potentially resulting in a fragmented legal framework. Alternatively, new legislation could offer a more comprehensive and cohesive approach to realizing climate rights.
- Court-based actions can lead to protections but often require subsequent policy actions. In contrast, new legislation could provide a clear vision and structured governance framework. The judgement itself acknowledges the absence of an ‘umbrella legislation’ for climate change, suggesting the need for overarching, framework legislation.

What is the Supreme Court ruling on right against Climate Change?

- Right against Climate Change is a fundamental right
- Expansive view of the Fundamental rights under Art 14 and 21
- Impact on the right to health (Art 21) due to Climate Change
- Impact on the right to equality (Art 14) due to Climate Change
- Interconnection between climate change and human rights
- Right against Climate change and right to clean environment two sides of the same coin

What is the importance of the Supreme Court Ruling on right against Climate Change?

- India's commitment to climate justice has been reaffirmed.
- Elevates the issue of climate change into public discourse.
- Unlocks access to constitutional courts for environmental jurisprudence.
- A progressive move that establishes a significant legal precedent.
- Recognises the Vulnerability of Indians to climate change.

Constitutional Provisions Concerning Climate Change in India

- **Article 48A:** This article mandates that the State shall endeavor to protect and improve the environment and safeguard forests and wildlife.
 - Climate Relevance: It provides a foundational basis for environmental protection, which implicitly supports efforts to address climate change.
- **Article 51A(g):** This article encourages every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
 - Climate Relevance: This promotes individual responsibility towards environmental conservation, which includes mitigating the effects of climate change.
- **Article 21:** It guarantees the right to life and personal liberty.
 - Climate Relevance: The Supreme Court has interpreted this right to include the right to a clean and healthy environment, essential for safeguarding individuals from the adverse effects of climate change.
- **Article 14:** This article provides for equality before the law and the equal protection of laws.
 - Climate Relevance: It supports the notion that all individuals should have equal access to a clean environment and protection from environmental hazards.

Legal Precedents

- **MC Mehta vs Kamal Nath Case (2000):** The Supreme Court affirmed that the right to a clean environment is an extension of the right to life under Article 21 of the Constitution.
 - Implication: This landmark ruling underscored that environmental protection is integral to the fundamental right to life.

Way Forward

Strengthening Environmental Protection

Framework for Legal Challenges

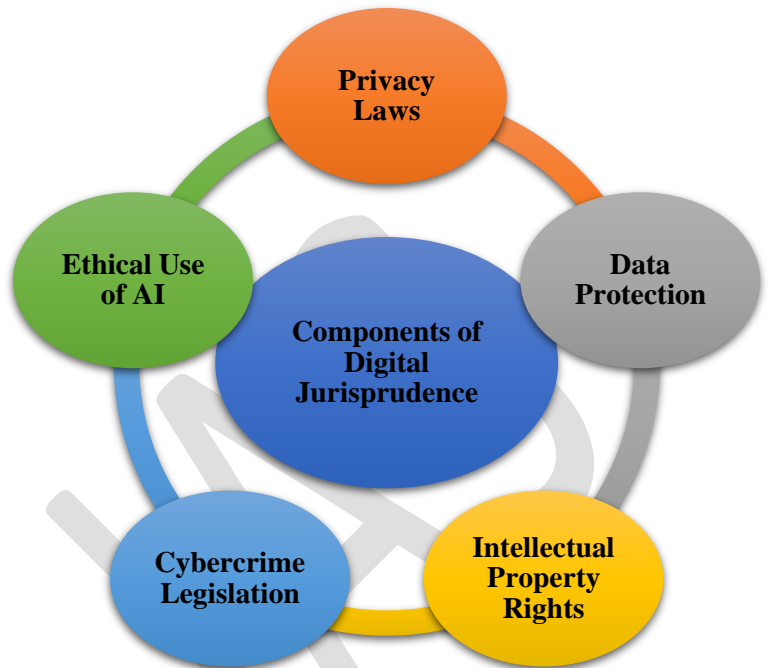
International Alignment

- The recent Supreme Court ruling, which introduces the 'climate right' into the Indian Constitution, reinforces the legal foundation for environmental protection. It provides citizens with a robust framework for challenging government inaction on climate change.
- The recognition of a 'climate right' empowers individuals and organizations to file legal petitions demanding effective climate action and environmental safeguards.
- This judicial reinforcement aligns with global human rights perspectives on climate change.
- This decision reflects the growing international acknowledgment of the human rights aspects of climate change, as highlighted by global entities such as the UN Environment Programme and the UN Special Rapporteur on Human Rights and the Environment.
- It situates India's climate jurisprudence within the broader context of international human rights and environmental law.

Digital jurisprudence in India, in an AI era

- Even though Generative AI (GAI) stands as a transformative force, wielding power to revolutionise society in ground-breaking ways, existing legal frameworks and judicial precedents that have been designed for a pre-AI world may struggle to effectively govern this rapidly-evolving technology.
- Safe harbour and liability taxation One of the most persistent and contentious issues in Internet governance has been the taxing of liability on “intermediaries” for content hosted by them. The landmark Shreya Singhal judgment addressed this by upholding Section 79 of the IT Act which grants intermediaries ‘safe harbour’ protection against hosting content, contingent upon meeting the due diligence requirements outlined in Section 3(1)(b) of the Information Technology (Intermediaries Guidelines) Rules.
- However, its application to Generative AI tools remains challenging. There are contrasting views on the role of GAI tools. Some argue that they should be considered intermediaries since they are used almost like a search engine even though they do not host links to third-party websites.
- Others argue that they are mere “conduits” for user prompts, where altering the prompt leads to changes in output — essentially making the generated content akin to third-party speech, and, therefore, attracting lesser liability for the content generated. In *Christian Louboutin Sas vs Nakul Bajaj and Ors* (2018), the Delhi High Court held that safe harbour protection applies solely to “passive” intermediaries, referring to entities functioning as mere conduits or passive transmitters of information.
- However, in the context of Large Language Models (LLMs), making a distinction between user-generated and platform-generated content is increasingly challenging.
- Additionally, liability in the case of AI chatbots arises once the information is reposted on other platforms by the user; mere response to a user prompt is not considered dissemination.
- Generative AI outputs have already led to legal conflicts in various jurisdictions. In June 2023, a radio host in the United States filed a lawsuit against Open AI, alleging that Chat GPT had defamed him. The ambiguity in classifying GAI tools, whether as intermediaries, conduits, or active creators, will complicate the ability of courts to assign liability, particularly in user reposts.
- The copyright conundrum Section 16 of Indian Copyright Act 1957 specifically provides that “no person” shall be entitled to protection of copyright except by the provisions of the Act. As in India, reluctance persists regarding the provisions of copyright protection to works generated by AI globally.

- The critical questions are: should existing copyright provisions be revised to accommodate AI? If AI-generated works gain protection, would co-authorship with a human be mandatory? Should recognition extend to the user, the programme itself, and by extension, the programmer, or both?
- The 161st Parliamentary Standing Committee Report found that the Copyright Act of 1957 is “not well equipped to facilitate authorship and ownership by Artificial Intelligence”.
- Under current Indian law, a copyright owner can take legal action against anyone who infringes on his/her work with remedies such as injunctions and damages.
- However, the question of who is responsible for copyright infringement by AI tools remains unclear.
- As previously argued, classifying GAI tools, whether as intermediaries, conduits, or active creators, will complicate the courts’ ability to assign liability. ChatGPT’s ‘Terms of Use’ attempt to shift liability to the user for any illegal output.
- But the enforceability of such terms in India is uncertain. The landmark K.S. Puttaswamy judgment (2017) by the Supreme Court of India established a strong foundation for privacy jurisprudence in the country, leading to the enactment of the Digital Personal Data Protection Act, 2023 (DPDP).
- While traditional data aggregators or consent managers raise privacy concerns during the collection and distribution of personal information, Generative AI introduces a new layer of complexity. The DPDP Act introduces the “right to erasure” as well as “right to be forgotten”.
- However, once a GAI model is trained on a dataset, it cannot truly “unlearn” the information it has already absorbed. This raises a critical question. How can individuals exercise control over their personal information when it is woven into the very fabric of a powerful AI model?
- Steps to pursue First, learning by doing. Consider granting GAI platforms temporary immunity from liability following a sandbox approach. This approach allows responsible development while gathering data to identify legal issues that could inform future laws and regulations.
- Second, data rights and responsibilities. The process of data acquisition for GAI training requires an overhaul. Developers must prioritise legal compliance by ensuring proper licensing and compensation for the intellectual property used in training models. Solutions could include revenue-sharing or licensing agreements with data owners.
- Third, licensing challenges. Licensing data for GAI is complex as web-data lacks a centralised licensing body similar to copyright societies in the music industry.
- A potential solution is the creation of centralised platforms, akin to stock photo websites such as Getty Images, which simplify licensing, streamline access to necessary data for developers and ensure data integrity against historical bias and discrimination.
- The jurisprudence around Generative AI (GAI) is hazy and yet to be evolved. It demands a comprehensive re-evaluation of existing digital jurisprudence.



- A holistic, government-wide approach and judicious interpretations by the constitutional courts are essential to maximise the benefits of this powerful technology, but safeguarding individual rights and protecting them against unwelcome harm all the while.

Trends related Artificial Intelligence

Trends	Description
OpenAI	<ul style="list-style-type: none"> - Definition: An artificial intelligence research organization and company. - Founded: December 2015. - Mission: To ensure that artificial general intelligence (AGI) benefits all of humanity. - Known For: Advanced AI models like GPT (Generative Pre-trained Transformer), including ChatGPT. - Research Areas: Natural language processing, robotics, machine learning.
Generated AI	<ul style="list-style-type: none"> - Definition: Refers to content or outputs produced by AI models, such as text, images, music, or videos. - Purpose: Emphasizes the AI's ability to create or generate content based on patterns learned from large datasets. - Examples: Text (stories, articles), images (DALL-E), music (AI algorithms). - Applications: Creative industries, content generation, customer service.
ChatGPT	<ul style="list-style-type: none"> - Definition: A specific AI model developed by OpenAI, based on the GPT architecture. - Function: Engages in conversational interactions with users, answers questions, and provides explanations. - Training: Based on a large corpus of text data for generating human-like responses. - Uses: Customer support, virtual assistants, educational tools, entertainment. - Specialization: Tailored for dialogue and conversational use cases.

The Information Technology Act, 2000

The Information Technology Act, 2000, passed by the Indian Parliament, serves as the primary legislation in India for addressing cybercrime and regulating e-commerce. It was established to provide legal recognition to electronic commerce and transactions, facilitate e-governance, and combat cybercrime. The Act allows for the prosecution of foreign nationals for crimes involving computers or networks located within India. It outlines penalties for various cybercrimes and

SECTION 79

- The “safe harbor” provision in the Information Technology (IT) Act, 2000, provides legal protection for intermediaries like Internet service providers (ISPs) and other platforms that host or transmit third-party content. Specifically, under Section 79 of the IT Act, intermediaries are not held liable for any third-party information, data, or communication link made available or hosted by them, provided they comply with certain conditions

Section 3 (1) (b)

- Section 3(1)(b) of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021,
- It requires intermediaries to inform users about their rules, regulations, privacy policy, and user agreement in English or any language specified in the Eighth Schedule to the Constitution.

frauds conducted through digital or electronic means and grants legal validity to digital signatures. Additionally, the IT Act amended specific provisions of the Indian Penal Code (IPC), the Banker's Book Evidence Act, 1891, the Indian Evidence Act, 1872, and the Reserve Bank of India Act, 1934, to align these laws with emerging digital technologies.

Landmark Judgment: Justice K.S. Puttaswamy Vs Union of India

In August 2017, a significant ruling was made by a nine-judge bench of the Supreme Court in the case of Justice K. S. Puttaswamy (Retd) Vs Union of India. The bench unanimously recognized that the right to privacy is a constitutionally protected fundamental right under Article 21, which ensures the right to life and liberty for all Indians.

Defining the Right to Privacy

- The Supreme Court held that privacy is a natural right inherent in all individuals. This right can only be restricted by the state under stringent conditions, which must meet the following three tests:
- Legislative Mandate: Any state action restricting privacy must be backed by a law.
- Legitimate State Purpose: The action must aim to achieve a legitimate objective for the state.
- Proportionality: The action must be necessary in a democratic society and should be the least intrusive method available to achieve the intended purpose.

A New Perspective on Privacy

- This landmark judgment prompted a shift in how the government views and manages its citizens' privacy. It emphasized the need for the government to:
- Undertake Structural Reforms: Ensure transparency and openness in the execution of surveillance projects.
- Establish Judicial Oversight: Implement mechanisms to oversee surveillance requests.
- Handle Personal Data with Care: Treat citizens' personal information with the highest level of care and sensitivity.
- Enact Data Protection Laws: Develop a rights-oriented data protection law to hold all entities handling personal data, including the state, accountable.

Government's Steps to Strengthen the Privacy Regime

Data Protection Committee

- In response to the judgment, the government appointed a committee of experts on data protection under the chairmanship of Justice B.N. Srikrishna. This committee submitted its report in July 2018, along with a draft Data Protection Bill.
- The report made several key recommendations, including:
 - Restrictions on Data Processing: Imposing limitations on the processing and collection of personal data.
 - Data Protection Authority: Establishing a regulatory body to oversee data protection.
 - Right to be Forgotten: Allowing individuals to request the deletion of their personal data.
 - Data Localisation: Mandating that certain types of data be stored within India.
 - Consent Requirements: Requiring explicit consent for processing sensitive personal data.

Evaluating the Two Years Since the Privacy Judgment

Despite the Supreme Court's ruling, there has been limited change in the government's approach to privacy and personal data management. The government has continued to commission and execute mass surveillance programs, often justifying these actions in the name of national security, without always adhering to the principles of necessity and proportionality.



Notable Government Actions

- December 2018: The Ministry of Home Affairs authorized ten central agencies to intercept, monitor, and decrypt any information stored in any computer within the country. This notification is currently under challenge before the Supreme Court.
- July 2018: The Ministry of Information Broadcasting proposed the 'Social Media Monitoring Hub' project, intended to monitor social media communications. The project was withdrawn following criticism from the Supreme Court.
- August 2018: The Unique Identification Authority of India (UIDAI) floated a request for a social media surveillance program, which is also under challenge in the Supreme Court.
- Income-Tax Department: The department's 'Project Insight' aims to conduct mass surveillance of citizens.

Copyright Conundrum

"Copyright conundrum" refers to the complex and often challenging issues surrounding copyright law, particularly in the context of modern technology, digital media, and the internet. These challenges might include questions about the balance between protecting creators' rights and allowing for fair use, the difficulty of enforcing copyright in the digital age, and the ethical dilemmas that arise when content is easily shared and reproduced online. The "conundrum" lies in finding solutions that uphold the principles of copyright while adapting to rapidly evolving technological landscapes.

Data Use Vs Privacy

The government has largely prioritized the economic value of data over the protection of privacy rights. This is evident in the approach taken in various government initiatives, where personal data is viewed as a valuable asset for public good and economic growth.

- Economic Survey 2018-19: The survey praised the government's success in selling and monetizing vehicle owner data from the Vahan database and encouraged the replication of such models with other databases.
- Draft Personal Data Protection Bill: The Bill emphasizes a 'free and fair digital economy,' with privacy serving as a guiding principle rather than the primary focus.

Features of the Digital Personal Data Protection Act (DPDPA) 2023



- **Right to Data Protection:** The Digital Personal Data Protection Act (DPDPA) 2023 grants individuals significant rights concerning their personal data. This includes the right to access, correct, and erase their data, empowering citizens to have greater control over their personal information.
- **Data Processing and Consent:** The Act emphasizes that personal data can only be processed with the explicit consent of the individual. Organisations are required to provide clear and specific consent forms, ensuring that individuals fully understand and agree to the data collection process before it occurs.
- **Data Localisation:** To enhance data security and facilitate the enforcement of data protection laws, the DPDPA mandates that certain types of sensitive personal data must be stored and processed within India. This provision ensures that sensitive data remains within the country's jurisdiction.

- **Regulatory Authority:** The DPDPA establishes the Data Protection Board of India (DPBI) as the regulatory authority responsible for overseeing compliance with the Act. The DPBI is tasked with handling grievances, adjudicating disputes, and imposing penalties for any violations of the data protection laws.
- **Data Breach Notification:** Under the Act, organisations are required to notify both the individuals affected and the Data Protection Board in the event of a data breach. This provision aims to maintain transparency and ensures that prompt action is taken to protect personal information in the case of data leaks.
- **Fines and Penalties:** The DPDPA outlines stringent penalties for non-compliance, including substantial fines for violations. These penalties are intended to encourage organisations to adhere strictly to data protection standards and safeguard individuals' personal data.

What is Copyright?

Aspect	Description
Scope of Copyright	Protects original works in literary, dramatic, musical, and artistic categories, including novels, plays, music, paintings, sculptures, and other creative expressions.
Rights Conferred	Grants creators exclusive rights to reproduce, perform, display, distribute, and adapt their works, alongside moral rights like attribution and protection against derogatory treatment.
Duration of Copyright	Typically lasts for the author's lifetime plus 60 years. For joint works, it's 60 years after the last surviving author's death. For films, sound recordings, and anonymous works, the duration is 60 years from publication.
Infringement and Remedies	Provides legal actions such as injunctions, damages, and profit recovery for unauthorized use or reproduction of copyrighted material.
Moral Rights	Recognizes authors' rights to attribution and protection against derogatory treatment of their work, independent of economic rights.
Amendments	Includes various updates addressing technological changes and new issues, notably in 1983, 1992, 1994, 1999, and 2012, covering digital rights, enforcement, and international treaties.
International Treaties	Aligns with global agreements like the Berne Convention and TRIPS Agreement to ensure Indian law meets international standards and promotes global cooperation.
Copyright Office	Establishes the Copyright Office responsible for registering copyrights and maintaining related records.
Fair Use	Permits limited use of copyrighted materials without authorization for criticism, news reporting, teaching, scholarship, or research.

Way Forward

Temporary Immunity and Sandbox Approach

Overhaul Data Acquisition for GAI Training

Simplify Licensing

Comprehensive Legal and Government Approach

- Consider granting GAI platforms temporary immunity from liability by adopting a sandbox approach.
- This allows responsible development while gathering data to identify legal issues that can inform future regulations.
- Developers must prioritize legal compliance by ensuring proper licensing and compensation for intellectual property used in training models.
- Implement revenue-sharing or licensing agreements with data owners to ensure fair compensation.
- The complexity of licensing data for GAI arises from the lack of a centralized licensing body for web data.
- Establish centralized platforms similar to stock photo websites (e.g., Getty Images) to:
- Simplify the licensing process.

- Streamline access to necessary data for developers.
- Ensure data integrity against historical bias and discrimination.
- A holistic, government-wide approach and careful interpretations by constitutional courts are crucial.
- The aim is to maximize the benefits of GAI while safeguarding individual rights and protecting against potential harms.
- Collaborative efforts are necessary to develop solutions that protect confidential information, identities, and human rights.

Factory accidents, a pointer to rusty inspection reform

- An explosion of a reactor in a **chemical factory** in the **Dombivli Maharashtra Industrial Development Corporation (MIDC) area in May 2024** resulted in the loss of lives and injuries to workers and people.
- It also caused damage to factories, shops and residencies in the neighbourhood. The Maharashtra government announced compensation to the kin of the deceased and funds for the treatment of the injured.
- Newspaper reports show that fatal industrial accidents were frequent in 2016, 2018, 2020 and 2023.
- **The Maharashtra government is guilty of not relocating 156 chemical factories in the Dombivli MIDC area even after “deciding” in 2022 to relocate them to Patalganga.** It is now known that the **boiler** in the chemical factory was **not registered under the Indian Boiler Regulations, 1950.**
- In 2021, in Maharashtra, 1,551 of 6,492 hazardous factories were inspected, i.e., a 23.89% inspection rate. And, 3,158 out of 39,255 registered factories were inspected, i.e., an 8.04% inspection rate. The situation is no better in two other top industrial States. In Tamil Nadu, the general inspection rate was 17.04% and the hazardous factories inspection rate was 25.39%. In Gujarat, it was 19.33% and 19.81%, respectively.
- The all-India figure, of 14.65% and 26.02%, respectively, is not surprising (the data are from the Directorate General Factory Advice Service & Labour Institutes report, 2022).
- The poor inspection rates could also be due to a shortage of personnel among other reasons. In Maharashtra, the appointment rate is just 39.34%; 48 out of the 122 sanctioned officers were appointed. The numbers are better in Gujarat (50.98%) and Tamil Nadu (53.57%).
- The all-India figure was 67.58%. Even the sanctioned posts relative to the number of registered factories have been inadequate to ensure that every factory is inspected in a year. For example, for an all-India reach, each of the 953 sanctioned inspectors would have had to inspect 337 registered factories in a year, in 2021.
- The inspection rates are poor because of the heavy workload of the inspectors. An inspector in Maharashtra must inspect 818 factories in a year; 589 in Gujarat; 532 in Tamil Nadu, and 499 at the all-India level.
- The prosecution rate, i.e., the number of prosecutions decided as a percentage of total prosecutions (including pending cases) was 6.95% in Gujarat; 13.84% in Maharashtra, and 14.45% in Tamil Nadu. As a result, inspections lose their “deterrent effect”.
- From the data, it is clear that labour market governance through the labour inspection system is weak and does not perform efficiently. However, employers call it pejoratively as “inspector-raj”, implying harassment and prevalence of compromising practices such as bribes.

Patalganga

- The Patalganga industrial area is located in the Raigad district of Maharashtra, near the Patalganga River. It is part of the larger Mumbai Metropolitan Region and is known for housing a variety of chemical, pharmaceutical, and textile manufacturing units. The region is named after the Patalganga River.
- The Patalganga industrial area hosts several large industrial plants, particularly in the chemicals, textiles, and pharmaceuticals sectors.

- The criticism is not without merit. Given the vast universe of inspection, the inspectors may “target” and “harass” several factories/establishments, exhibiting state power and also attempting to secure bribes. But this cannot be universal as the statistics are telling.
- The president of the Maharashtra Industry Development Association has admitted, in a media report in May 2024, that in many cases, safety inspection and certification were done “on an “understanding” between the auditors and factory owners or managers”.
- Employers are as guilty as the labour inspectors, and tackling the “supply side” of “rent seeking” is as important as reforming the “demand” side.
- Reforms of the inspection system are necessary but not of the kind initiated in most States in response to employer criticism. Self-certification, randomised inspections, online inspections, and third-party certification have been introduced by ruling political parties at the all-India level and in many States. These changes violate several articles in the International Labour Organization’s Labour Inspection Convention (081), 1947.
- According to the Convention, there must be sufficient qualified and well-provided inspectors and they shall enter the establishments freely and without prior notice at any time to secure due compliance of the labour laws, among others. Instead of liberalising the inspection system, governments must ensure a strong labour market governance by implementing the provisions of the ILO Convention. Given the fast-paced changes taking place in technology, and the use of hazardous and chemical substances, the increased need for inspection is felt.
- Inspectors can both “inspect” and “facilitate” due compliance of laws by providing suitable advice to employers and unions. This is recognised by the ILO Convention.
- If a firm or a trade union does not comply with laws, they are prosecuted by the state. If the state fails in its governance what is the penalty the state, viz. the government and the labour department officials pay? Simple and meagre compensation to the victims and their families? No. There must be a penal system for the enforcers also which will pave the way for complete legal compliance.
- The recurrence of the same kind of industrial disasters shows a lack of learning by the government. In the name of reforms and a lean government, the state cannot abrogate its fundamental duty — to ensure a safe working and living environment. It should carry out meaningful reforms to ensure an “efficient” and “ethical” labour inspectorate.
- The recurrence of the same kind of industrial disasters highlights the need for more meaningful reforms in the inspection process.

Labor Codes in India



Code on Wages, 2019

- **Applicability:** Applies to all establishments and employees in both organized and unorganized sectors.
 - Uniform Wage and Bonus Provisions: Ensures timely payment of wages and sets minimum wage standards for all employees.
 - Introduces the concept of a "floor wage," determined by the Centre, considering minimum living standards, which varies by geographical area.
 - State governments cannot set minimum wages below the central floor rate.
- **Gender Equality and Work Conditions:** Prohibits gender discrimination in wages and recruitment for similar work.
 - Defines similar work as requiring the same skill, effort, experience, and responsibility.

- **Wage Components and Working Hours:** Wages include salary, allowances, but exclude bonuses and travel allowances.
 - Central or state governments determine working hours and overtime compensation, set at least twice the standard wages.
- **Employer Responsibilities:** Employers can set wage periods as daily, weekly, fortnightly, or monthly.
 - Advisory boards advise on minimum wage setting and increasing employment opportunities for women.
- **Penalties:** Offences such as paying less than the minimum wage may result in penalties, including up to three months of imprisonment and a fine of Rs. 1 lakh.

Code on Industrial Relations, 2020

- **Expanded Definition of Workers:** Includes those in skilled/unskilled, manual, technical, operational, and clerical roles.
 - Supervisors earning less than Rs. 18,000 per month are also included.
- **Fixed-Term Employment:** Introduces fixed-term employment, granting the same benefits to fixed-term employees as permanent ones.
 - Flexible Hiring and Lay-offs: Increases the minimum number of workers required for standing orders to 300, making it easier to hire and fire.
 - Firms with up to 300 workers can proceed with lay-offs, retrenchments, and closures without government permission.
- **Worker Reskilling:** Establishes a reskilling fund for retrenched workers, with contributions from employers.
 - Worker Dispute Resolution and Equality: Introduces helplines for migrant workers and mandates the creation of a national database.
 - Ensures equality for women in the workplace, including provisions for night shifts with security.
 - Accidents and Compensation: At least 50% of penalties in the event of worker death or injury go to the affected worker or family, in addition to Employee's Compensation.

Code on Social Security, 2020

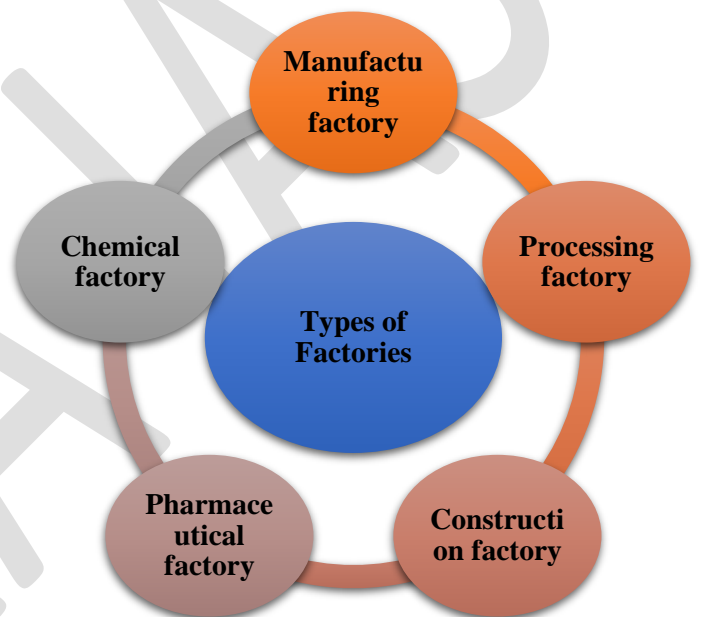
- **Widened Employee Definition:** Includes inter-state migrant workers, construction workers, film industry workers, gig workers, and platform workers.
- **Social Security Schemes:** Subsume nine laws and empower the Centre to notify schemes like EPF, EPS, and ESI for workers across sectors.
 - ESIC coverage extended to all 740 districts, from 566 previously.
- **Mandatory Reporting and Social Security Fund:** Firms with over 20 workers must report vacancies online.
 - Proposes a social security fund for unorganized sector workers and the establishment of a National Social Security Board.
- **Gratuity and Registration:** Fixed-term employees are eligible for gratuity without a minimum service period.
 - Simplifies the registration process for unorganized sector workers via an online portal with self-certification.
 - Code on Occupational Safety, Health, and Working Conditions, 2020
- **Applicability and Workplace Safety:** Applies to factories with 20+ workers (with power) or 40+ workers (without power).
 - Employers must ensure a hazard-free workplace and provide annual health exams for certain employees.
- **Migrant Workers:** Defines inter-state migrant workers and offers portability benefits in destination states.

- Journey Allowance and Employment Formalization: Introduces a journey allowance for workers traveling to their place of employment.
- Grants a legal right to an appointment letter, encouraging formal employment.
- Cine Workers and Hazardous Conditions: Expands coverage to audio-visual workers beyond just film artists.
- Removes the manpower limit for hazardous work conditions and applies the Code to contractors with 50+ workers.
- Working Hours and Women's Employment: Limits daily working hours to eight.
- Allows women to work in all establishments, including night shifts, with consent and safety provisions in place.

Factories Act

The Factories Act, 1948 is a significant piece of legislation in India designed to regulate labour in industrial settings and ensure the health, safety, and welfare of workers, the Act include:

- **Health and Safety:** The Act mandates standards for cleanliness, ventilation, and lighting within factories. It also addresses waste disposal, overcrowding prevention, and the maintenance of safe working conditions.
- **Working Hours:** It sets limits on working hours for adults, capping them at 48 hours per week. The Act also requires provision of rest intervals and weekly holidays.
- **Welfare:** Factories are required to offer essential facilities such as drinking water, latrines, urinals, and first-aid kits. Larger establishments must also provide additional amenities including canteens, restrooms, and crèches.
- **Employment of Young Persons:** The Act prohibits the employment of children under the age of 14 and regulates the working hours for young persons aged 15-18.
- **Hazardous Processes:** Factories involved in hazardous processes must disclose information about potential dangers and implement necessary safety measures.



The implementation of the Act is overseen by the Ministry of Labour and Employment, with enforcement carried out by state governments through their factory inspectorates.

International Tools and Support

- **Organisation for Economic Co-operation and Development (OECD):** Provides policy guidance for preventing, preparing for, and responding to chemical accidents.
- **EU Policy:** Focuses on managing major-accident hazards.
- **UN Environment:** Supports local and national efforts in prevention and preparedness.
- **World Health Organization (WHO):** Manages public health responses during chemical incidents.
- **United Nations Office for Disaster Risk Reduction (UNISDR):** Advocates for new frameworks for disaster risk reduction.

- **Organisation for the Prohibition of Chemical Weapons (OPCW):** Implements programs for chemical safety and security.

ILO Conventions on Labour Inspection

Convention	Key Objectives	India's Status
Convention No. 81: Labour Inspection Convention, 1947	<ul style="list-style-type: none"> - Establishes a framework for national labour inspection systems to enforce labour laws on working conditions, hours, wages, safety, health, and welfare. - Requires a labour inspection system under the control of a central authority. - Grants inspectors the authority to enter workplaces, examine records, and investigate violations without prior notice. - Stipulates that inspectors should have necessary resources and remain impartial and free from conflicts of interest. 	India ratified this convention on November 7, 1949. The principles are reflected in India's labour inspection systems.

Labour Inspection in India

India has developed a robust labour inspection system that adheres to the principles outlined in ILO Convention No. 81, ensuring compliance with labour laws across various sectors.

Key Features	Details
Central and State Authorities	Labour inspection is managed by both central and state governments. The Ministry of Labour and Employment oversees the implementation of labour laws at the central level, with corresponding state departments handling state-level inspections.
The Factories Act, 1948	Mandates regular inspections of factories to ensure compliance with safety, health, and welfare standards. Inspectors have the authority to enter factories, examine documents, and enforce laws.
The Mines Act, 1952	Includes specific provisions for the inspection of mines, focusing on the safety, health, and working conditions of mine workers.
The Shops and Establishments Act	Varies from state to state, but generally requires inspections of commercial establishments to ensure compliance with labour laws related to working hours, wages, and safety.

Way Forward

Enhanced Regulatory Oversight

Improving Inspection and Compliance

Promoting a Safety Culture

- Strengthen and update safety regulations regularly to incorporate the latest technological advancements and align with international best practices.
- Ensure that these regulations are rigorously enforced, with clear penalties for non-compliance and mechanisms for transparent reporting and accountability.
- Increase the number of qualified inspectors and invest in their ongoing training to keep them informed of industry developments and safety challenges. Utilize modern inspection techniques, such as digital monitoring and remote sensing, to enhance accuracy and efficiency.
- Conduct both regular and unannounced inspections to ensure continuous adherence to safety standards.

- Encourage a proactive safety culture within industries through comprehensive training programs and awareness campaigns.
- Develop incentive programs to recognize and reward exemplary safety practices and compliance. Provide channels for employees to report safety concerns and offer feedback on safety practices without fear of reprisal.

The risk of international spread of wild type-1 polio cases from Pakistan

Context: The ambitious goal of eradicating wild-type poliovirus type-1 (WPV1) by 2026 appears to have become tougher. WPV1, which is endemic only in Pakistan and Afghanistan, is showing signs of a resurgence since 2023.

Key Highlights

- With Afghanistan and Pakistan reporting six WPV1 cases each in 2023 — there were two cases in Afghanistan and 20 cases in Pakistan in 2022 — the total incidence of type-1 cases in both countries in 2023 might appear to have nearly halved.
- But with six cases in Afghanistan and five cases in Pakistan already this year, there appears to be an uptick. If this continues, the total cases being reported from the two countries might be close to or even surpass the 2022 numbers.
- The concern about WPV1 is not limited to the number of cases in children. The circulation of the virus in the environment is seen to be rising, and, most importantly, after a gap of two years, positive environmental samples have been increasingly collected in Pakistan, in 2023 and till early June this year, from cities which have been historical reservoirs for the virus.
- Last year, 125 positive environmental samples were collected from 28 districts in Pakistan. Of these, 119 belonged to a genetic cluster (YB3A), which suggests that these were imported from Afghanistan.
- By June 1 this year, there have been 153 positive environmental samples from 39 districts. As of April 8, 2024, 34 positive environmental samples were collected from Afghanistan.
- According to the World Health Organization, the presence of positive environmental samples in “epidemiologically critical areas and historical reservoirs” such as Karachi, Quetta and the Peshawar-Khyber blocks in Pakistan, and Kandahar in Afghanistan, represents a significant risk to the gains made in the past.
- Rising positive environmental samples are a reflection of polio campaigns not really achieving their desired coverage; fake finger marking sans vaccination is a persisting problem.
- Though children in Pakistan’s cities are largely immunised, there is a heightened risk of the virus striking any unvaccinated or not fully vaccinated children — in 2023, two of the six cases were from Karachi city.

What is polio

■ **Poliomyelitis (polio) is a highly infectious viral disease, mainly affecting children**

■ **According to WHO, the virus is transmitted from person-to-person, mainly through the faecal-oral route**



STRAINS

■ **There are three types of polio virus strains — P1, P2 and P3**

■ **P2 was eradicated globally in 1999**

■ **India attained a polio free status in 2014 after successfully eliminating the wild P1 and P3 strains**

VACCINATION SCHEDULE

OPV: At 6 weeks, 10 weeks and 14 weeks

IPV: At 6 weeks and 14 weeks

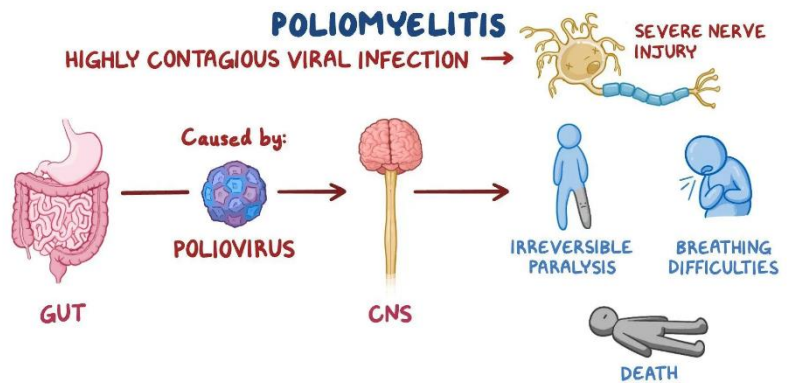
OPV booster: Between 16 and 24 months

MISSION INDRADHANUSH

AN INITIATIVE TO FULLY IMMUNIZE ALL CHILDREN AGAINST SEVEN VACCINE PREVENTABLE DISEASES (DIPHTHERIA, POLIO, T.B, PERTUSSIS, TETANUS, HEPATITIS B AND MEASLES)

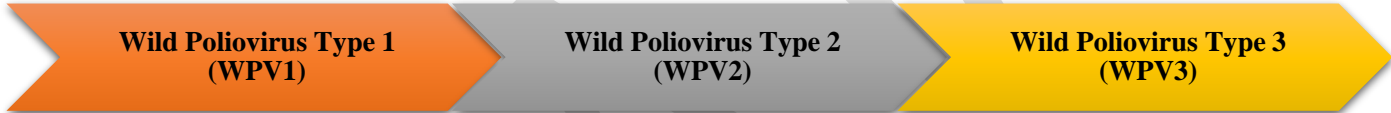


- The situation in Pakistan appears worse than it is in Afghanistan with the actual spread of WPV1 seen “predominantly in Afghanistan in 2022 now being detected in Pakistan in 2023 and 2024”.
- There is also the grave risk of international spread from Pakistan, particularly to Afghanistan. With over 0.5 million Afghan refugees forced to leave Pakistan, and an estimated 0.8 million to be evicted soon, there is an increased risk of cross-border spread of the virus.
- There is a large pool of unvaccinated and under-immunised children in southern Afghanistan, increasing the risk that returning refugees can pose.



Polio

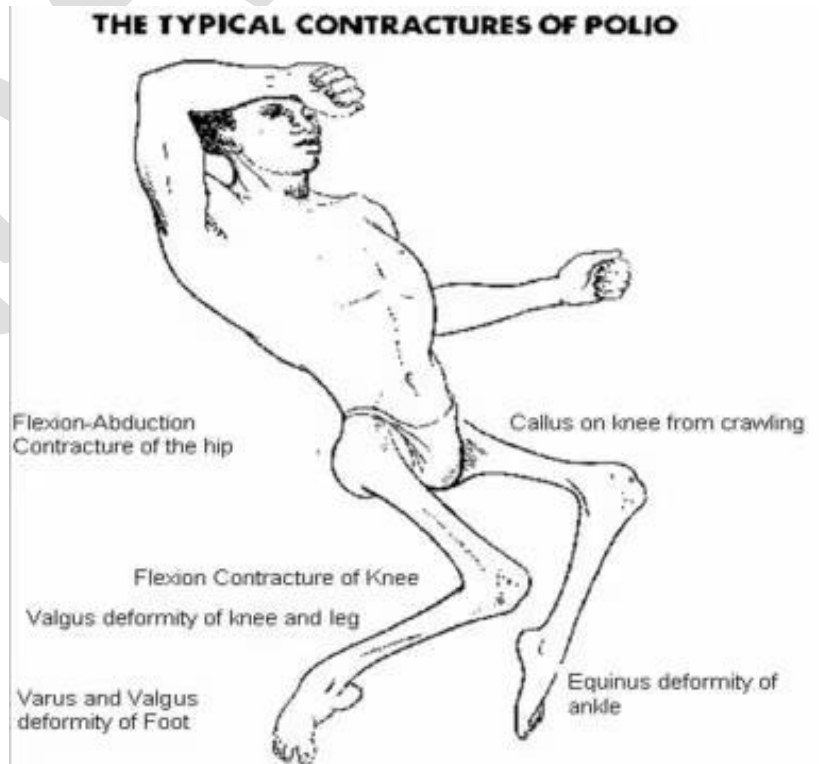
- Polio, short for poliomyelitis, is a serious viral disease that primarily affects the nervous system, potentially leading to severe complications. It is caused by three distinct types of wild poliovirus:



- Each type of poliovirus causes similar symptoms, which can include irreversible paralysis and, in severe cases, death. Despite these shared outcomes, each virus type is unique in its genetic makeup and biological characteristics. This means that efforts to eradicate polio must address each virus type individually.
- **Variants of Wild Poliovirus:** There are three types of wild poliovirus:
 - Type 1: This strain still exists, and global efforts are ongoing to eradicate it.
 - Type 2: This strain has been eradicated.
 - Type 3: This strain has also been eradicated.

Transmission

- Wild poliovirus is primarily transmitted from person to person via the fecal-oral route, although it can also spread less commonly through contaminated water or food.



- The virus thrives in the feces of an infected person, meaning that individuals can transmit the virus to others if they do not practice proper hand hygiene after defecating.
- It largely affects children under 5 years of age. The virus multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.

Endemism

- Currently, wild poliovirus remains endemic in two countries: Pakistan and Afghanistan.
- The detection of Type 1 wild poliovirus outside these endemic regions highlights the ongoing risk of international spread until the virus is eradicated globally.

Symptoms

Minor Symptoms

- Fatigue
- Nausea
- Headache
- Nasal congestion
- Sore throat and cough
- Stiffness in the neck and back
- Pain in the arms and legs

Major Symptoms

- Permanent loss of muscle function (paralysis)
- Polio can be fatal if it leads to paralysis of the muscles used for breathing or if it causes a brain infection.

Current Status of Polio in India

India was declared polio-free by the Regional Polio Certification Commission on March 27, 2014. The last reported case of wild poliovirus in India was on January 13, 2011, in Howrah, West Bengal. Since then, no new cases have been reported.

Measures to Maintain Polio-Free Status



- **Annual Polio Campaigns:** To keep the population immune, India conducts annual polio campaigns. In 2018, two National Immunization Days (NID) and two Sub-National Immunization Days (SNID) were held. Routine immunization continues, and Inactivated Polio Vaccine (IPV) has been introduced to enhance immunity.
- **Vaccination for International Travelers:** Vaccination is provided to international travelers from and to eight countries with ongoing polio cases. Continuous vaccination at international borders helps prevent the importation of the virus.
- **Surveillance and Monitoring:** Acute Flaccid Paralysis (AFP) surveillance and environmental monitoring are used to detect any potential polio threats early and respond quickly.

Polio Vaccination

Inactivated Poliovirus Vaccine (IPV)

- Made from killed poliovirus strains.
- Administered as an injection.
- Stimulates immunity without causing polio.

Oral Poliovirus Vaccine (OPV)

- Contains live but weakened poliovirus strains.
- Administered orally.
- Provides immunity by stimulating the immune system in the intestines.
- A very rare risk of causing polio exists through vaccine-derived poliovirus (VDPV).

BENEFITS OF POLIO VACCINATION

01 Prevention of polio infection

02 Elimination of polio-related disabilities

03 Herd immunity to protect the community

04 Global efforts to eradicate polio

05 Improved quality of life for individuals and communities



History of Polio Vaccination

1952: Dr. Jonas Salk begins testing the IPV.

1957: Dr. Albert Sabin develops the OPV.

1979: The U.S. records its last case of wild poliovirus.

2000: The Western Pacific Region is certified as polio-free.

2024: Efforts continue toward global eradication.

1955: IPV is licensed in the U.S.

1960s: OPV is introduced globally.

1988: The Global Polio Eradication Initiative (GPEI) is established.

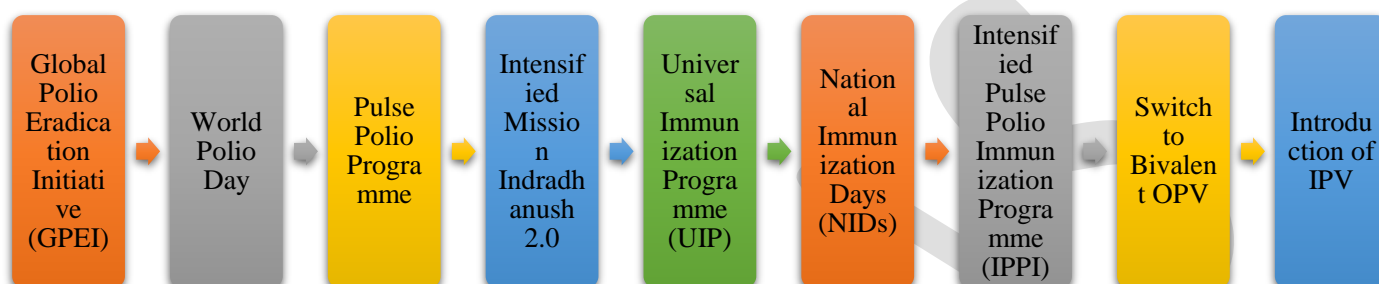
2014: WHO declares the spread of wild poliovirus a global health emergency.

Key Facts about Polio

- Polio is a highly infectious disease that spreads through the mouth and affects the nervous system.
- It mainly impacts children under five years of age.
- Initial symptoms can include fever, fatigue, headache, and stiffness in the neck.
- Up to 90% of infections are asymptomatic or mild.

- One in 200 infections can lead to permanent paralysis, and 5-10% of those paralyzed may die due to respiratory issues.
- The virus spreads through feces and thrives in areas with poor sanitation.
- Since 1988, polio cases have decreased by over 99%, with only two endemic countries remaining as of October 2023.

Measures Taken to Eradicate Polio



- **Global Polio Eradication Initiative (GPEI):** Launched in 1988, led by WHO, Rotary International, CDC, and UNICEF.
- **World Polio Day:** Observed annually on October 24 to promote continued vigilance.
- **Pulse Polio Programme:** Mass immunization campaigns targeting children under five.
- **Intensified Mission Indradhanush 2.0:** Aims to increase immunization coverage.
- **Universal Immunization Programme (UIP):** Launched in 1985 to improve immunization services and ensure vaccine availability.
- **National Immunization Days (NIDs):** Specific days dedicated to administering the oral polio vaccine to children under five.
- **Intensified Pulse Polio Immunization Programme (IPPI):** Targets high-risk areas with additional vaccination rounds.
- **Switch to Bivalent OPV:** In 2016, India switched to bivalent OPV to focus on WPV1 and WPV3.
- **Introduction of IPV:** In 2015, IPV was added to routine immunization to strengthen protection.

ANRF plan has got off on the wrong foot

- In 2023, both Houses of Parliament passed the Anusandhan National Research Foundation (ANRF) Bill, marking a historic start to an initiative to seed, grow, and facilitate research in India, especially in India's universities and colleges.
- The 2019 National Research Foundation (NRF) project report explicitly mentioned that “growing outstanding research cells already existing at State Universities” is one of the ANRF's top priority. The scientific community welcomed the Bill and was hoping that the ANRF would provide much-needed breathing space for Indian academia for research free from the bureaucracy, in addition to providing a funding boost and a chance to work together with industry partners.
- Nearly a year later and the ANRF has got off on the wrong foot. Recently, it announced a 15-member Governing Board and a 16-member Executive Council, which lack representation from organisations the ANRF envisioned aiding and facilitating.
- For example, the ANRF aims to strengthen the research infrastructure of universities. Even acknowledging that more than 95% of students attend State universities and colleges in India, the board and the executive council do not have any members from Central or State universities or colleges.

- In addition to the Principal Scientific Adviser, they are represented by people who are usually in any high-powered committees of the Government of India — Secretaries from all science departments (Department of Science and Technology (DST), Department of Biotechnology (DBT), Department of Scientific and Industrial Research (DSIR), earth sciences, agriculture, health research, atomic energy, new and renewable energy, electronics and information technology), higher education and defence research and development, directors of the Indian Institute of Science and Tata Institute of Fundamental Research, the Chair of the Indian Council of Historical Research, a Princeton mathematics professor, a science administrator and former Director of the United States National Science Foundation from Brown University and a Silicon Valley serial entrepreneur.
- However, the board and the council need representatives who understand the bottlenecks in the current system, especially in the university system, and know how to get things done on the ground rather than being in an advisory role.
- Most importantly, the ANRF needs to avoid the confusion that can arise from multiple committees. Therefore, creating a single committee to formulate and implement strategies on the ground is crucial.
- This emphasis on ground-level knowledge and experience among the committee members should reassure the research community and stakeholders that the ANRF's decision-making process will be informed, competent, and timely.
- The lack of adequate industry representation and diversity is one of the most glaring omissions from the current board and council, especially when the ANRF plans to raise more than 70% of its funding from non-government sources and industry.
- The sole industry representative, Romesh T. Wadhvani, is an Indian-American businessman based in Silicon Valley, U.S., and the sole woman representative is the Secretary of the DSIR. There is no representation from Indian industry or any entrepreneurs from the country or eminent academics from the Central and State universities on the committee.
- India underfunds research and development. In addition to increasing the research and development budget to 4% of GDP, a significant overhaul of the current funding system is required to boost research and to make innovation coming out of Indian organisations globally competitive.
- To achieve this, the ANRF must: be adequately staffed; implement a robust grant management system; have an internal standard peer-review system with an incentive for reviewers; ensure timely disbursement of research grants and student fellowships with a quick turn-around time (less than six months) between application and fund disbursement; have a system free from bureaucratic hurdles both at the funding body and at grantee institutions; provide flexibility of spending money without following the government's stringent general financial rules (GFR), and permit purchases without going through the Government e-marketplace (GeM) portal.
- The ANRF must function unlike any other current government science department, it should have more diverse representations of practising natural and social scientists from the university system, with more women and young entrepreneurs in its committee.
- Additionally, the future chief executive officer of the ANRF must have a background in both industry and academia, and be someone who can raise money for the ANRF and understand the global innovation ecosystem. A complete overhaul is required for the ANRF to avoid becoming like any other government department and to bridge research and teaching in our universities.
- The composition of the Anusandhan National Research Foundation's governing board and executive council shows that it could become just another government department.

ANRF Act

In 2023, both Houses of Parliament passed the Anusandhan National Research Foundation (ANRF) Bill to initiate, foster, and promote research in India, with a particular emphasis on enhancing research activities in the nation's universities and colleges.

The National Research Foundation

The Ministry of Science and Technology, Government of India, has approved the proposal to introduce the National Research Foundation (NRF) Bill, 2023, in Parliament.

- **Establishment of NRF:** The bill advocates for the formation of the National Research Foundation (NRF), a premier organization tasked with offering strategic guidance for scientific research in India. This initiative aligns with the recommendations outlined in the National Education Policy (NEP) 2020.
- **Objective:** The National Research Foundation (NRF) aims to ensure equitable conduct and funding of scientific research, with an emphasis on increasing participation from the private sector. It will focus on establishing a policy framework and regulatory processes to encourage collaboration and boost industry spending on research and development (R&D). The NRF also seeks to engage more colleges and universities in scientific research, addressing the current situation where less than 1% of India's nearly 40,000 higher learning institutions are involved in research. The NRF plans to strengthen research capacities in universities by encouraging active researchers to take up NRF professorships and collaborate with existing faculty, regardless of age.

Significance

- **Promoting Research Beyond Natural Sciences:** The NRF will support and fund research not only in natural sciences but also in humanities, social sciences, and the arts. This interdisciplinary approach is vital for nurturing creativity, critical thinking, and communication skills. Currently, research in these areas receives limited funding, and the NRF aims to establish dedicated directorates for social sciences, Indian languages and knowledge systems, arts, and humanities.
- **National Priorities:** The NRF will identify key areas where science and technology can contribute to national objectives, such as clean energy, climate change, sustainable infrastructure, improved transportation, and accessible and affordable healthcare.
- **Enhanced Funding:** The NRF seeks to increase funding for scientific research in India from both government and private sources. Currently, India spends less than 0.7% of its GDP on research and development, lagging behind countries like Egypt and Brazil, which spend more. Nations such as the US, China, Israel, Japan, and South Korea invest between 2% and 5% of their GDPs in scientific research. This inadequate funding has affected the quality and quantity of research output in India. The initial allocation of ₹50,000 crore over five years for the NRF may not represent a significant increase, but it is expected to grow as the NRF gains traction and demonstrates tangible progress.

Functions of the National Research Foundation



The National Research Foundation (NRF) plays a key role in shaping research, innovation, and entrepreneurship across various fields. Its primary focus areas include natural sciences, engineering and technology, environmental and earth sciences, health and agriculture, and the intersection of science with humanities and social sciences.

- **Research Roadmap Development:** Create plans for short-term, medium-term, and long-term research and development strategies.

- **Infrastructure Support:** Facilitate and fund the development of research infrastructure in universities, colleges, and research institutions.
- **Grant Funding:** Provide funding for competitive peer-reviewed grant proposals submitted by eligible individuals.
- **Technology Transformation:** Assist in converting research into technologies that require significant investment.
- **Global Engagement:** Strengthen India's involvement in major national and international research areas.
- **Investment Encouragement:** Promote investment from both private and public sectors into the NRF.
- **Research and Spending Surveys:** Conduct annual surveys to evaluate scientific research, its outcomes, and funding expenditure.

Structure of the National Research Foundation (NRF)

Component	Details
Governing Board	<p>President/Chairperson: Prime Minister of India</p> <p>Other Members:</p> <ul style="list-style-type: none"> - Union Minister of Science and Technology - Union Minister of Education - Principal Scientific Advisor (Member Secretary) - Secretaries to the Departments of Science and Technology, Biotechnology, Scientific and Industrial Research - Member of the NITI Aayog dealing with science and technology - Additional members from business organizations, social sciences, and humanities as appointed by the President - Secretaries to various central government departments including Science and Technology, Higher Education, Health Research, Agricultural Research, Defence Research, Atomic Energy, Space
Executive Council	<p>President/Chairperson: Principal Scientific Advisor</p> <p>Functions:</p> <ul style="list-style-type: none"> - Govern the administrative department of NRF - Provide policy guidance to the Foundation and oversee implementation - Implement the objectives of the Foundation based on the policy direction and guidance provided by the Governing Board - Examine applications for financial aid - Develop a budget and manage accounts

Need for the National Research Foundation



- **Low Investment in Research:** India's Gross Expenditure on Research and Development (GERD) is approximately 0.7 percent of GDP, which is lower compared to the global benchmark of 2 percent.
 - To become a leader in science, India needs a substantial increase in funding and a clear implementation strategy.
- **Limited Private Sector Contribution:** The government contributes 52 percent of GERD in India, significantly more than in countries like the US (10%), Germany (13%), and China (15%).
 - The ANRF-2023 Act aims to attract more private sector investment to bridge this gap.



- **Challenges in Research and Development:** The NRF can address issues related to India’s research and development capacity.
 - Funds should be directed towards enhancing scientific research in universities and semi-urban areas.
- **Impact of Brain Drain:** Low spending on R&D and fewer innovative opportunities may drive young talents to seek opportunities abroad.
 - India needs to make better use of its talented workforce.

Significance of the National Research Foundation



- **Democratization of Science Funding:** The NRF will focus on funding projects in rural and semi-urban areas that typically receive less support for scientific research.
- **Expansion of Research Areas:** Support will extend beyond natural sciences and engineering to include social sciences, arts, and humanities.
- **Efficient and Integrated Management:** The NRF will implement missions such as supercomputing and quantum technology with a streamlined management system.
- **Enhanced Collaboration:** The NRF will foster partnerships between businesses, academia, government agencies, and research institutions.
 - It will seek financial contributions from the private sector to build a sustainable research ecosystem.

Anusandhan National Research Foundation Bill, 2023

The Anusandhan National Research Foundation Bill, 2023, introduced in the Lok Sabha on August 4, 2023, repeals the Science and Engineering Research Board Act, 2008, and dissolves the Science and Engineering Research Board established under it. The Bill establishes the Anusandhan National Research Foundation (NRF) to oversee strategic direction in research, innovation, and entrepreneurship.

Component	Details
Ministry	Science and Technology
Functions of NRF	- Provide strategic direction for research and innovation in: <ol style="list-style-type: none"> Natural sciences and mathematics Engineering and technology Environmental and earth sciences Health and agriculture Scientific and technological interfaces with humanities and social sciences - Prepare roadmaps and formulate R&D programs - Facilitate and finance R&D infrastructure - Provide research grants - Support translation of research into technology - Encourage international collaboration and investments - Conduct annual surveys of scientific research and spending
Funds for NRF	- Grants and loans from the central government - Donations - Income from investments - Amounts from the previous Science and Engineering Research Fund

Constituted Funds	<ul style="list-style-type: none"> - Anusandhan National Research Foundation Fund: For salaries, allowances, and administrative expenses - Innovation Fund: For funding outstanding creativity - Science and Engineering Research Fund: For continuation of projects from the 2008 Act - Special Purpose Funds: For specific projects or research - Utilisation rules prescribed by the central government - Annual audit by the Comptroller and Auditor General (CAG)
Governing Board	<p>Chairperson: Prime Minister of India</p> <p>Members:</p> <ul style="list-style-type: none"> - Union Ministers of Science and Technology and Education as Vice Presidents - Principal Scientific Advisor as Member Secretary - Secretaries to the Departments of Science and Technology, Biotechnology, and Scientific and Industrial Research - Additional members appointed by the President, including from business organizations, social sciences, and natural sciences
Executive Council	<p>Chairperson: Principal Scientific Advisor</p> <p>Functions:</p> <ul style="list-style-type: none"> - Review applications for financial assistance - Prescribe regulations for financial assistance - Prepare the budget and maintain accounts - Authorize officers to verify grant applications <p>Members:</p> <ul style="list-style-type: none"> - Secretaries to various central government departments - Chief Executive Officer of the Foundation - Up to two additional secretaries and three experts appointed by the President

A law around low-carbon climate resilient development

Context: In a landmark judgment, the Supreme Court of India recently recognised a right to be “free from the adverse impacts of climate change” in M.K. Ranjitsinh and Others vs Union of India — sourcing it from the right to life and the right to equality. There is, therefore, a strong case for climate legislation, but only if it is tailored to the Indian context. Taking this issue forward provides an opportunity, but also a challenge, for the new government.

Key Highlights

- Preparing India to reduce the risks of climate change and address its impacts requires nothing less than re-orienting development toward low-carbon and climate resilient futures.
- Any law that attempts to take this on must ensure these objectives are internalised in routine decision-making at all levels of development. Because climate change relentlessly targets the vulnerable, and because an energy transition must be just, it must be grounded in the imperative of advancing social justice.
- While the concept of climate law is often associated with a top-down approach of setting and achieving targets, in a developing country, this approach is limited because addressing climate change is about more than limiting emissions.
- Instead, it requires careful, ongoing, consideration of each developmental choice and its long-run synergies and trade-offs with low-carbon and climate resilient futures.
- To achieve this, the substantive right of protection against adverse effects of climate change must be realised, in part, through well-defined procedures in law that are applicable across levels of government.
- Climate action is more credible when a well-designed institutional structure is strategizing, prioritising, troubleshooting and evaluating policies behind the scenes.
- Several countries (67 according to one estimate) have experimented with ‘framework climate laws’ that build governance capacity to address climate change.

- Umbrella laws that define government-wide goals and substantiate them with a set of processes and accountability measures are a known and increasingly popular way of bringing climate action to the heart of government. However, these laws vary, and India's approach must be tailored to our context.
- Starting from a low base of per capita emissions — less than half the global average — India's emissions are still growing, and our objective should be to squeeze out as much development as possible from each ton of carbon and avoid locking-in to high carbon futures.
- Moreover, India is highly vulnerable to climate impacts, and climate resilience must be an essential element of the new law. In meeting both objectives, considerations of social equity must be central.
- Consequently, India's law must ensure development, but in a low-carbon direction while building resilience to ever more pervasive climate impacts. What we arrive at, then, is a law that helps navigate developmental choices. It must create the basis for thoughtful decision-making toward achieving a low-carbon, resilient society.
- For example, since Indian cities are still growing and changing rapidly, what could low-carbon, climate resilient cities of the future look like? And what levers exist to shape those cities? How can city planning minimise the risk of floods and vulnerability to heatwaves? How should transport needs be met through technology shifts such as electric vehicle adoption and greater attention to public transport and lifestyle shifts? A framework climate law should lay out an institutional structure capable of crafting viable answers to these questions.
- Our ongoing work at the Sustainable Futures Collaborative provides some suggestions. An immediate priority is to create a knowledge body in government capable of rigorously parsing policy options and the futures they might generate. We recommend an independent 'low-carbon development commission', staffed with experts and technical staff, which could offer both national and State governments practical ways of achieving low-carbon growth and resilience.
- This body could also serve as a platform for deliberative decision-making. Vulnerable communities and those that may lose from technological change need to be systematically consulted. Hearing their concerns and incorporating some of their ideas could lead to longer-lasting policy outcomes. An example is South Africa's Presidential Climate Commission, which is tasked with charting a course toward just transition based on inputs and representations from stakeholders.
- Effective climate governance also requires the ability to set directions, make strategic choices, and encourage the consideration of low carbon choices and climate change impacts within line ministries. Accordingly, the law could create a high-level strategic body, which we label a 'climate cabinet', a core group of Ministers plus representation from Chief Ministers of States, tasked with driving strategy through government. Across the world, climate policy is often defeated by siloed decision-making.
- This is one way of fixing it. A whole-of-government approach will also require dedicated coordination mechanisms for implementation. The Ministry of Environment, Forest and Climate Change should continue to play a central role, but it needs to be complemented by higher-level coordination. Here, the pre-existing Executive Committee on Climate Change (made up of senior bureaucrats from multiple Ministries), provides a useful template but only if it is reinvigorated with clearly specified legal powers and duties.
- Not least, the law must pay attention to India's federal structure. Many areas crucial to reducing emissions and improving resilience — electricity, agriculture, water, health and soil — are wholly or partially the preserve of State and local governments. When a climate impact is felt, it is felt first, and most viscerally, at local levels.
- Any institutional structure or regulatory instrument created to protect the Court's newly established climate right must meaningfully engage with subnational governments.
- First, the law must establish a channel for subnational governments to access national scientific capacity, potentially through the low-carbon development commission as an intermediary, as a step toward solving the pervasive problem of insufficient local climate scientific capacity.

- Second, it could articulate ways of financing local action, for example by requiring centrally-sponsored schemes to be more aligned with climate goals or by requiring national departments to climate tag expenditure towards local climate resilience.
- Third, the law could establish coordination mechanisms that allow the Centre and States to consult on major climate decisions. It could also require the Centre and States to put out periodically updated medium-term climate plans built around unified goals.
- To enable development of State-specific solutions, States could also build complementary institutions to those at the Centre, providing knowledge, strategy-setting, deliberation and coordination functions.
- The framework law proposed here — one that enables and catalyses action across national Ministries and the federal structure — cannot be the only legal tool in the country's regulatory arsenal. Complementary sectoral laws and amendments may be required, but they would be informed by the approach laid out by the framework law.
- The Court's historical pronouncement in M.K. Ranjitsinh opens the door to legal and governance changes that make possible an actionable right against the adverse effects of climate change. But to realise this promise, this open door has to actually be used to pass a climate law that is well suited to the Indian context, that steers Indian development choices toward a low-carbon and climate resilient future, and that also advances justice. The 'M.K. Ranjitsinh' judgment must be used to pass a climate law that is well suited to the Indian context.

Evolution of India's Climate Policy

- India's climate change policies have consistently aimed to align development goals with climate outcomes, maintaining a clear, consistent, and coordinated approach. Following the 1992 Rio Summit, the Climate Change and Biodiversity Divisions within India's then Ministry of Environment and Forests gradually began to take shape.
- The Rio Summit marked the emergence of key international agreements, including the UNFCCC, the Convention on Biological Diversity (CBD), and Forest Principles.
- India has been a strong and consistent advocate for the Global South, playing a pivotal role in the development of the CBDR-RC (Common but Differentiated Responsibilities and Respective Capabilities) principle during the Rio Summit in 1992.

Need for Climate Legislation in India

Climate Resilience as a Priority

Beyond Emissions Targets

Framework Climate Laws

Enabling Law for Low-Carbon Growth

- **Climate Resilience as a Priority:** Any climate legislation in India must prioritize climate resilience by embedding climate considerations into everyday decision-making processes across all levels of development. This is crucial as vulnerable communities are disproportionately impacted by climate change, underscoring the importance of a just energy transition rooted in social justice.
- **Beyond Emissions Targets:** Climate law should extend beyond simply setting and achieving emissions targets. It should guide developmental choices by assessing their long-term synergies and trade-offs with low-carbon and climate-resilient futures.
- **Framework Climate Laws:** Many countries have adopted 'framework climate laws'—broad, umbrella laws that define government-wide goals and establish processes and accountability measures. India's approach should be tailored to fit its unique context and governance capacity.
- **Enabling Law for Low-Carbon Growth:** Instead of narrowly focusing on regulating carbon emissions, India needs an 'enabling law' that promotes development decisions across various sectors. This law should

systematically evaluate whether each decision supports low-carbon growth and climate resilience. Key sectors like urban development, agriculture, water management, and energy must align with these objectives.

Role of Supreme Court in Climate Policy

- The Supreme Court of India has recognized the links between ecology, human dignity, and climate change and made important connections between human rights and global warming mitigation.
- It stated, 'Without a clean environment which is unimpacted by the vagaries of climate change, the right to life is not fully realised'.
- It noted that the right to a healthy environment, safe from the ill-effects of climate change, was a 'fundamental human right'.
- The court linked the right against climate change to Articles 21 (right to life) and 14 (right to equality), stating that the rights to life and equality could not be fully realised without a clean, stable environment.
- It highlighted the interconnection between climate change and various human rights, including the right to health, indigenous rights, gender equality, and the right to development.

Need for Climate Policy

Internalizing Climate Objectives

Governance Capacity

Social Equity

- **Internalizing Climate Objectives:** India needs a climate law that establishes a cohesive framework for national action while empowering states and local governments. The law should provide essential information and financial resources to support effective climate initiatives at all levels. Additionally, it should involve civil society and private sector stakeholders, not just the government.
- **Governance Capacity:** Framework climate laws, often termed 'umbrella laws,' set broad goals and processes for addressing climate change across the government. These laws enhance governance capacity by guiding strategy, prioritization, troubleshooting, and policy evaluation. India can benefit from the experiences of other countries that have implemented similar laws.
- **Social Equity:** Energy transition efforts must address social equity. Those responsible for greenhouse gas emissions should bear the associated social and environmental costs, with compensation mechanisms in place for those adversely affected by climate change. Achieving a balance between development and low-carbon objectives requires a fair and just transition.

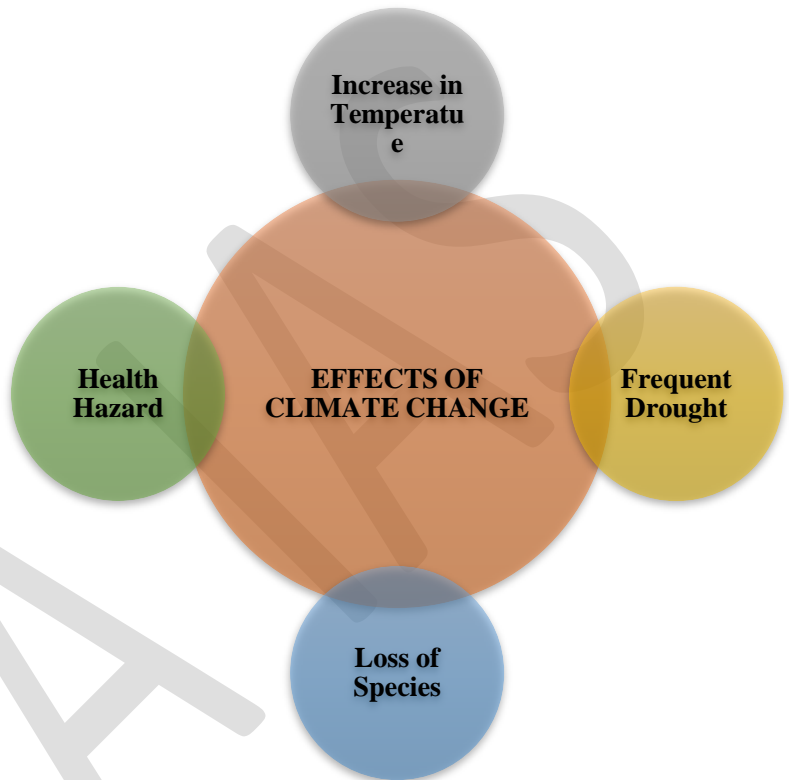
Climate Change

It refers to significant and lasting changes in the Earth's climate patterns, primarily driven by human activities such as the burning of fossil fuels, deforestation, and industrial processes. These activities increase the concentration of greenhouse gases in the atmosphere, leading to global warming and altering weather patterns.

Several human activities contribute significantly to environmental harm, including:

- **Power Generation:** The burning of fossil fuels—such as coal, oil, and gas—for power and heat is a major source of global emissions. This process releases substantial amounts of carbon dioxide and nitrous oxide. Currently, only about a quarter of the world's electricity is generated from renewable sources like wind, solar, and other natural resources.
- **Manufacturing and Industrial Goods:** The manufacturing and industrial sectors are key contributors to greenhouse gas emissions. These emissions primarily result from burning fossil fuels to generate energy for producing goods such as textiles, electronics, plastics, cement, iron, and steel. Additionally, mining, construction, and other industrial processes release greenhouse gases. Many products, including plastics, are made from chemicals derived from fossil fuels.

- **Deforestation:** Deforestation, along with agricultural practices and other land-use changes, is responsible for a significant portion of global greenhouse gas emissions. Annually, approximately 12 million hectares of forests are burned or cleared. Forests play a crucial role in absorbing carbon dioxide; thus, their destruction diminishes this natural carbon sink and increases emissions.
- **Transportation:** The transportation sector, which relies heavily on fossil fuels, is a major source of greenhouse gas emissions, particularly carbon dioxide. Projections indicate a substantial increase in energy use for transportation in the coming years.
- **Food Production:** The food production process contributes to climate change in several ways, including deforestation for agricultural use, methane emissions from livestock digestion, and the energy-intensive production and use of fertilizers and manure. Fossil fuels are also used to power farm machinery and fishing boats.
- **Powering Buildings:** Residential and commercial buildings account for over half of the world's electricity consumption. Energy-related carbon dioxide emissions from buildings have risen due to increased demand for heating, cooling, air conditioning, and the use of electricity for lighting, appliances, and electronic devices.



Indigenous HPV vaccine, the rhetoric and the reality

Context: India's public health sphere was subject recently to a one-sided discourse on how vaccination against the human papilloma virus (HPV) prevents cervical cancer and consequent death. Interestingly, it is not proven beyond doubt that HPV causes cervical cancer, as only a couple of strains out of 200 strains that infect humans are somehow 'associated' with 'precancerous lesions'.

Key Highlights

- Most of the women who die of cervical cancer are HPV positive, but most of the men and women who are HPV positive do not get virus-induced cancer, let alone die due to it.
- The Population Based Cancer Registries (PBCR) of India and the International Agency for Research on Cancer (IARC) have acknowledged the declining trends of cervical cancer prevalence in India and the globe, regardless of vaccine coverage or efficacy.
- Therefore, the timing of the overzealous push for 'universal' vaccination of girls against HPV does serious injustice to the more justifiable 'selective' vaccination of high-risk groups, considering its sexual transmission, unlike air-borne, water-borne or contagious diseases.
- An extremely important western assumption behind targeting pre-puberty girls for this vaccine is that teenage girls indulging in promiscuous physical relations and becoming carriers of the virus are a huge risk factor for

the entire adult population. This is a huge moral conundrum in Indian society and even reeks of patriarchy, as men can be carriers too.

- But this article focuses on the questionable timing, promotion and pricing of indigenous HPV vaccines, assuming some high-risk populations need it.
- The Serum Institute of India (SII) developed ‘Cervavac’ and promoted it as an indigenous and affordable vaccine. It is pertinent to ask why it took nearly two decades for the ‘indigenous’ vaccine after the introduction of a patented HPV vaccine in the United States, Australia and elsewhere in the Global North.
- Cervavac uses similar techniques, deploying virus-like particles (VLPs) produced using recombinant deoxyribose nucleic acid (rDNA) techniques to generate an immune response against HPV infections.
- The vaccine against cervical cancer is only the second rDNA vaccine in the world using the techniques of the early 1970s, the first being the vaccine against Hepatitis-B.
- Prior to the development of rDNA methods, vaccine manufacture was largely a charitable or public sector enterprise with universal sharing of strains/techniques and little or no place for patenting of vaccines.
- The whole scenario changed with the amendment of the U.S. Patent Act in the 1980s allowing the patenting of genetically modified organisms (GMOs) and life processes, and the introduction of Bayh-Dole Act to legalise publicly funded scientists setting up companies.
- With the eventual globalisation of U.S. patent laws through the World Trade Organization Agreement on Trade-Related Aspects of **Intellectual Property Rights (TRIPS)** since 1995, vaccine development and innovation changed drastically.
- **Vaccine innovation underwent significant changes** in terms of its organisation, patenting strategies and even distribution practices in academia and industry.
- An important element of this ‘value addition’ is legalisation of the conversion of public ‘research’ into private ‘development’ and its monopolisation by patenting. This facilitated the change of hands in vaccine development and production from the public to private sector the world over, aided by the politics of liberalisation and globalisation.
- This was **elaborated by William Muraskin in his book**, The Politics of International Health: The Children’s Vaccine Initiative and the Struggle to Develop Vaccines for the Third World, and, more recently, in a collection edited by Stuart Blume and Baptiste Baylac-Paouly, titled Immunization and States: The Politics of Making Vaccine, that included the Indian scenario. Developed under these new innovation conditions was the first vaccine for cervical cancer marketed as Gardasil by Merck and Cervarix by Glaxo Smithkline, globally.
- These developments impacted the Indian pharmaceutical and biotech industry in general and vaccine development in particular. Earlier, **the Indian Patent Act (1970)** abolished patenting products and allowed only processes, that too excluding agricultural and biological patents.
- This enabled the growth of domestic industries to become the pharmacy of the world within two decades. They manufactured low-cost generic drugs and vaccines, often within a couple of years after they were introduced in the global north.
- The first rDNA vaccine produced in India for hepatitis-B not only entered the market within five years under the process patent but also dropped the price to an order of magnitude cheaper than in the global north.
- On the other hand, under the current product patent regime, a locally made DNA vaccine against cervical cancer had to wait for two decades till the expiry of the product patents before its indigenous ‘generic’ version was made available.
- The expiry of key patents of the HPV vaccine was recently reported by the World Health Organization and a highly cited article published in Nature Biotechnology.
- While multinational patent monopolies largely explain the delay in developing a local vaccine, what still remains unexplained is the exorbitant current market price of Cervavac. Prior to the domestically manufactured vaccine, two prominent multinational vaccines (Gardasil and Cervarix) were sold in India for ₹4,000 a dose.

- Even at about half that price, a domestically manufactured vaccine in the private market remains largely unaffordable, keeping the vaccine out of reach for a large section of the target population.
- What is even more worrisome is the unreasonable pricing strategy itself, as the price does not truly reflect the production costs. First, Indian industry is well equipped infrastructurally to make rDNA products at scale, particularly vaccines. Second, Cervavac development was funded heavily, which included nearly \$7 million by the Bill & Melinda Gates Foundation (BMGF) under its Grand Challenges Fund. Third, the infrastructure used in producing Cervavac was also a part of the production facility for the Covishield vaccine, built with significant support from the Indian government's Department of Biotechnology.
- Such a shared use of resources must have reduced the actual input costs to enable more affordable pricing, thus raising doubts on the pricing strategy of the SII. It seems to be designed to capitalise on high-margins even at low trade volumes, rather than using economies of scale and low margin pricing to boost volume trade. This is essential for public health, as high population coverage is crucial for the success of any vaccine.
- Another serious concern is the unavailability of other competing vaccines from domestic players, which could have put downward pressure on the current price of Cervavac.
- This is surprising given the fact that at least four different vaccine candidates were in the pipeline since 2010 from other domestic players. Shantha Biotechnics, Hyderabad, which produced a rDNA Hepatitis-B vaccine at a cheaper price pledged to bring an affordable HPV vaccine to the market by 2015, after it acquired licences from the National Institutes of Health and Johns Hopkins University in the U.S.
- This may have collapsed after Shanta was acquired by Sanofi Pasteur, Paris, which itself was associated with Merck's Gardasil in several ways. Nonetheless, Shantha Biotechnics, Indian Immunologicals, and Bharat Biotech, Hyderabad, and Zydus Cadila, Ahmedabad has all announced their HPV vaccines in the pipeline around the same period. Their unavailability despite the expiry of the earlier patent barrier is a matter of concern.
- The Cervavac vaccine is currently recommended universally under the government vaccination programme for girls between the ages of nine to 26 at a price of ₹500 for two doses, which is expensive even for the government.
- For those millions who are left out of the government coverage, the retail price of Cervavac will shoot up four-fold to ₹2,000, in a country that has low insurance penetration and catastrophically huge out-of-pocket health expenditures. Therefore, even as the need for universal HPV vaccination to prevent cervical cancer remains an unresolved doubt, the lack of competition and opaque pricing merits investigation in the larger public interest.
- India's push for vaccination of girls against HPV raises questions on its timing, promotion and pricing.

Global Trends

	Global Trends	Trends in India
Prevalence	Cervical cancer ranks as the fourth most common cancer among women worldwide.	In India, it is the second most common cancer among women aged 15-44 years.
New Cases	Approximately 604,000 new cases were reported globally in 2020.	India reports over 97,000 new cases annually.
Mortality Rates	Global deaths reached around 342,000 in 2020, with the highest mortality observed in low- and middle-income countries due to limited access to screening and treatment.	Cervical cancer accounts for about 17% of all female cancer deaths in India.

Hpv - Human Papillomavirus

- Human Papillomavirus (HPV) is a very common infection.
- Most people will contract HPV at some point in their lives.
- Over 42 million Americans are currently infected with types of HPV that can cause disease.
- Annually, about 13 million Americans, including teenagers, get infected with HPV.

- HPV spreads through intimate skin-to-skin contact, including vaginal, anal, or oral sex, even if the infected person shows no symptoms.

Types of HPV

Non-Oncogenic HPV

These types primarily cause warts.

Oncogenic HPV

These types are associated with an increased risk of cancer.

HPV Vaccine

The HPV (Human Papillomavirus) vaccine is a preventive tool designed to guard against infections from high-risk strains of HPV, which can lead to various cancers, including cervical cancer, as well as cancers of the vulva, vagina, penis, anus, and throat. It also helps prevent genital warts caused by certain HPV types.

Types of HPV Vaccines

- **Gardasil:** Protects against HPV types 6, 11, 16, and 18, offering protection against most cervical cancers and genital warts.
- **Gardasil 9:** An updated version covering nine HPV types (6, 11, 16, 18, 31, 33, 45, 52, and 58), providing broader protection against cervical, vulvar, vaginal, and anal cancers, as well as genital warts.
- **Cervarix:** Targets HPV types 16 and 18, which are linked to a significant number of cervical cancer cases.

How does HPV vaccine works?



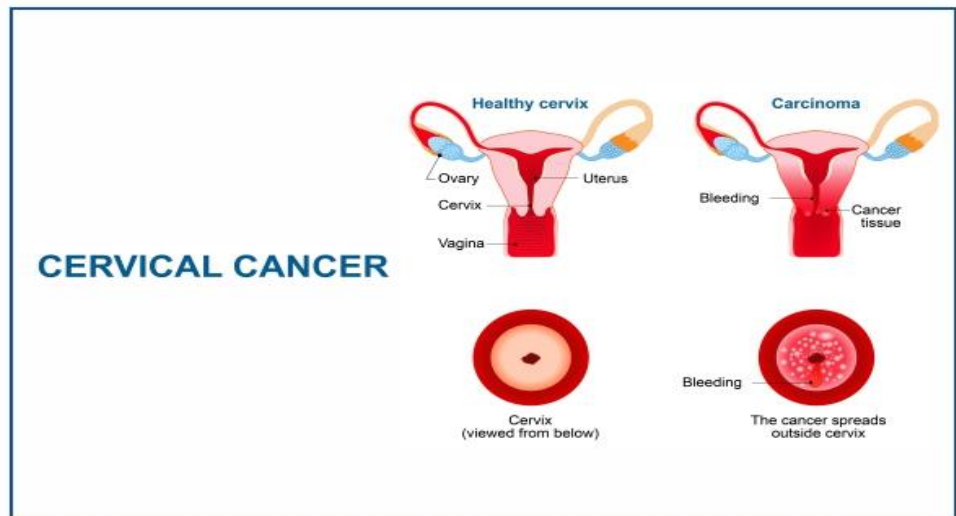
- **Target Age Group:** Recommended primarily for preteens aged 11-12 years, but it can be given to individuals up to age 45. It is most effective when administered before sexual activity begins.
- **Administration:** The vaccine is generally given in a series of two or three doses over a six-month period, depending on the recipient's age at the start of the vaccination series.
- **Effectiveness:** The HPV vaccine is highly effective in preventing infections with the HPV types it covers, significantly lowering the incidence of HPV-related cancers and genital warts. It is estimated to reduce the risk of cervical cancer by up to 90% if administered prior to HPV exposure.
- **Safety:** Extensive testing has confirmed the HPV vaccine's safety and efficacy. Common side effects are generally mild and may include pain at the injection site, mild fever, or headache.
- **Global Impact:** Widespread HPV vaccination programs have led to notable declines in HPV infections, cervical cancer rates, and genital warts in countries with high vaccine coverage.
- **Public Health Benefits:** By preventing HPV infections, the vaccine reduces the incidence of HPV-related diseases and contributes to a decrease in cervical cancer cases. It plays a crucial role in global efforts to eradicate cervical cancer and other HPV-related cancers.

The HPV vaccine marks a significant advancement in public health, offering an effective method to prevent specific cancers and other HPV-related conditions. Vaccination programs are vital for decreasing HPV prevalence and enhancing health outcomes worldwide.

Cervical cancer

It is the second most common cancer among women in India, predominantly affecting those in middle age. In 2022, India accounted for approximately one-fifth of the global burden, with 123,907 new cases and 77,348 deaths.

- Main Cause:** Persistent infection with high-risk types of Human Papilloma Virus (HPV) is the primary cause of cervical cancer. Contributing factors such as low socioeconomic status, weakened immune system, other genital infections, and smoking can facilitate the initiation and progression of the disease.
- Prevention and Detection:** Cervical cancer is both preventable and treatable if detected early. Most cases, including precancerous ones, can be identified in women of reproductive age. The disease has a prolonged pre-invasive phase lasting 10 to 15 years, offering a crucial opportunity for early detection and treatment. When diagnosed and managed at an early stage, cervical cancer has a cure rate exceeding 93 percent.
- Prevention Strategies:** HPV vaccination for girls is an effective method for preventing cervical cancer. Globally, cervical cancer ranks as the fourth most common cancer among women, claiming the lives of more than 300,000 women annually, or roughly one life every two minutes. Ninety percent of these deaths occur in lower- and middle-income countries.



Is proof of necessity a pre-requisite for the ED to arrest accused under PMLA?

Context: Two observations made in different contexts by the Supreme Court of India have raised relevant issues concerning personal liberty.

Key Highlights

The cases related to actions under the **Prevention of Money Laundering Act (PMLA)**, and the significance of these observations lies in the extent to which courts are inclined to protect personal liberty in the face of a determined government that wants its agencies to have their way.

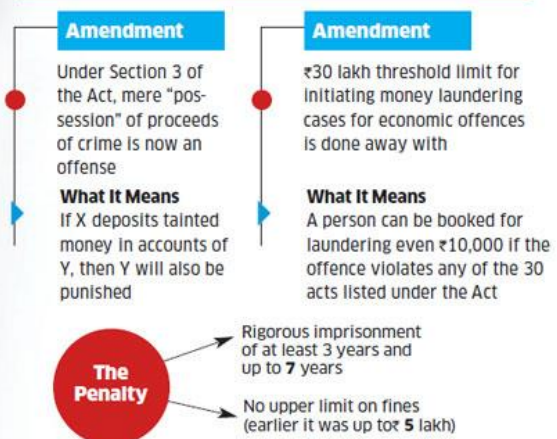
- One concerned the question whether an officer arresting a person on money-laundering charges should demonstrate the necessity for arrest for the action to be deemed valid; and the other voiced shock and revulsion at the ease and quickness with which courts were staying reasoned orders granting bail.
- A Bench headed by Justice Sanjiv Khanna granted interim bail, for the second time since his arrest in March, to Delhi Chief Minister Arvind Kejriwal, in the course of a discussion on the legality of his arrest by the Enforcement Directorate (ED).
- The 64-page verdict ended with a reference to a larger Bench the question whether the ED would have to prove the need or “necessity to arrest” a person, before effecting an arrest. Section 19 of PMLA speaks of the arresting officer being required to have “reason to believe” that the person is guilty of money-laundering before effecting arrest.

- The PMLA casts a statutory obligation on an officer to both record reasons for arrest and convey grounds for arrest to the accused. Whether these obligations include a duty to demonstrate the necessity to arrest the person will have to be decided.
- It is established that the existence of a power is not sufficient justification for exercising it. The heartening feature of the Court's order is that it lays down the view that the authorised officer's decision on arrest ought to be rooted in compliance with statutory requirements, and one that a magistrate or judge can examine.
- The Court has also done well to reiterate that arrests under the PMLA cannot be on a mere whim; and that decisions during investigation should consider exculpatory material too, and not merely material against the accused.
- The other issue, regarding another Bench's shock over courts staying bail orders, touches upon a key aspect of contemporary judicial functioning.
- The vehemence with which the prosecution argues its case, be it against bail or challenging a court's order granting it, seems to be a major factor in the approach of higher courts. As the Bench noted, a stay on reasoned orders ought to be rare exceptions based on grounds such as perversity by the lower court, and not done as a matter of routine.



The Act

Prevention of Money Laundering (Amendment) Act, 2012



Money Laundering

- Money laundering is the illicit process of transforming substantial sums of money obtained through criminal activities into seemingly legitimate funds.
- This money, derived from crimes such as drug trafficking, terrorist financing, illegal arms trade, smuggling, prostitution rings, insider trading, bribery, and computer fraud, is disguised to appear as if it originates from lawful sources.

The Prevention of Money Laundering Act (PMLA), 2002

- The Prevention of Money Laundering Act (PMLA), 2002, addresses the crime of money laundering, which involves converting or disguising illegally obtained funds to appear as though they come from legitimate sources. In India, money laundering is a criminal offense, and the statutory provisions for prosecuting such offenses are outlined in the PMLA, 2002.
- The PMLA is applicable to all persons which include individuals, companies, firms, partnership

On ED's power under PMLA

An upshot of the judgment by the Supreme Court on the validity of certain provisions under the Prevention of Money Laundering Act

- The offence of money laundering is as heinous an offence as terrorism
- Section 3 (definition of money laundering), Section 24 (reverse burden of proof), and Section 5 (attachment of property) to stay
- Stringency in granting bail under the Act is legal and not arbitrary
- It is not mandatory to give an Enforcement Case Information Report (ECIR) in every case as it was not an FIR
- The statements made to ED are considered admissible
- Provision of attachment of property of accused as proceeds of crime 'balances' the interests of the accused and the State
- The question of enactment of PMLA amendments through the Money Bill route is to be decided by a larger Bench



firms, associations of persons or incorporations and any agency, office or branch owned or controlled by any of the above-mentioned persons.

Recent Amendments Related to PMLA

2019 Amendment

- **Introduction of New Rule 3A:** This rule allows the Special Court to publish notices in newspapers, inviting claimants with legitimate interests in attached, seized, or frozen property to establish their claims for restoration, following the framing of charges.

2023 Amendment

- **Expanded Disclosure Requirements:** The Finance Ministry has updated money laundering regulations to broaden the disclosure requirements for NGOs by entities like financial institutions, banks, and intermediaries.
- **Clarification of "Politically Exposed Persons":** The definition of "politically exposed persons" (PEPs) under the Prevention of Money Laundering Act (PMLA) has been refined to align with Financial Action Task Force (FATF) recommendations.
- **Definition of PEPs:** The new compliance rules define PEPs as individuals entrusted with prominent public roles by a foreign country, such as heads of state, senior politicians, high-ranking government, judicial, or military officials, senior executives of state-owned corporations, and key political party officials.

Objectives of PMLA

Prevention

Detection

Confiscation

International Cooperation

- **Prevention:** To prevent money laundering by enforcing strict measures and closely monitoring financial transactions.
- **Detection:** To identify and investigate money laundering activities through effective enforcement and regulatory practices.
- **Confiscation:** To seize assets obtained through money laundering to deter offenders and disrupt illegal financial operations.
- **International Cooperation:** To promote global collaboration in the fight against money laundering and terrorist financing

The Enforcement Directorate

The Enforcement Directorate (ED) is a specialized financial investigation agency operating under the Department of Revenue, Ministry of Finance. Established in 1956 as an 'Enforcement Unit' within the Department of Economic Affairs to address violations of Exchange Control Laws, it was renamed the 'Enforcement Directorate' in 1957. The ED is responsible for enforcing laws such as the Foreign Exchange Management Act, 1999 (FEMA) and the Prevention of Money Laundering Act, 2002 (PMLA).

Structure of ED

Level	Designation	Location
National	Director of Enforcement	New Delhi
Regional	Special Directors of Enforcement	Mumbai, Chennai, Chandigarh, Kolkata, Delhi
Zonal	Deputy Directors	10 Zonal Offices
Sub-Zonal	Assistant Directors	11 Sub-Zonal Offices

Recruitment and Tenure of ED Officers

- **Direct recruitment:** Officers are selected through competitive exams.
- **Transfer from other agencies:** Experienced officers from IRS, IPS, and IAS may join the ED.

Tenure

- **Initial tenure:** Two years.
- **Extensions:** Can be extended up to five years in total, with annual extensions granted by the government upon recommendation of a High-Level Committee.
- **Recent developments:** In July 2023, the Supreme Court upheld statutory amendments allowing for piecemeal extensions but struck down an illegal extension granted to the outgoing ED Chief.

Statutory Functions of the Enforcement Directorate (ED)

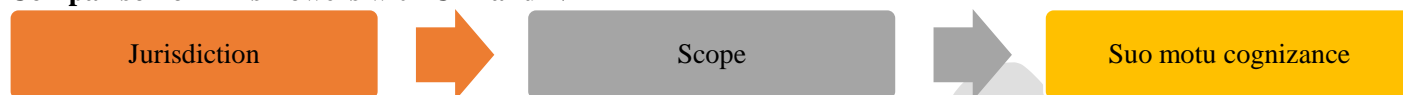
Conservation of Foreign Exchange and Prevention of Smuggling Activities Act (COFEPOSA)	<ul style="list-style-type: none">• Purpose: To prevent smuggling and ensure the conservation of foreign exchange.• ED's role: Sponsors preventive detention cases against individuals suspected of violating FEMA regulations.
Foreign Exchange Management Act (FEMA)	<ul style="list-style-type: none">• Purpose: To regulate foreign exchange and facilitate external trade.• ED's role: Investigates suspected violations of foreign exchange laws, adjudicates cases, and imposes penalties.
Prevention of Money Laundering Act (PMLA)	<ul style="list-style-type: none">• Purpose: To combat money laundering and trace the proceeds of crime.• ED's role: Conducts investigations, attaches properties, prosecutes offenders, and confiscates property.
Fugitive Economic Offenders Act (FEOA)	<ul style="list-style-type: none">• Purpose: To deter economic offenders from evading Indian law.• ED's role: Attaches properties of fugitive economic offenders and facilitates their confiscation by the government.

Enforcement Directorate (ED) under PMLA

- **Powers of the ED:** The ED can conduct searches and seize property, money, or documents suspected of being linked to money laundering.
 - **Arrest:** Based on evidence gathered during searches, the ED can arrest individuals suspected of money laundering.
 - **Direct search and seizure:** The ED can conduct searches and seizures without first summoning the individual.
 - **Timelines:** The ED has 60 days to file a prosecution complaint if an arrest is made and 60 days to submit an attachment order if no arrest is made.
- **Expansion of the ED's Powers:** The PMLA schedule has expanded to cover a wider range of offenses, including terrorism, wildlife hunting, copyright infringement, and more.
 - **Additional powers:** The ED has gained the power to investigate conspiracy cases, seize Indian properties linked to laundered money acquired abroad, and attach properties earned through criminal activity.

- **Virtual Digital Assets:** Recent amendments have extended the ED's jurisdiction to include virtual digital assets and cryptocurrencies.
- **GSTN integration:** The Goods and Services Tax Network (GSTN) has been included in the PMLA, enabling information sharing between various agencies.

Comparison of ED's Powers with CBI and NIA



- **Jurisdiction:** The ED has nationwide jurisdiction and can investigate money laundering cases without requiring state government consent.
- **Scope:** The ED's scope of investigation is broader than that of the CBI and NIA.
- **Suo motu cognizance:** Unlike the CBI, the ED can take suo motu cognizance of money laundering cases.

ED's Jurisdiction



- **Geographical scope:** The ED's jurisdiction extends to the entire territory of India.
- **Entities:** The ED can take action against individuals and legal entities involved in money laundering.
- **Public servants:** The ED has jurisdiction over public servants involved in money laundering offenses.
- **Initiation of cases:** The ED typically acts on complaints filed by other agencies or individuals.
- **Investigations and actions:** The ED can investigate matters, attach properties, make arrests, and initiate legal proceedings.
- **Resolution:** Cases are resolved through adjudication by courts or PMLA courts.

Focus on female employment to counter unemployment

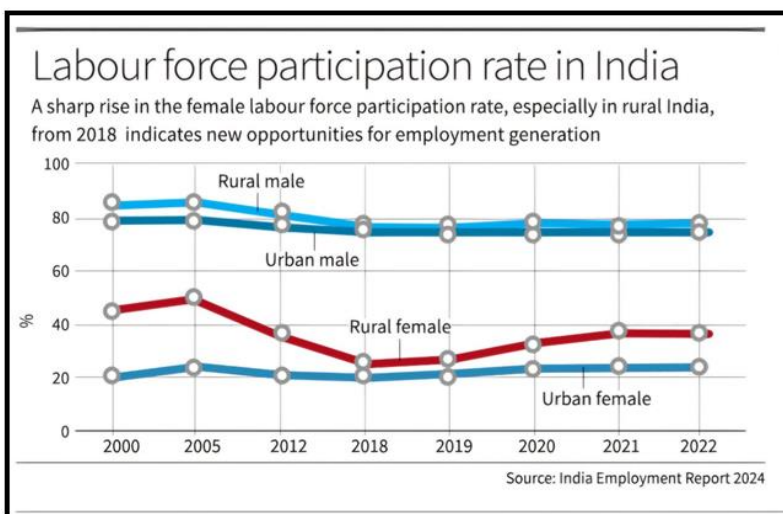
Context: The difficulty in getting jobs and inflation were the two major issues that played a role in the results of the Lok Sabha Elections 2024, according to the Lokniti-CSDS pre-poll survey.

Key Highlights

- The India Employment Report (IER) 2024, published by the Institute for Human Development and the International Labour Organization, also illustrated a rise in the unemployment rate from a little more than 2% in 2000 and 2012 to 5.8% in 2019.
- Unemployment reduced somewhat to 4.1% in 2022, although time-related underemployment was high at 7.5%. The labour force participation rate (LFPR) also fell from 61.6% in 2000 to 49.8% in 2018 but recovered halfway to 55.2% in 2022. But in this gloomy picture marked by unemployment and underemployment, there was a steep and steady upward trend of female LFPR from 24.6% in 2018 to 36.6% in 2022 in rural India.
- It also increased by around 3.5% from 20.4% in 2018 in urban areas. This is in contrast with male LFPR, which rose marginally by 2% in rural areas and almost stagnant in urban areas.
- Female LFPR in India is low when compared to the world average of 53.4% (2019), and it has decreased from 38.9% in 2000 to 23.3% in 2018. Against this backdrop, the current increasing trend in female LFPR, especially a 12% rise in rural India during 2018-22, indicates an untapped opportunity for employment generation.
- Women have been engaged in unpaid family labour work in both rural and urban areas. While 9.3% of males were employed as unpaid family workers, the same was as high as 36.5% for females in 2022.

- Moreover, the difference between female and male unpaid family labour employment was 31.4% in rural areas against only 8.1% in urban areas. Hence, if appropriate strategies are taken, there is a much greater opportunity for female employment generation, especially in rural areas.
- The choice of employment for earnings may be extremely gendered, which makes generating employment opportunities for females tricky.
- Conditions and employment for women in the slums of Bhuj, Gujarat, shows that women are more interested in engaging in traditional employment activities from home, such as bandhani, embroidery and fall beading, rather than other opportunities, including non-farm casual labour.
- The flexibility of work and the possibility of working from home were the major reasons for preferring traditional occupations despite their low income.
- The study also found that 30% of women were stuck to their traditional occupations due to the unavailability of other options. A lower rise of female LFPR in urban than rural areas during 2018-22, as shown in IER 2024, also indicates a lack of appropriate and gainful opportunities for females in urban areas.
- The opportunity to develop one's own enterprise was difficult due to limited access to capital and binding social norms where males of a particular community control the dominant business of the locality — tie and dye. Collectivising women under self-help groups (SHG), and, further, through federations may benefit women involved in traditional occupations.
- SHG women may be trained to acquire new skills, and federations may link women directly to the market for better returns. The Kutch Mahila Vikas Sangathan (KMVS), a local non-profit organisation, is working in the region towards this end.
- Traditional occupations are accepted by society as they conform to local gender norms. These occupations have emerged as the dominant choice of women. Traditional occupations support women's practical gender needs, such as managing both household work and earnings.
- However, they may not help in meeting strategic gender needs, such as challenging regressive gender norms. Moving out of their own dwelling and working in a professional environment increases women's agency and empowers them to meet strategic gender needs.
- The foray of women into male-dominated workspaces would increase competition for labour work. This competition can be avoided by generating new opportunities in previously neglected arenas.
- In a study on the relationship between the type of dominant irrigation source of a region (canal or groundwater) and women's empowerment (farm employment and decision-making abilities) in the villages in the Upper Gangetic Plains of Uttarakhand and Uttar Pradesh, we found that women's wages in farm labour work and decision-making abilities increased with the expansion of relatively less dominant source of irrigation and vice versa.
- Males may take more interest if more water is available through the dominant source of the region. Further, the expansion of canal irrigation during Ziad (summer slump season), when males had less interest in agriculture, positively affected female empowerment.
- Additional non-conventional irrigation benefits women, as this writer's recent field visits to villages in West Bengal showed. Women have initiated farming, pisciculture, nursery and vermicompost after water is made available through ponds or tube wells in arid and monocropped regions.
- These women are part of an all-women water user's association supported by the West Bengal Accelerated Development of Minor Irrigation Project, Government of West Bengal.
- Availability of work near home has reduced female migration with the whole family and has increased family welfare. Male family members help in heavy activities that demand strength, such as ploughing or netting in ponds. In most tribal villages, women are barred from ploughing due to gender norms.
- Similar norms exist for netting in ponds. Women said that they could carry on without the help of male family members if they used hired tractors for ploughing and hired labour for netting.

- More market interaction empowers women by enabling them to circumvent gender norms and reduce dependency on male family members. Far away, in the Upper Gangetic Plains, a more vibrant water market was found to be associated with higher agency by women to influence the purchase of agricultural inputs.
- The earnings of both men and women contribute to family income and welfare. Hence, the strategy to enhance women's workforce participation and reduce underutilisation of time can be possible by developing income-earning opportunities where males need not be confronted and driven out of the labour market.



- Women's work opportunities at or near home can enhance the family income and women's position in the family.
- Strikingly, a woman in West Bengal was proud that she could lend money to her husband to buy agricultural inputs.
- In another study in the slums of Kolkata, it was observed that women's participation in the workforce has reduced economic vulnerability and improved resilience during the COVID-19 pandemic.
- At the same time, participation in work outside the home should be focused. This has a more direct impact on women's empowerment. However, a long-term strategy is required to develop a better work environment for women.
- Safety and basic facilities in the workplace (toilets and crèches) should be made available. Public policy should mandate these facilities in small- and medium-manufacturing or business units.
- A strategy of focusing on the improvement of female LFPR would improve overall employment and the family income. In rural areas, public policy should help women by providing more access to resources (such as water) and markets (to buy inputs and implements and to sell produce). In urban areas, better facilities in the workplace should be mandated.
- Collectivising women and federating collectives in rural and urban India under planned economic activities will be most helpful. The Lakhpati Didi programme aiming at raising an SHG woman's annual income to ₹1 lakh or above may pave the way.
- A better female labour force participation rate can improve overall family income and welfare, especially in rural India

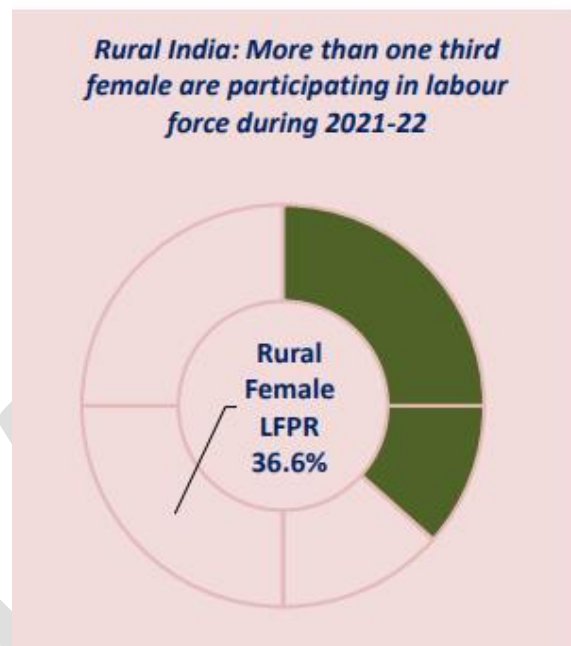
Female Participation in the Labour Force

- Female participation in the labour force is influenced by a range of structural and socioeconomic factors.
- Over time, this participation has generally increased, reflecting a positive trend towards economic growth.
- Periodic Labour Force Survey (PLFS) for 2021-22 highlights this upward trend in India.

Overall Trends

- **Overall Increase:** The female labour force participation rate (LFPR) has risen from 23.3% in 2017-18 to 32.8% in 2021-22. This represents a 9.5 percentage point increase.
- **Rural vs. Urban Participation**

- **Rural Areas:** Female LFPR in rural areas surged from 24.6% to 36.6%, an increase of 12.0 percentage points.
- **Urban Areas:** In urban areas, the LFPR rose from 20.4% to 23.8%, a more modest increase of 3.4 percentage points.



Issues with Women's Participation in the Labor Force?

- **Urban Female Workforce Participation:** Between 2018 and 2022, urban female labour force participation (LFPR) increased more slowly, reflecting fewer job opportunities for women in cities. Starting businesses was challenging due to limited access to capital and prevailing societal norms, particularly in male-dominated industries such as tie and dye.
- **Traditional Occupations:** Women often remain in traditional jobs like bandhani and embroidery, despite these roles offering lower income potential. These occupations conform to local gender norms and allow women to manage household responsibilities while earning. However, they do not address broader gender issues or challenge regressive norms.
- **Gendered Occupational Choices:** Women's employment decisions are influenced by local gender norms. For example, in many tribal villages, cultural norms restrict women from engaging in activities such as ploughing or fishing in ponds.

Factors Contributing to Low Female Participation in the Labour Force

Female participation in the labour market is influenced by a variety of factors that act as both "push" and "pull" forces. Despite economic growth, rising education levels, and declining fertility rates, women continue to face significant barriers to accessing economic opportunities. These barriers can be understood through the following key factors:

- **Unpaid Domestic and Care Work:** Women often shoulder the majority of unpaid domestic duties and caregiving responsibilities, limiting their ability to engage in paid employment.
- **Gender-Biased Social Norms:** Deeply entrenched cultural and social norms about gender roles act as significant obstacles to gender equality in the workforce.
- **Rising Household Income:** As household incomes rise, there is often less financial necessity for women to participate in the labour market, which can serve as a disincentive.
- **Wage Disparity:** The persistent gap in wages between men and women discourages female participation, as women may perceive less value in entering the labour force.
- **Role of Education:** Education plays a critical role in influencing female labour force participation. Higher educational attainment generally leads to greater participation in the workforce and increased productivity. Theories on employment outcomes consistently emphasize the importance of education in enhancing women's economic opportunities.
- **Social Norms as Barriers:** According to the World Bank Report "Reshaping Norms: A New Way Forward," economic development and rising income levels alone are insufficient to close gender gaps. Social norms surrounding gender roles remain a key barrier to achieving gender equality in the labour market.

Significance of Increasing Female Labour Force Participation in India

Boost to Productivity

Potential Economic Impact

Financial Independence

Challenging Gender Roles

Enhanced Competitiveness

Alignment with SDGs

- **Boost to Productivity:** A higher female Labour Force Participation Rate (LFPR) contributes directly to economic growth, as more women in the workforce lead to increased productivity and innovation. Women's diverse skills and perspectives enhance workplace efficiency.
- **Potential Economic Impact:** According to a report by McKinsey Global Institute, providing equal opportunities to women could add an estimated US\$ 770 billion to India's GDP by 2025.
- **Financial Independence:** Increased female participation in the labour force empowers women financially, enabling them to make decisions regarding their lives, education, and families.
- **Challenging Gender Roles:** Participation in the workforce elevates women's status in society, challenging traditional gender roles and promoting empowerment.
- **Enhanced Competitiveness:** A diverse and inclusive workforce enhances India's global competitiveness by fully utilizing its population's potential.
- **Alignment with SDGs:** Increasing female LFPR contributes to achieving Sustainable Development Goals (SDGs), particularly SDG 5 (gender equality), SDG 8 (decent work and economic growth), and SDG 10 (reduced inequality).

Government Initiatives to Improve Female Labour Force Participation in India

Initiative	Key Features
Codification of Labour Laws:	
Labour Codes Introduced	- Code on Wages (2019) - Industrial Relations Code (2020) - Code on Social Security (2020) - Occupational Safety, Health, and Working Conditions Code (2020)
Code on Social Security (2020):	
Maternity Leave	- Paid maternity leave extended from 12 to 26 weeks.
Crèche Facilities	- Crèche facilities mandatory in establishments with 50 or more employees.
Night Shifts for Women	- Permits women to work night shifts with necessary safety measures.
Code on Wages (2019)	- Ensures no gender-based wage discrimination for similar work.
Beti Bachao Beti Padhao Scheme	- Aims to ensure survival, safety, and education of female children.
Workplace Safety	- The Sexual Harassment of Women at Workplace Act (2013) ensures safe work environments and complaint mechanisms.
Working Women Hostel Scheme	- Provides grants for constructing or expanding hostels for working women in various regions.
One Stop Centre (OSC) and Women Helpline	- Offers 24-hour emergency support for women affected by violence.
Skill India Mission	- Provides training to women through Women Industrial Training Institutes, National Vocational Training Institutes, and Regional Vocational Training Institutes.
Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005	- Mandates that at least one-third of jobs generated under MGNREGA be allocated to women.

The Way Forward

- **Collectivization:** Establishing self-help groups (SHGs) and federations can support women in traditional occupations. SHGs offer training for new skills, while federations help women connect directly with markets, enhancing their financial returns. Examples include the Kutch Mahila Vikas Sangathan (KMVS) and the Lakshpati Didi Programme.
- **Creating New Opportunities:** Increasing female participation in male-dominated industries may lead to heightened competition for traditionally male jobs. To address this, it is crucial to create opportunities in underdeveloped sectors. For instance, expanding canal irrigation during the summer season can provide women with more agricultural work, especially when men are less available.
- **Market Access:** Enhancing women's access to markets for inputs and tools can boost their engagement and empowerment. For example, in the Upper Gangetic Plains (Uttarakhand and Uttar Pradesh), the expansion of less conventional irrigation sources like groundwater has empowered women by providing additional agricultural opportunities.
- **Workplace Improvements:** Ensuring that workplaces are equipped with safety measures and essential facilities such as toilets and childcare (crèches) is vital. These provisions should be mandated in small and medium-sized manufacturing or business units to improve the overall well-being of employees

Long on Intent, Short on Details

Context: The short Budget speech by the Union Finance Minister is marked by clarity on three aspects.

- **First**, the intentions and vision for Viksit Bharat@2047 are spelt out through the nine priority areas, a long-term vision, to which we expect that subsequent Budgets would adhere, to accomplish these goals.
- **Second**, there is an explicit recognition of the problem of unemployment in the economy. Addressing this has been a challenge and the Budget devotes considerable space in listing out initiatives towards generating employment.
- **Third**, the compulsions of a coalition government surface in parts, but are hidden in some of the specificities. These three have guided the strategy and the approach of the Budget.

Key Highlights

- On the face of it, the policy slant reveals good intentions, but the ways and the means to accomplish the ambitious goals set out are not divulged, casting a shadow on the possibility of realising the targets set.
- The fiscal arithmetic and the macro-policy stance in the Budget signal continuity and a carrying on with fiscal consolidation efforts.
- The overall fiscal deficit has been lowered to 4.9% compared to 5.1% targeted in the interim Budget. A large part of the surplus received from the Reserve Bank of India has been used to buttress fiscal prudence.
- The anticipated reiteration of the reduction in the fiscal deficit to below 4.5% of GDP in FY2026 is welcome. The new medium-term fiscal consolidation path has been linked to a reduction in the debt/GDP ratio instead of continued compression of the fiscal deficit/GDP ratio.
- This will allow the government flexibility to chart an appropriate fiscal course that builds in higher capital spending as well as support to meeting climate goals in an uncertain global environment.
- The size of the Budget has gone up only marginally. This also means that the overall borrowing programme of the government is almost unchanged — in fact, it has come down marginally though the cut in borrowings is smaller than what could have been possible with the buoyant revenue collections.
- While there has been a slight increase in overall expenditure, capital expenditure remains more or less unchanged. There are two discomfiting trends on the expenditure side.

- First, the Budget estimates for 2024-25 show only marginal increase in allocation in most of the items of expenditure compared to that of 2023-24. In fact, in some of the key items, it shows a decrease. In the case of commerce, industry and energy, we find a decline in Budget estimates for 2024-25. Second, in many items of expenditure, the revised estimates for 2023-24 are lower than the Budget estimates for the same year. Social welfare and scientific departments are notable in this context.
- Effective capital expenditure, which is capital expenditure plus the grant in aid for creation of capital assets, have come down when we compare revised estimates and provisional actuals for 2023-24.
- The decline in revised estimates compared to Budget estimates is an indication of the lack of capacity of the government to spend, which is likely to undermine the expected multiplier effects of such expenditures.
- Thus, we need to wait and watch as to how much of the proposed outlays are utilised. Further, the same levels of capital expenditure imply that the government would bank more on private investments, as indicated in the Economic Survey, which has not yet registered a significant increase in recent years.
- The Budget relies on two measures to bolster demand and increase private consumption. It takes the route of tinkering with the new income-tax regime to leave slightly more disposable incomes for a section of taxpayers, which is expected to stimulate demand.
- Given the growth in indirect tax collections, there was more room for income-tax reliefs, which could have been useful to not only stimulate demand but also increase dwindling household savings.
- This is an opportunity missed. Second, the Budget expects employment growth to take place, imparting more incomes, and, hence, higher demand in the economy.
- The internship scheme, the direct thrust on channelling funds to first-time employees with commensurate benefits to companies to incentivise a hiring of more people and providing salary top up for first time employed

UNION BUDGET 2024-25
विद्युत मंत्रालय
MINISTRY OF FINANCE

Tax Relief and Revised Tax Slabs in New Tax Regime

0-3 lakh rupees	Nil
3-7 lakh rupees	5 per cent
7-10 lakh rupees	10 per cent
10-12 lakh rupees	15 per cent
12-15 lakh rupees	20 per cent
Above 15 lakh rupees	30 per cent

- Income tax saving of up to ₹ 17,500/- for salaried employee in new tax regime

Income Tax Relief for around Four Crore Salaried Individuals and Pensioners

- Standard deduction for salaried employees to be increased from ₹ 50,000/- to ₹75,000/-
- Deduction on family pension for pensioners to be increased from ₹ 15,000/- to ₹ 25,000/-

UNION BUDGET 2024-25
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MINISTRY OF FINANCE

Simplification of IT Act, Tax Reassessment, Capital Gains Taxation

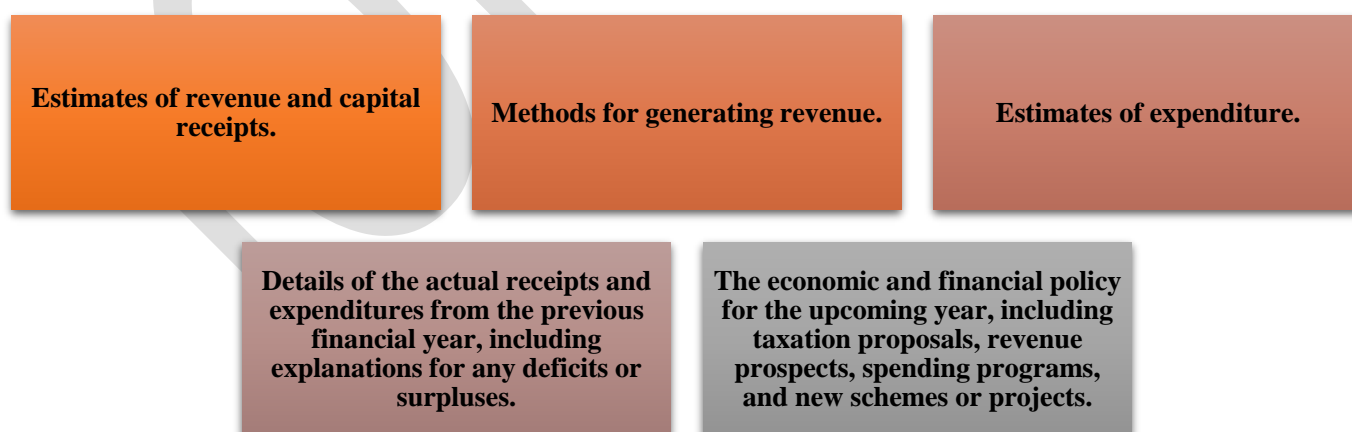
- Income-tax Act, 1961 to be made concise and easy to read
- Opening of Reassessment beyond three years from end of assessment year only if escaped income is ₹ 50 lakh or more, up to a maximum period of five years from end of assessment year
- Time limit for search cases to be reduced from 10 years to 6 years before year of search
- Short-term gains on certain financial assets to be taxed at 20%, Long-term gains on all financial and non-financial assets to be taxed at 12.5%
- Listed financial assets held for more than a year to be classified as long-term
- Vivad Se Vishwas Scheme, 2024 for resolution of certain income tax disputes pending in appeal

are unlikely to create more jobs as they do not address the questions of social aspirations and technological changes which directly impinge labour market outcomes.

- Moreover, implementing these schemes is not straightforward. The internship scheme has the additional risk of becoming a short-term urban employment programme, which only creates a pool of the unemployed in the future.
- Employment growth is also expected to take place with the revival of the Micro, Small and Medium Enterprises (MSME) sector through the credit route with a guarantee scheme being launched, besides asking banks to have their own models for lending that is not linked with collateral.
- Assistance to States such as Andhra Pradesh, Bihar, Odisha and Jharkhand are also expected to give an indirect push to investment and employment along with the thrust to housing in urban and rural areas.
- It needs to be noted that MSMEs need to have not only credit but also a conducive environment to operate for their growth. Hence, the efficacy of providing only credit and leaving the rest to market forces might not generate the desired results.
- Barring the announcement of tax benefits for Indian start-ups and their investors, including scrapping the contentious angel tax for all classes of investors and aligning capital gains rates between listed and unlisted equity and the increased limit of Micro Units Development and Refinance Agency Ltd. (MUDRA) loans from ₹10 lakh to ₹20 lakh, the big push for the industrial sector is conspicuously absent in the Budget.
- Neither was there any mention of the Railways, PLI Scheme, Gati Sakthi and the Census. The list of omissions could be longer, but a lack of clear initiatives towards the education and health sectors to tap demographic dividend might not augur well with the vision of 2047.
- Equally important is to strike a balance between cities and rural economy and to make a distinction between jobs and internships. With the macroeconomy well poised at the moment, some bold steps and details of the journey to 2047 could have been outlined.
- The policy slant highlights good intentions, but the ways and the means to accomplish the ambitious goals set out are hazy.

Budget and Constitutional Provisions

Under Article 112 of the Indian Constitution, the Union Budget for a fiscal year is known as the Annual Financial Statement (AFS). This statement outlines the government's estimated receipts and expenditures for the financial year, which runs from April 1 of the current year to March 31 of the following year. The Budget includes:

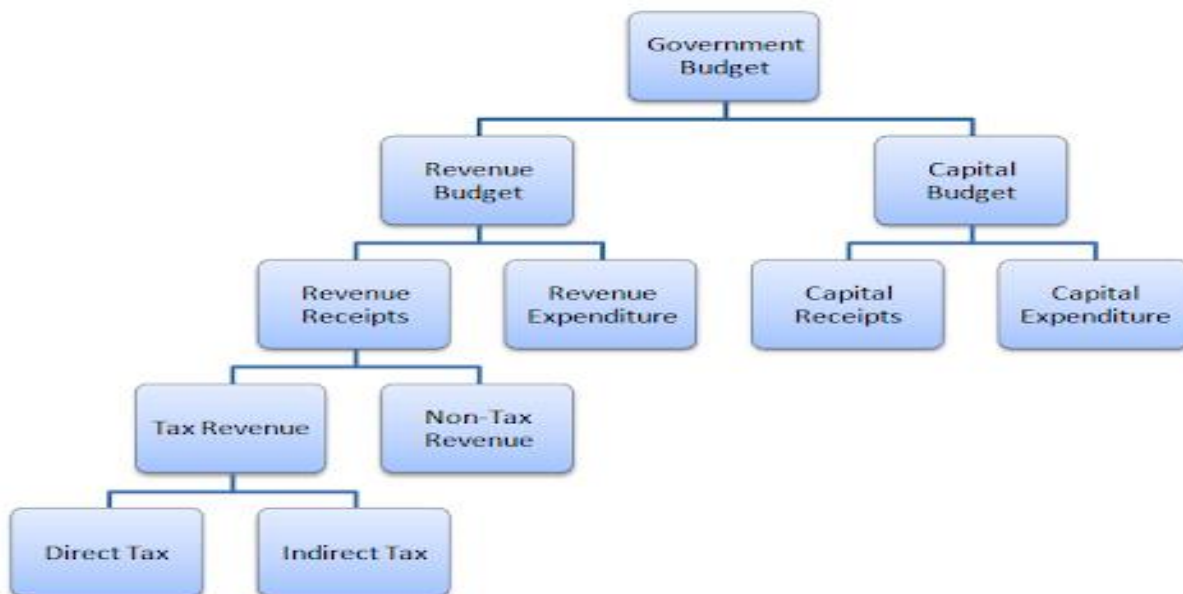


In Parliament, the Budget undergoes six stages:

- Presentation of the Budget.
- General Discussion.

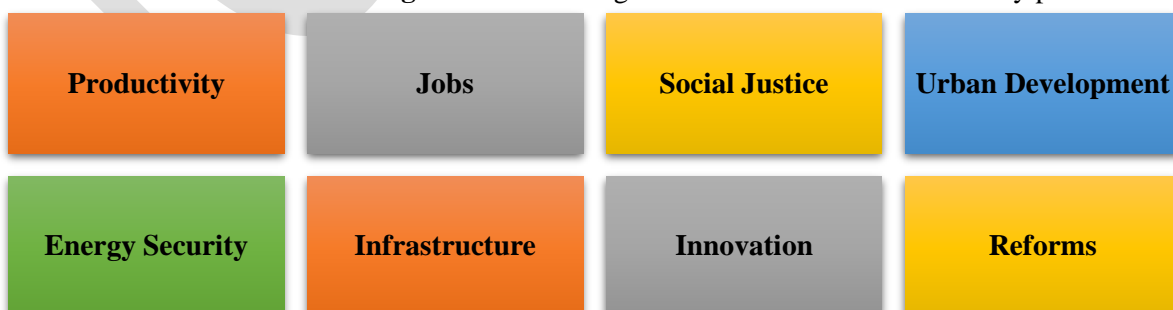
- Scrutiny by Departmental Committees.
- Voting on Demands for Grants.
- Passing of the Appropriation Bill.
- Passing of the Finance Bill.
- The Budget Division within the Department of Economic Affairs in the Finance Ministry is responsible for preparing the Budget.

Components Of Government Budget



Key Insights from the Union Budget 2024-25

- **Re-election of Government:** The re-election of Prime Minister Narendra Modi's government for a third term reflects strong public confidence.
- **Economic Resilience:** India's economy remains robust amid global economic uncertainty, signaling strong governance and economic management.
- **Stable Inflation:** The country's inflation is moving towards 4%, showcasing stability in the economy.
- **Core Inflation:** Core inflation stands at a low 3.1%, indicating controlled price pressures excluding food and energy.
- **Nine Priorities of the Union Budget 2024-25:** The government has identified nine key priorities:





- **Receipts:** The revised estimate for total receipts (excluding borrowings) is ₹32.07 lakh crore.

- **Expenditure:** The revised estimate for total expenditure is ₹48.21 lakh crore.

- **Capital Expenditure:** Retained at ₹11.11 lakh crore, unchanged from the interim budget.

- **Revenue Sources:** Borrowings and other liabilities are the largest contributors to the budget, followed by income tax, GST, and corporate tax.

- **Expenditure Allocation:** The highest expenditure allocation is towards states' share of taxes and duties (21%), followed by interest payments.

- **State-Wise Allocation of Central Taxes:** Uttar Pradesh received the largest share of central taxes and duties at 18% (₹2,23,737.23 crores).

- Major Expenditure Breakdown
- Total Budget Expenditure: ₹48.21 lakh crore.
- Central Sector Schemes and Expenditure: ₹30.07 lakh crore.
- Other Central Expenditure: Includes interest payments and payments to autonomous bodies.
- Transfers to States: Includes finance commission grants and other transfers.

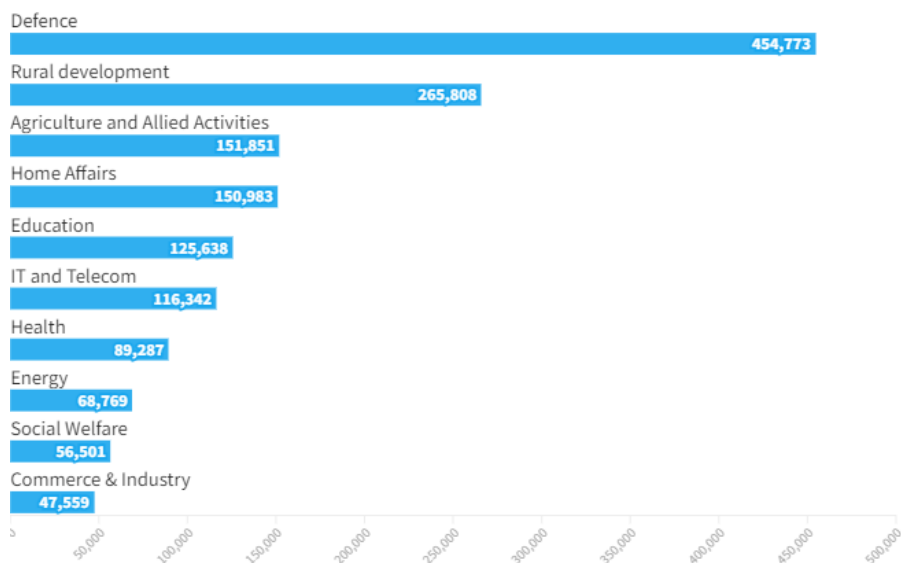
- **Ministry Allocations:** Receives the highest allocation among ministries, with ₹6,21,940.85 crore, making up 12.9% of the total budget.

- **Allocation for Major Schemes:** Core welfare schemes driving socio-economic development received significant allocations, though specific amounts were not detailed.

- **Railways Budget Overview**

- **Railways Allocation:** ₹2,55,393 crore (5.3% of the total budget).
- **Net Revenue:** Estimated to be ₹2,800 crore in FY25, up from ₹2,000 crore in FY24.
- **Freight Earnings:** Estimated at ₹1,80,000 crore, consistent with previous estimates.
- **Passenger Earnings:** Estimated at ₹80,000 crore in FY25, reflecting a 9.5% increase from FY24.

Major expenditures



Allocation to ministries



Source: Union Budget 2024-25

Way Forward

The policy demonstrates positive intentions, but the specifics on how to achieve its ambitious goals remain unclear, casting doubt on the feasibility of meeting the targets.

- **Fiscal Deficit Reduction:** Aiming to reduce the fiscal deficit to below 5% of GDP by FY2026 is a commendable goal.
- **Employment Growth:** Revitalizing the Micro, Small, and Medium Enterprises (MSME) sector through a new credit guarantee scheme is expected to boost employment. Encouraging banks to adopt collateral-free lending models may further support this effort.
- **State Assistance:** Support for states such as Andhra Pradesh, Bihar, Odisha, and Jharkhand is anticipated to indirectly stimulate investment and job creation, with a focus on housing development in both urban and rural areas.
- **MSME Environment:** While credit provision is crucial for MSMEs, creating a favorable operating environment is equally important. Solely relying on market forces without additional support may not yield the desired growth.
- **Omissions:** The policy does not address critical areas such as the Railways, the Production Linked Incentive (PLI) Scheme, Gati Shakti, and the Census.
- **Education and Health:** There is a lack of clear initiatives in the education and health sectors, which are vital for harnessing the demographic dividend and achieving the vision for 2047.
- **Balance and Clarity:** A balanced approach between urban and rural economies and a clear distinction between jobs and internships are necessary. More specific steps and details for achieving the 2047 vision would enhance the policy's effectiveness.