

FREE OPEN TEST (IAS/PCS)

10th August 2024: Ancient History (Time: 02:30 PM to 04:30 PM)

17th August 2024: Current Affairs (June + July 2024) (Time: 02:30 PM to 04:30 PM)

Venue: Patriotic IAS, 3rdFloor KV Tower, Paidleyganj Road,
Gorakhpur, 273009

Contact Number: 9971932488

MONTHLY CURRENT AFFAIRS JULY 2024

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HISTORY

1. Architecture:

1.1. Renaming of the Halls of Rashtrapati Bhavan:

- President Droupadi Murmu has renamed two halls at Rashtrapati Bhavan.
- Durbar Hall is now called Ganatantra Mandap (Republic Hall) to better reflect the concept of a republic rather than the colonial term "Durbar."
- Ashok Hall is now named Ashok Mandap. The name Ashok connotes freedom from suffering and references **Emperor Ashoka, symbolizing unity and peace.**
- The renaming aims to remove traces of Anglicisation and uphold key values associated with the terms.
- The Ashok Hall is used for **presentation of credentials by Heads of Missions of foreign countries** and as a formal place of introductions for the visiting and Indian delegations prior to the commencement of the State Banquets hosted by the President.
- **The Durbar Hall is used to host Civil and Defence Investiture Ceremonies** wherein the Hon'ble President of India confers the prestigious honours to the recipients.
- Swearing-in ceremonies of incoming governments, additions to the Council of Ministers and the swearing in of the Chief Justices of India are all conducted at the Durbar Hall.
- The Durbar Hall was also used for paying respects to **India's fifth President Fakhruddin Ali Ahmed** on the solemn occasion of his demise in the year 1977.
- This ceremonial hall that is right under the central Dome of Rashtrapati Bhavan can be accessed from three sides, through the front forecourt steps via the six meters tall teak door and through the twin ash grey marble stairways on Durbar Hall's either sides

1.2. Sangameswara Temple:

- **Location:** Nandyal District, Andhra Pradesh, India, near Muchumarri, at the confluence of the Krishna and Bhavanasi rivers, within the Srisailem reservoir's foreshore.
- **Submersion:** The temple is submerged for part of the year due to the Srisailem Dam, which was constructed in 1981. It first surfaced in 2003 and remains visible for approximately 4 months when water levels recede.
- **Historical and Religious Significance:**
- **Deity:** The temple is dedicated to Lord Shiva and houses a wooden Lingam called Sangameshwaram, which is believed to have been installed by Dharmaraja, the eldest of the Pandavas, following their visit to the Srisailem Mallikarjuna temple.



- **Confluence:** The temple is situated at the confluence of seven rivers: Krishna, Bhavanasi, and five others — Veni, Tunga, Bhadra, Bheemarathi, and Malapaharini. This confluence is considered a site of religious sanctity.
- **Importance:** Known as Sapta Nadi Sangameswar, the temple is regarded as the north-west gateway of Srisailam, the second of the twelve Jyothirlingas. It is a holy shrine with significant
- **Architectural Style and Spiritual Significance:**
- **Nagara Influences:** The temple's architectural style aligns with the Nagara (North Indian) tradition, showcasing influences prevalent during the construction period.
- **Sacred Confluence:** The temple's original location held immense spiritual significance. It stood at the confluence of the Krishna and Bhavanasi rivers, a revered meeting point considered holy in Hinduism.
- **Early Mentions and Construction (7th-8th Century AD):**
- **Estimated Period:** Historical records suggest the temple's construction dates back to the 7th-8th century AD.
- **Chalukya Dynasty:** Attributions credit the construction to a ruler from the **Chalukya dynasty, possibly Pulakesi II (609-642 AD)** during their reign in South India.
- **Architectural Style:** The temple reflects the architectural style prevalent during the Chalukya era, characterized by its Nagara (North Indian) influences.

Accessibility and Devotion:

- **Visibility:** The temple is generally submerged for about 8 months each year and becomes visible only during the remaining 4 months. During its visibility period, it is accessible with considerable difficulty.
- **Devotees:** Thousands of devotees visit the temple during the months it is visible, emphasizing its importance in regional religious practices. The temple's unique location and periodic emergence attract significant religious attention.

1.3. Mallikarjuna Temple, Srisailam:

The Mallikarjuna Temple in Srisailam, Andhra Pradesh, is a revered Hindu pilgrimage site dedicated to Lord Shiva. Here's a breakdown of its key aspects:

History and Significance:

- **Ancient Origins:** While the exact date of construction is unknown, historical estimates place it between the 2nd and 12th centuries AD.
- **Shiva and Shakti:** The temple enshrines Lord Shiva as Mallikarjuna (meaning "Lord of Ardhanareeshwara") and his consort, Parvati, as Brahmaramba.
- **Jyotirlinga and Shakti Peetha:** Mallikarjuna is one of the twelve revered Jyotirlingas, representing the fiery aspects of Shiva. Srisailam is also one of the 18 Shakti Peethas, associated with the divine feminine energy of Sati, consort of Shiva. This confluence of Shiva and Shakti symbolism imbues the temple with immense significance.

Architectural Brilliance:

- **Dravidian Style:** The temple complex showcases Dravidian architectural influences, with towering gopurams (gateway towers), intricately carved pillars, and mandapams (halls).
- **Sculptural Grandeur:** The temple walls and pillars are adorned with exquisite sculptures depicting various deities, mythological scenes, and floral motifs.
- **Spiritual Significance:** The temple complex houses several shrines dedicated to other Hindu deities, including Vishnu, Ganesha, and Subramanya.

Pilgrimage and Traditions:

- **Sacred Abode:** Srisailem is revered as one of the holiest places in India, attracting thousands of devotees throughout the year.
- **Maha Shivaratri:** The annual festival of Maha Shivaratri is a particularly significant time for pilgrimage, witnessing grand celebrations and special pujas (worship rituals).
- **Spiritual Practices:** Devotees undertake the holy circumambulation (pradakshina) around the temple complex, offering prayers and seeking blessings.

Additional Notes:

- The temple is situated on a hilltop, offering panoramic views of the surrounding landscape.
- The Krishna River flows nearby, adding to the temple's spiritual aura.
- The temple complex also houses a museum showcasing artifacts related to the temple's history and religious significance.

Mallikarjuna Temple stands as a testament to India's rich heritage, spiritual traditions, and artistic excellence. It continues to be a beacon of faith and a source of solace for millions of devotees

1.4. Nalanda's Lost Glory:

Of a gilded past and the future: Nalanda's lost glory and new-found ambitions

Writers with the help of Chinese pilgrim Hiuen Tsang's account and other research have traced the rise and fall of an ancient seat of learning go back to the Gupta dynasty. Nalanda, a revered Buddhist site, which had been destroyed, was rediscovered in the 19th century

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Ziya Us Salam

Nalanda is not just a name, it is an identity. Nalanda is the root, it is the mantra. Nalanda is the proclamation of the truth that knowledge cannot be destroyed even though books burn in a fire." Prime Minister Narendra Modi's words at the inauguration of the new Nalanda University campus at Rajgir recently and his "golden age" references made us go back to the history books.

Established by emperor Kumaragupta-I of the Gupta dynasty around 427 AD, Nalanda, a centre for learning, carved out its own niche with the support of the Pala kings, and later the monks of Nalanda, who were patronised by the Pithipatis of Bodhi Gaya. Nalanda was way ahead of its times, a sacred spot for the spiritually inclined.

Aryabhata on the rolls

At one time, Nalanda's faculty included some of the most highly regarded names in Hinayana as well as Mahayana Buddhism; the latter sect started much after Hinayana but flourished for long, touching with its spirit Tibet, China, Japan and much of southeast Asia. The names of those associated with Nalanda read like a roll call of brilliance, even genius. Included in the list were Aryabhata, Harsha, Dharmapala, Nagarjuna, Dharmakirti, Asanga, Vasubandhu, Chandrakirti and Silabhadra. Hiuen

Tsang, of course, spent five years here during the reign of Harshavardhan in the 7th century, and wrote in detail about Nalanda's meticulous approach in enrolling students, including rigorous admission tests.

Its glory got an affirmative nod in the *History of Bangladesh: Early Bengal in Regional Perspectives*, edited by Abdul Momin Chowdhury and Ranabir Chakravarti with a foreword by Romila Thapar. They write: "It is well known Nalanda gained the celebrated status of a Buddhist site after Alexander Cunningham identified it with Bargon, based on the travel notes of Xuan Zang (Hiuen Tsang) followed by epigraphic records recovered from the site. This Chinese pilgrim left a detailed account of the monastic organisation." Prof. Thapar herself wrote of its global repute in *A History of India*, widely regarded as a must-read for students of ancient and early medieval India, "It is on record that a king of Sumatra requested a Pala king's permission to endow a monastery at Nalanda. The ties between the Buddhists in eastern India and southeast Asia were strengthened at this time."

Khalji raids, and a denial

Yet Nalanda has not been without its share of controversies. Several historians have recorded that Nalanda was ransacked by Bakhtiyar Khalji around 1200 AD and its treasure of books reduced to ashes. In *History of Medieval*

India, Satish Chandra writes: "A Khalji officer, Bakhtiyar Khalji, whose uncle had fought the battle of Tarain, had been appointed in charge of some of the areas beyond Banaras. He had taken advantage of this to make frequent raids into Bihar... During these raids, he had attacked and destroyed some of the famous Buddhist monasteries of Bihar, Nalanda and Vikramshila, which had no protector left."

Noted historian Mohammad Habib, while not referring to Nalanda's possible destruction directly, wrote in *Studies in Medieval Indian Polity and Culture: The Delhi Sultanate and Its Times*, about Bakhtiyar's raids in Bihar. Elucidating about the fall of Indian kingdoms one after the other to the Ghurid army, Habib wrote, "Bakhtiyar, an adventurer from Khilji, who had been twice declared unfit for enrolment in the army as a common soldier, harassed and conquered Bihar and about one-half of Bengal."

Such assertions were probably based on the writings of Minhaj-i-Siraj who wrote in *Tabaqat-i-Nasiri*, "He (Bakhtiyar Khalji) used to carry his deprivations into those parts and that country until he organised an attack upon the fortified city of Bihar... He advanced to the gateway of the fortress of Bihar with two hundred horsemen in defensive armour, and suddenly attacked the place."

Rediscovering Nalanda

Illustrious historian D.N. Jha, however,

contested such claims. He argued in *Against the Grain: Notes on Identity Intolerance and History*, one of his works, "The fortified monastery where Bakhtiyar captured was known as Audand-Bihar or Odandapura-viha was not Nalanda, claimed Jha. He said Minhaj did not refer to Nalanda at his writings.

Minhaj spoke instead of the ruins of the fort of Bihar or Hisar-i-Bihar, argued. "Bakhtiyar did not go to Nalanda. It escaped the main fury of the Muslim conquest because it lay not on the route from Delhi to Bengal but near a separate expedition." Bakhtiyar's raids in Bihar. Elucidating about the fall of Indian kingdoms one after the other to the Ghurid army, Habib wrote, "Bakhtiyar, an adventurer from Khilji, who had been twice declared unfit for enrolment in the army as a common soldier, harassed and conquered Bihar and about one-half of Bengal."

Fellow historian Namit Arora writes in *Indians: A Brief History of Civilization*, "By the time of the Turko-Persian invasions, most Buddhist sites had already been abandoned, destroyed or converted into Brahminical sites as much of India. Buddhist artifacts and texts were wiped out and Buddhist sites vanished from India's public memory. Only in the 19th century did Indian scholars rediscover Nalanda."

With the opening of the Rajgir campus, scholars hope Nalanda will regain its glory.

For the discerning, Nalanda cannot be an open book. You read, you interpret, you conclude. As Oscar Wilde said: The word is nothing; the interpretation is everything.

1.5. MP's Bhojshala Complex:

- Dhar, located in central India, was a medieval circular city and a capital of Malwa, initially under the Paramara dynasty from the 10th century.
- It later became the Maratha capital of the Powars in the 18th century.
- **Cultural and Economic Center:**
- Dhar was renowned as a center of education, manuscript compilation, and cattle trading.

- It was also noted for metallurgical activities, suggested by its name Dhārānagara (city of swords) and the presence of the Dhar iron pillar.
- **Political Turbulence and Islamic Influence:**
- Dhar witnessed conflicts involving the Yadavas, Solankis, and Paramaras, resulting in multiple sackings and burnings.
- Malwa eventually came under the Delhi Sultanate in the early 14th century.
- **Kamal Maula Mosque:**
- Constructed before 1331 CE, originally associated with Kamal-al-Din, a Chishti Sufi saint.
- Islamic inscription from 1392 mentions repairs by Dilāwar Khān, indicating ongoing use and maintenance under different rulers.
- **Architectural Features:**
- The mosque features sandstone pillars from the 11th and 12th centuries, stacked to increase ceiling height.
- Trabeate domes added later, decorated with intricate designs resembling those at Ajmer and the Qutb complex in Delhi.
- Contains stone panels with Sanskrit and Prakrit inscriptions, possibly assembled as a medieval display similar to a museum.
- **Cultural Significance:**
- Referred to historically as Bhoj Shala or Raja Bhoja school, indicating its association with learning and scholarly activities.
- No Sarasvatī statue found, but a Jain statue of Ambikā was discovered, originally mistaken for Sarasvatī.
- **Legal and Contemporary Context:**
- Recent legal proceedings in 2024 aimed to clarify the nature of the complex, reflecting ongoing debates about its historical and religious significance.
- The Diwan of Dhar State declared it a mosque in 1935, but the recent court case seeks to demystify its character further.

Existing structure at M.P.'s Bhojshala complex was built using remains of temple: ASI

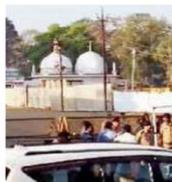
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**Ishita Mishra
Mehul Malpani**
NEW DELHI

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 on Monday.

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-penetrat-



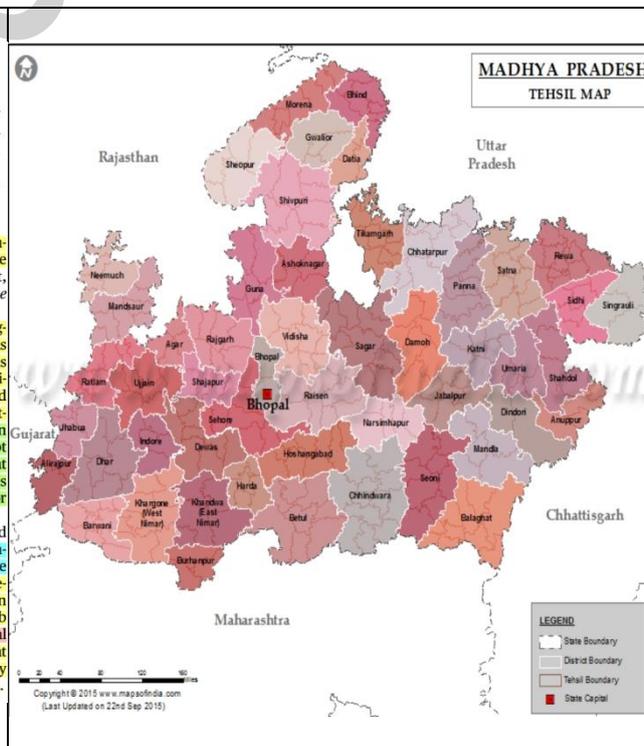
Security personnel stand guard outside the Bhojshala Temple-Kamal Maula Mosque.

ing 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, fi-

gures of deities and humans carved on them were mutilated," the ASI report, a copy of which is with *The Hindu*, stated.

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. "As human and animal figures are not permitted in mosque, at many places, such images have been chiselled out or defaced..." the ASI said.

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 Chaghal at Dhar which had said that the temple "was violently converted" into a mosque.



1.6. Jagannath Temple Puri

- As per temple records, King **Indradyumna of Avanti** built the main temple of Jagannath at Puri.
- The present temple was rebuilt from the **tenth century onwards** on the site of pre-existing temples in the compound, but not the main Jagannath temple.
- The rebuilding was begun by **Anantavarman Chodaganga**, the first king of the **Eastern Ganga dynasty**.



Devotees pull a chariot of the Shree Jagannath Temple on the last day of the nine-day Rath Yatra festival at Puri in Odisha. BISWARANJAN ROUT

- Many of the temple rituals are based on **Oddiyana Tantras and Shabari Tantras**, evolved from **Tantric Buddhism** and tribal beliefs respectively.
- Local legends link the idols with aboriginal tribes, and the daitapatis (servitors) claim to be descendants of the aboriginals.
- The temple is one of the **108 Abhimana Kshethram of the Vaishnavite tradition**.
- The temple is famous for its **annual Ratha Yatra**, or chariot festival, where the three principal deities are pulled on huge and elaborately decorated raths (temple cars).
- The worship is performed by **the Bhil Sabar tribal priests**, as well as priests from other communities.
- Unlike the stone and metal icons in most Hindu temples, the **image of Jagannath is made of wood and is ceremoniously replaced every 12 or 19 years by an exact replica**.

- The temple was rebuilt by **Anantavarman Chodaganga**, King of the Eastern Ganga dynasty, in the 10th century CE.
- This is described by the **Kendupatna copper-plate inscription** of his

Chariot Details	Jagannath	Balabhadra	Subhadra [hide]
Name of Chariot	Nandighosha (ନନ୍ଦିଘୋଷ)	Taladhwaja (ତାଳଧ୍ୱଜ)	Darpadalana (ଦର୍ପଦଳନ)
Alternates name of Chariot	Garudadhwaja, Kapidhwaja	Langaladhwaja	Devadalana, Padmadhwaja
Image			
Number of wheels	16	14	12

descendant, Narasimhadeva II, and Rajendra Chola from the mother side.

- Anantavarman was originally a Shaivite and became a Vaishnavite after conquering the Utkala region in 1112 CE.

- A 1134–1135 CE inscription records his donation to the temple, indicating the temple construction must have started after 1112 CE.

1.7. Heritage Sites:

Hampi

- It is a UNESCO World Heritage Site, is a captivating historical town located in the Vijayanagara district of Karnataka, India. It was once the capital of the Vijayanagara Empire, one of the most powerful Hindu kingdoms in India.

Early History:

- Hampi was founded in the **14th century (1336 AD) by the Sangama dynasty**, who established the Vijayanagara Empire.
- The city grew rapidly under the rule of the **Saluva, Tuluva, and Aravidu dynasties**, becoming a major center of trade, religion, and culture.
- At its peak in the 16th century, Hampi was one of the largest and richest cities in the world, with a population estimated at over 500,000.

Decline of the Vijayanagara Empire:

- **In 1565, the Vijayanagara Empire was defeated by a coalition of Muslim sultanates in the Battle of Talikota.**
- Hampi was sacked and plundered, and its population was decimated.
- The city was abandoned and fell into ruins.

Architectural Splendor

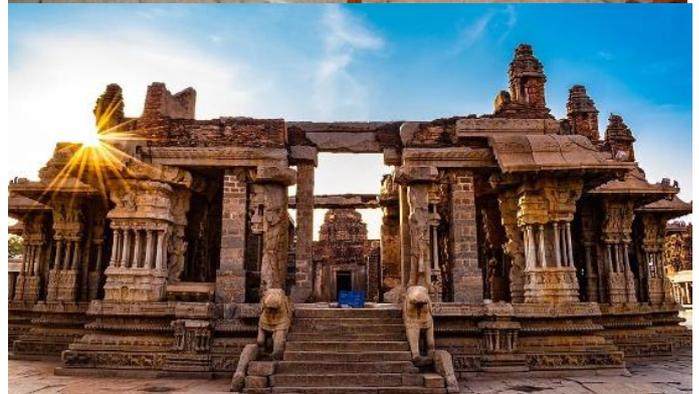
- Hampi is a treasure trove of architectural marvels, showcasing the brilliance of Vijayanagara architecture. **Virupaksha Temple:** A dedicated Hindu temple to Lord Shiva, it remains an active place of worship.
- **Vittala Temple:** Famous for its intricate stone carvings and the mesmerizing musical pillars.
- **Lotus Mahal:** A stunning palace complex with intricate carvings and a lotus-shaped pool.

Hazara Rama Temple: A royal temple complex adorned with exquisite sculptures

Hampi Chariot:

- Among three famous stone chariots in India; the other two are in **Konark (Odisha) and Mahabalipuram (Tamil Nadu)**.
- Built in the 16th century by King Krishnadevaraya, a Vijayanagara ruler.
- Vijayanagara rulers reigned from the **14th to 17th century CE**.
- Shrine dedicated to **Garuda, the vehicle of Lord Vishnu**.

Vittala Temple:



- Built in the 15th century during the rule of Devaraya II, a Vijayanagara ruler.
- Dedicated to Vittala, also known as Vijaya Vittala Temple.
- Vittala is an incarnation of Lord Vishnu. Constructed in the Dravidian style, adorned with elaborate carvings.

World Heritage Sites

- There are places considered to be of outstanding value to humanity, recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- They are inscribed on the World Heritage List, a prestigious designation that aims to encourage the identification, protection, and preservation of cultural and natural heritage worldwide.

Key Features of World Heritage Sites:

- **Outstanding Universal Value:** Sites must possess exceptional cultural or natural significance that transcends national borders and has importance for all humanity.
- **Diversity:** World Heritage Sites encompass a wide range of properties, including:
 - **Cultural heritage:** Historical monuments, archaeological sites, buildings, city centers, and cultural landscapes.
 - **Natural heritage:** Forests, mountains, lakes, coastlines, deserts, and geological formations.
 - **Mixed heritage:** Sites with both cultural and natural significance.
- **International Cooperation:** The concept of World Heritage Sites promotes international cooperation in protecting and preserving these invaluable places.
- **Conservation Challenges:** Many World Heritage Sites face threats from climate change, pollution, tourism, and urbanization. UNESCO and partner organizations work to address these challenges and ensure the long-term preservation of these sites.

UNESCO's Role:

- UNESCO plays a crucial role in identifying, protecting, and promoting World Heritage Sites.
- It provides technical assistance, capacity building, and financial support to countries in their efforts to conserve and manage these sites.

By recognizing and protecting World Heritage Sites, UNESCO and its member states strive to ensure that these invaluable treasures are preserved for future generations.

2. Classical Language

- In 2004, the Government of India declared that languages that met certain strict criteria could be accorded the status of a "Classical Language" of India.
- This initiative was instituted by the Ministry of Culture along with the Linguistic Experts' Committee, which was constituted by the Government of India to consider demands for the categorization of languages as Classical languages.

Criteria

- In 2004, the tentative criteria for the age of antiquity of a "classical language" was assumed to be at least 1000 years of existence.
- In a 2006 press release, Minister of Tourism and Culture Ambika Soni informed the Rajya Sabha about the following criteria laid down to determine the eligibility of languages to be considered for classification as a "Classical Language":
 - **High antiquity of its early texts/recorded history over a period of 1500–2000 years.**
 - **A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers.**
 - **The literary tradition should be original and not borrowed from another speech community.**

- The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.

Benefits

- As per Government of India's Resolution No. 2-16/2004-US (Akademies) dated 1 November 2004, the benefits that will accrue to a language declared as a "Classical Language" include:
- Two major international awards for scholars of eminence in Classical Indian Languages are awarded annually.
- A Centre of Excellence for Studies in Classical Languages is set up.
- The University Grants Commission will be requested to create, to start with at least in the Central Universities, a certain number of Professional Chairs for Classical Languages for scholars of eminence in Classical Indian Languages.

Only Sanskrit getting govt. attention, says Congress

The Hindu Bureau
NEW DELHI

The Congress on Tuesday said the Centre was providing "handsome" support only for Sanskrit among classical languages.

"So far, the Centre has supported only Sanskrit handsomely. That is fine. But what about the other classical Indian languages, which are not merely regional but are national languages as well?" Mr. Ramesh said in a post on X.

Taking note of *The Hindu* report on the government planning to change the criteria for classical language classification, he sought to know if the Maharashtra government would have to resubmit its application to meet the new criteria for recognition of Marathi as a classical language.

Language	Language Family	Language Branch	Earliest Attestation	Date Recognised
தமிழ், <u>Tamil</u>	<u>Dravidian</u>	<u>South Dravidian</u>	Between 500 and 300 BCE	12 October 2004
		<u>Middle Tamil</u>		
संस्कृतम्, <u>Sanskrit</u>	<u>Indo-European</u>	<u>Indo-Aryan</u>	1st century BCE	25 November 2005
ಕನ್ನಡ, <u>Kannada</u>	<u>Dravidian</u>	<u>South Dravidian</u>	370 CE	31 October 2008
		<u>Kannada dialects</u>		
తెలుగు, <u>Telugu</u>	<u>Dravidian</u>	<u>South-Central Dravidian</u>	400 CE	31 October 2008
മലയാളം, <u>Malayalam</u>	<u>Dravidian</u>	<u>South Dravidian</u>	830 CE	23 May 2013
ଓଡ଼ିଆ, <u>Odia</u>	<u>Indo-European</u>	<u>Eastern Indo-Aryan</u>	10th-11th century CE	20 February 2014

3. Historical Personalities:

3.1 Dnyaneshwar Maharaj

- Dnyaneshwar Maharaj, also known simply as Sant Dnyaneshwar or Jnaneshwar, was a prominent saint, philosopher, poet, and yogi from Maharashtra, who lived in the 13th century.
- **Early Life and Background:**
- **Birth:** Sant Dnyaneshwar was born in 1275 CE in a village called Apegaon near Paithan in present-day Maharashtra, India.
- **Life and Teachings**
- **Literary Works:** Sant Dnyaneshwar is best known for his magnum opus, the "Dnyaneshwari" (also spelled "Dnyaneshwari" or "Jnaneshwari"), a commentary on the Bhagavad Gita written in Marathi prose.
- **Philosophy:** He propagated the philosophy of Bhakti (devotion) and Jnana (knowledge), emphasizing the unity of all beings with the divine and the importance of understanding spiritual truths through direct experience.
- **Bhakti Movement:** Dnyaneshwar Maharaj, along with other Bhakti saints like Namdev, Eknath, Tukaram, and others, played a significant role in the Bhakti movement in Maharashtra, which sought to democratize spirituality and religious practice by emphasizing personal devotion to God over rigid ritualism.

3.2. Sant Namdev:

- Namdev (1270–1350 CE) was born in Maharashtra, likely in the village of Narsi-Bamani in present-day Hingoli district.
- He is known for his devotional hymns and abhangas (devotional poetry) in Marathi, which emphasize the worship of Vithoba (a form of Lord Krishna) and the importance of bhakti (devotion) and humility.
- Namdev's compositions are included in the Guru Granth Sahib, the holy scripture of Sikhism, highlighting his influence beyond Maharashtra.

3.3 Sant Eknath

- **Birth:** Eknath (1533–1599 CE) was born in Paithan, Maharashtra.
- **Works:** He is known for his literary works such as the "Eknathi Bhagavata," a Marathi commentary on the Bhagavata Purana, and "Eknathi Bhagwat," a commentary on the Bhagavad Gita.
- Eknath was a social reformer who challenged caste discrimination and promoted egalitarianism and devotion to Lord Vitthal.

3.4. Sant Tukaram

- **Birth:** Tukaram (1608–1649 CE) was born in Dehu, near Pune, Maharashtra.
- **Literary Works:** He composed numerous abhangas (devotional songs) in Marathi, collected in the "Tukaram Gatha," which express his deep devotion to Lord Vitthal and spiritual insights.
- **Social Reformer:** Tukaram advocated for social justice, equality, and compassion, criticizing societal hypocrisy and emphasizing the importance of genuine devotion over ritualistic practices.

4. Dynasty:

Parmar Dynasty:

- The Paramara dynasty ruled the Kingdom of Malwa in west-central India from the 9th to the 14th centuries.
- They belonged to the Parmara clan of the Rajputs.

Establishment and Early Rule:

- Established in the 9th or 10th century, initially as vassals of the Rashtrakutas of Manyakheta.
- Earliest extant inscriptions by ruler Siyaka found in Gujarat.

Ascendancy to Sovereignty:

- Around **972 CE**, **Siyaka sacked Manyakheta**, asserting Paramara sovereignty.
- Malwa, centered on **Dhara (now Dhar)**, became core Paramara territory under Munja.

Zenith under Bhoja:

- Bhoja, Munja's nephew, expanded empire from Chittor to Konkan and Sabarmati to Vidisha by c. 1055 CE.

Political and Military Struggles:

- Faced challenges from Chaulukyas of Gujarat, Chalukyas of Kalyani, Kalachuris of Tripuri, and Chandelas of Jejakabhukti.
- Capital moved to Mandapa-Durga (Mandu) due to repeated sackings of Dhara.

Decline and End:

- Last known ruler Mahalakadeva defeated and killed by Alauddin Khalji's forces in 1305 CE.
- Epigraphic evidence suggests Paramara rule continued briefly after Mahalakadeva's death.

Cultural and Religious Patronage:

- Paramaras renowned for patronage of Sanskrit poets and scholars, particularly under Bhoja.
- Predominantly Shaivite rulers who also patronized Jain scholars



FREE OPEN TEST

10th August 2024: Ancient History

17th August 2024: Current Affairs (June + July 2024)

Venue: Patriotic IAS, 3rd Floor KV Tower, Paidleyganj Road,
Gorakhpur, 273009

Contact Number: 9971932488

Society

1. Women Issues:

1.1. Focus on Female Employment:

- Difficulty in getting jobs and inflation were major issues in the 2024 Lok Sabha Elections (source: Lokniti-CSDS pre-poll survey).
- The India Employment Report (IER) 2024 showed the unemployment rate increased from just over 2% (2000, 2012) to 5.8% (2019), then decreased to 4.1% (2022), with time-related underemployment at 7.5% (2022).
- Labour force participation rate (LFPR) fell from 61.6% (2000) to 49.8% (2018), then recovered to 55.2% (2022).

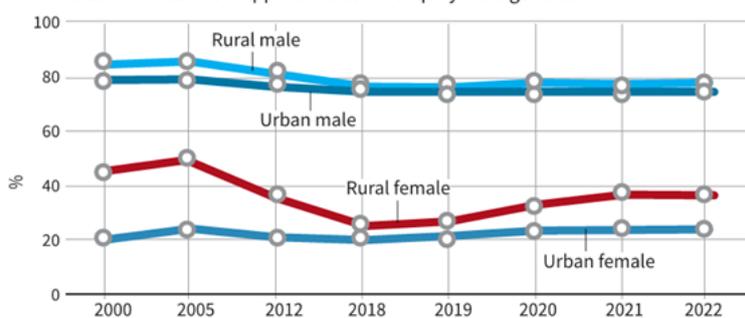
- Female LFPR increased from 24.6% (2018) to 36.6% (2022) in rural areas, and by around 3.5% from 20.4% (2018) in urban areas.

- Male LFPR rose marginally by 2% in rural areas and remained almost stagnant in urban areas.

- Female LFPR in India is low compared to the world average of 53.4% (2019) and decreased from 38.9% (2000) to 23.3% (2018).

Labour force participation rate in India

A sharp rise in the female labour force participation rate, especially in rural India, from 2018 indicates new opportunities for employment generation



Source: India Employment Report 2024

- The rise in female LFPR, especially a 12% increase in rural areas (2018-2022), indicates potential for employment generation.
- Women are more engaged in unpaid family labor (36.5% for females vs. 9.3% for males in 2022).
- The difference in unpaid family labor employment is 31.4% in rural areas and 8.1% in urban areas.
- There is a greater opportunity for female employment generation, especially in rural areas, with appropriate strategies.
- Employment choices for earnings are highly gendered, making it challenging to generate employment opportunities for women.
- Study in Bhuj, Gujarat slums shows **women prefer traditional home-based work (bandhani, embroidery, fall beading) over non-farm casual labor due to flexibility and working from home.**
- **30% of women remain in traditional occupations due to a lack of other options.**
- Lower rise in female LFPR in urban areas (2018-22) indicates a lack of appropriate opportunities.
- **Developing own enterprises is difficult due to limited access to capital and social norms controlling business.**
- **Collectivizing women under self-help groups (SHGs) and federations can benefit women in traditional occupations.**
- **SHGs can provide training for new skills and link women to markets for better returns.**
- Kutch Mahila Vikas Sangathan (KMVS) is a local NGO working towards this goal.

- **Traditional occupations conform to local gender norms and support women's practical needs (household work and earnings).**
- These occupations do not meet strategic gender needs (challenging regressive norms).
- Working outside the home in a professional environment can increase women's agency and empower them.

The Importance of Market Access

- Women's entry into male-dominated workspaces can increase labor competition, avoidable by creating opportunities in neglected areas.
- Study in Upper Gangetic Plains found women's wages and decision-making improved with the expansion of less dominant irrigation sources.
- Canal irrigation expansion during the Ziad season increased female empowerment as males showed less interest in agriculture.
- Non-conventional irrigation in West Bengal enabled women to start farming, **pisciculture, nurseries, and vermicomposting.**
- Women in West Bengal's water user's association benefited from work near home, reducing migration and increasing family welfare.
- Male family members assist in heavy tasks like ploughing or netting, but women can manage with hired help.
- **Market interaction empowers women, reducing dependency on men and circumventing gender norms.**
- Earnings from both men and women enhance family income and welfare.
- Strategies should focus on developing income opportunities where men are not driven out of the labor market.
- Women's work near home can improve family income and their position in the family.
- Women's workforce participation in Kolkata slums reduced economic vulnerability and improved resilience during the COVID-19 pandemic.

Need for a better Work Environment

- Participation in work outside the home should be focused on for direct impact on women's empowerment.
- A long-term strategy is needed to develop a better work environment for women.
- Safety and basic facilities (toilets and crèches) should be available in workplaces.
- Public policy should mandate these facilities in small and medium manufacturing or business units.
- Improving female LFPR would enhance overall employment and family income.
- In rural areas, public policy should provide more access to resources (water) and markets (inputs and selling produce).
- In urban areas, better workplace facilities should be mandated.
- Collectivizing women and federating collectives in rural and urban areas under planned economic activities is beneficial.
- The **Lakhpati Didi programme, aiming to raise an SHG woman's annual income to ₹1 lakh or above,** may pave the way.

1.2 Gender Gap in Education:

- The World Economic Forum (WEF) 2024 report ranked India 129 out of 146 economies in global gender gaps.
- India's rank slipped due to a decline in the education sector.
- The report highlighted that India's gender parity levels in education have dipped.
- Women have high enrolment in primary, secondary, and tertiary education, but the literacy rate gap between men and women is 17.2 percentage points.
- India ranked 124th in literacy rate indicator with a score of 0.964 in the education category.
- In the 2023 report, India had a perfect score of 1.000 in educational parity, ranking 26th.
- Indicators tracked include enrolment levels in primary, secondary, and tertiary education, and adult literacy rate.
- WEF's Ricky Li mentioned that the data for educational attainment indicators is collected by UNESCO and updated periodically.
- The 2024 report used data from 2022 and 2023, while the 2023 report used data from 2018, 2021, and 2022.
- Changes in gender parity scores can reflect updates in the data corresponding to the indicators.

What do Indian statistics show?

- The Union Education Ministry uses UDISE+ and AISHE to track school and college enrolment data.
- UDISE+ report for 2021-22 shows 13.79 crore boys and 12.73 crore girls enrolled in school, with girls making up 48% of the school population.
- At preschool or kindergarten, girls make up 46.8% of enrolled children.
- In primary school (Classes 1 to 5), girls' enrolment rises to 47.8%.
- In upper primary (Classes 6 to 8), girls' enrolment increases to 48.3%.
- Some girls drop out after Class 8 when free education ends.
- In secondary school (Class 9 and 10), girls' enrolment drops to 47.9%.
- In higher secondary (Class 11 and 12), girls' enrolment is 48.3%, showing a lower gender gap.
- AISHE report for 2021-22 shows the gross enrolment ratio (GER) for women in higher education is 28.5, slightly higher than the male GER of 28.3.
- Female enrolment in higher education has increased by 32% since 2014-15.
- Data for 2022-23 from UDISE+ and AISHE is not yet published.

What is the impact of a slew of packages to incentivise girls to get an education?

- Building more schools has significantly increased enrolment, especially for girls.
- Proximity of schools (within 1-2 km) increases the likelihood of parents enrolling their children.
- Since the mid-90s, the number of schools has grown, leading to a spike in girls' enrolment nationwide.
- Regional differences exist: Gujarat, with fewer government secondary schools, has lower girls' enrolment (45.2%) compared to poorer states like Jharkhand (50.7%), Chhattisgarh (51.2%), Bihar (50.1%), and Uttar Pradesh (45.4%).
- Presence of women teachers boosts enrolment; parents are hesitant to send daughters to schools with only male teachers.

- Transport facilities, such as free bus passes and free cycles for schoolgirls, have improved enrolment in states like Haryana, Punjab, Tamil Nadu, and Bihar, though less effective in Rajasthan.
- Sanitation issues, especially post-puberty, cause dropouts after Class 8.
- Funding for school washrooms' construction exists, but not for cleaning and maintenance, often left to local bodies.

What is the next challenge?

- Some states have closed the gender gap in higher classes, raising concerns about boys dropping out.
- In West Bengal, girls make up 55.7% of higher secondary students; similar trends are seen in Chhattisgarh (53.1%) and Tamil Nadu (51.2%).
- The Right to Education Act, which prevents students from being failed till Class 8, contributes to this trend.
- Girls who reach Class 9 are typically more interested in studying, while some boys who fail at the secondary level drop out.
- Poorer boys face higher pressure to earn a living, increasing dropout rates.
- At the college level, while the female GER is higher, fewer women (42.5%) enroll in STEM subjects from undergraduate to Ph.D. levels.
- Adult literacy remains an issue, with 64.63% of women being literate compared to 80.88% of men (2011 Census).
- There is a need to improve foundational literacy in schools and extend education to rural women to close the gender gap.

1.3. Divorced Muslim women entitled to maintenance under secular statute: SC

- The Supreme Court ruled that divorced Muslim women are entitled to maintenance under Section 125 of the Code of Criminal Procedure (CrPC).
- The court agreed with senior advocate Gaurav Agrawal that the secular provision of Section 125 CrPC applies to divorced Muslim women, despite the Muslim Women (Protection of Rights on Divorce) Act, 1986.
- This ruling means divorced Muslim women have the same maintenance rights as other women in the country.
- The decision came from an appeal by a Muslim man challenging a Telangana High Court decision that allowed his divorced wife interim maintenance under Section 125 CrPC.
- The man argued that the 1986 Act should be used instead of Section 125 CrPC, claiming the 1986 Act overrides the CrPC.
- Section 3 of the 1986 Act requires a man to provide maintenance to his divorced Muslim wife only during the **iddat period**.

Divorced Muslim women entitled to maintenance under secular statute: SC

GS Paper II:
K. Vulnerable Section

The Supreme Court on Wednesday held that divorced Muslim women are entitled to maintenance under the "secular" Section 125 of the Code of Criminal Procedure.

The court agreed with *amicus curiae*, senior advocate Gaurav Agrawal, that a remedy under the secular statutory provision of Section 125 of the CrPC 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.

A separate but concurring judgment by a two-judge Bench of Justices B.V. Nagarathna and Augustine George Masih came on an appeal filed by a Muslim man challenging a Telangana High Court decision upholding (though modifying) a Family Court order allowing his wife, whom he had divorced via *triple talaq*, interim maintenance under Section 125 of CrPC.

Mohd. Abdul Samad, in his appeal, said his wife had to exclusively take recourse under the 1986 Act rather than Section 125 CrPC. He had argued that the 1986 Act was a special law and overrode the CrPC provision. He contended that a divorced Muslim woman's application for maintenance under Section 125 was not maintainable.

Besides, the court pointed out that Section 3 of the 1986 Act requires a man to provide for a "reasonable and fair provision of maintenance" to his divorced Muslim wife only during the *iddat* period. Once the



Krishnasadas Rajagopal
NEW DELHI

Justice B.V. Nagarathna of the Supreme Court, in an order on Wednesday, said men should share their financial resources with their "homemaker" wives who did not have an

personal law obligation to maintain the divorced Muslim woman ceases. On the other hand, Section 125 mandates a husband to provide monthly maintenance to his divorced wife, irrespective of her faith. "Any divorced wife who has not remarried is entitled to maintenance by her ex-husband who has sufficient means but has neglected or refused to maintain her," Justice Nagarathna pointed out.

Children's maintenance Further, the 1986 Act holds a Muslim man liable to pay his divorced wife maintenance for their children for only a period of two years from birth. Whereas Section 125 requires a husband to pay for their children till they attain "the age of majority."

Justice Masih, in his opinion, said Section 125 manifested the constitutional commitment towards spe-

The choice is left to the Muslim woman to apply for maintenance either under Section 125 of the 1986 Act. Courts have to give both laws a harmonious and purposive interpretation.

ADJUSTICE AUGUSTINE GEORGE MASIH
Supreme Court Judge

'Men should share funds to empower their wives'

independent source of income, to empower them. The judge made the observations in a separate opinion upholding a divorced Muslim woman's right to maintenance.

FULL REPORT
» PAGE 5

cial measures to ensure a life of dignity for women at all stages of their lives, irrespective of their faith.

Harmonious He observed that Section 125 and the 1986 Act were not at loggerheads with each other. The 1986 Act did not extinguish the right of a divorced Muslim woman to seek maintenance under Section 125. The choice is left to the Muslim woman to apply for maintenance either under Section 125 or the 1986 Act. If a Muslim woman is unable to maintain herself, she could apply for maintenance under Section 125. If, on the other hand, she is able to take care of herself financially, she could very well seek maintenance under the 1986 Act till the expiry of the *iddat* period. Courts have to give both laws a harmonious and purposive interpretation, Justice Masih observed.

- Section 125 CrPC mandates a husband to provide monthly maintenance to his divorced wife, regardless of her faith, until she remarries.
- Any divorced wife who has not remarried is entitled to maintenance by her ex-husband if he has sufficient means but has neglected or refused to maintain her.
- The 1986 Act requires a Muslim man to pay for his children's maintenance for only two years after birth, while Section 125 CrPC requires payment until the children reach adulthood.
- Justice Masih stated that Section 125 CrPC and the 1986 Act are not in conflict. The choice is left to the Muslim woman to apply for maintenance under either Section 125 CrPC or the 1986 Act.

The "**iddat**" period refers to a waiting period that a Muslim woman must observe after the dissolution of her marriage, whether through divorce (talaq), death of her husband, or annulment. It is a period of spiritual and physical purification and transition.

1. **Purpose:** The iddat period serves several purposes, including ensuring that there is no pregnancy resulting from the previous marriage, providing time for emotional adjustment, and determining any possible reconciliation.
2. **Duration:** The length of the iddat period varies depending on the circumstances:
 - **Divorce (talaq):** Typically, it lasts for three menstrual cycles (approximately three lunar months) to ensure there is no pregnancy.
 - **Death of Husband:** It lasts for four lunar months and ten days.
 - **Annulment or other cases:** The duration may vary based on specific circumstances.
3. **During Iddat:**
 - The woman is required to stay in her home and refrain from socializing or interacting with non-mahram (non-related by blood or marriage) men.
 - She observes mourning practices if applicable.
 - It is a time for reflection and adjustment to the new status.

2. Caste and Community:

2.1. The Case for a caste Census:

The Census Act, 1948 should be amended to make enumeration by caste mandatory, instead of leaving it to the whims of the Union executive. Such data can be collected as part of the regular Census, with a few pertinent queries added to the questionnaire

- Peter Drucker emphasized that measuring data is crucial for managing issues.
- Historical discrimination against social groups (caste, race, religion, gender, disability) requires collecting data based on group identity for effective policy making.
- Germany's census does not count people by race, disadvantaging Black people, leading to the Afrozensus survey in 2020 which showed widespread anti-Black racism.
- Demand for enumeration typically comes from discrimination victims and is resisted by vested interests.
- A caste Census in India is important for social, legal, administrative, and moral reasons.
- Social: Caste remains a key social structure, evident in marriage patterns, residential segregation, and political choices.
- Legal: Policies of social justice, including reservations, require detailed caste-wise data, supported by Supreme Court rulings.

- Administrative: Data helps avoid wrongful caste inclusions/exclusions and manage reserved category dynamics.
-
- Moral: Lack of data benefits a few elites, allowing them to control a disproportionate share of resources and power.
- British India censuses (1881-1931) included all castes; post-Independence (1951) only SCs and STs were enumerated.
- In 1961, the Government of India advised states to conduct their own surveys for OBC lists.
- No reservation for OBCs existed in the Centre and its undertakings then.

The Arguments Against Caste Census

- There are several arguments against conducting a caste Census:
- Some argue it is socially divisive, but India's social divisions have existed for thousands of years. Counting SCs and STs since 1951 has not caused conflicts. India already enumerates religion, language, and region, which are equally divisive.
- Others claim it is an administrative nightmare, but unlike race, caste identification is clear. The government has successfully enumerated SCs and STs, so counting other castes, which are mostly state-specific, should not be problematic.
- There is a concern that it would increase demands for reservations. However, caste-wise data would help curb arbitrary demands and allow for objective policy making. Governments prefer vague data for flexible, often politically motivated, decision-making.

Do You Know?

World Population Day

- 11th July
- Theme 2024 –
"Empowering Youth for a Sustainable Future"

The Case for OBC Inclusion in Census

- The Constitution allows reservations for OBCs in education (Article 15(4)) and public employment (Article 16(4)).
- After the Mandal Commission recommendations, OBCs received reservations in the Central government and its undertakings.
- The Supreme Court in the Indra Sawhney case (1992) ruled that the OBC list based on the 1931 Census should be revised periodically.
- OBCs do not have reservation in electoral constituencies for MPs and MLAs, but after the 73rd and 74th amendments (1993), they have reservations in panchayats and municipalities.
- For this, caste-wise, area-wise Census data of OBCs is essential, but the government has not enumerated OBCs in any Census.
- When states tried to implement OBC reservations in local body elections, courts stayed the reservations due to lack of caste-wise data.
- The Supreme Court upheld 10% reservation for economically weaker sections (EWS) among upper castes in 2022 despite lack of empirical data.
- The Census should enumerate all castes, including upper castes, like it did till 1931.
- Census is a Union subject, but the Collection of Statistics Act, 2008 allows states and local bodies to gather statistics.

- In 2010, Parliament passed a resolution to include caste in the 2011 Census, but the SECC-2011 failed due to poor design and execution.
- The SECC-2011 was not conducted under the Census Act, 1948 and had issues with questionnaire design and execution.
- Bihar's Caste Survey in 2023 was more successful, using a specific list of caste names.
- Despite the 2010 resolution, the Central government announced in 2021 that it would not include caste in the next Census.
- The Supreme Court dismissed Maharashtra's plea to enumerate OBCs in the 2021 Census, despite past rulings supporting the need for caste data.

What is the Way Forward?

- The Census Act, 1948 should be amended to make caste enumeration mandatory.
- Caste should be part of the regular Census conducted by the Census Commissioner.
- The government should involve sociological/anthropological experts to create a draft list of castes specific to each state.
- This draft list should be published online for public suggestions and comments before finalizing it.
- The finalized list should be given to enumerators.
- The questionnaire should ask for sub-caste, caste, larger caste group, and caste surname.
- Internet-enabled hand-held devices preloaded with these details should be used, limiting the enumerator's role to selecting the correct option.
- Interested states should request the Supreme Court to review its 2021 judgment.
- It is illogical to implement OBC reservations based on 1931 Census data and EWS reservations without any empirical data.
- The next Census must include caste enumeration.

For your Information (FYI):

- India surpassed China as the world's most populous country last year.
- Current population of India is around 1.4 billion, projected to peak at 1.7 billion in 2064 and stabilize at 1.53 billion by 2100.
- Despite high numbers, India's population growth rate is slowing, with total fertility rate falling below replacement level of 2.1.
- Young women aged 15-19 and 20-24 show the highest demand for family planning services.
- Factors contributing to high unmet needs include early marriage in less educated regions, limited agency for family planning discussions, and societal norms favouring proving fertility before contraception.
- Teenage pregnancies are increasing, both among married and unmarried women, complicated by societal reluctance to acknowledge sexual activity among unmarried youth.
- Lack of comprehensive sex education in India contributes to misconceptions and inhibits access to contraceptives.
- Urgent need for culturally sensitive sexual education and comprehensive contraceptive options to address youth sexual and reproductive health.
- Women's education remains crucial in empowering choices related to contraception

2.2. Nishad Community:

Why in News?

- The Nishad community, categorized as EBCs, has historically supported leaders like Akhilesh Yadav and Rahul Gandhi, marking a shift towards the INDIA block in recent elections.
- The Nishad community in U.P. showed a preference for the Samajwadi Party (SP) and Congress in the 2024 elections, aligning with the SP-Congress alliance and Rahul Gandhi's initiatives.
- This election saw a notable engagement with the Indian Constitution among Nishads in areas like Banda, Chitrakoot, and Prayagraj, influenced by Rahul Gandhi's speeches on constitutional values.

Political History and Influence:

- Historically, the Nishad community in Bihar had limited political representation, with sporadic instances like Jai Narain Nishad and Ramkaran Sahni.
- Since 2014, Mukesh Sahani's Vikassheel Insaan Party (VIP) has aimed to consolidate Nishad votes, acknowledging their numerical strength in Bihar.
- In the 2024 elections, BJP gained Nishad votes in constituencies like Muzaarapur, where they are emerging as a dominant caste.

Challenges and Political Strategy:

- VIP faces challenges in putting forward strong candidates despite organizational strength within the Nishad community.
- BJP's inclusion of Raj Bhushan Choudhury from Muzaarapur in the Modi 3.0 Cabinet reflects their focus on consolidating Nishad support.

Core Issues of the Nishads:

- **Rights and Representation:** Nishads in U.P. demand rights over rivers and river produce, alongside better representation in governance.
- **Economic Issues:** Sand mining, fishing, and boat operations are vital income sources for the community, sparking conflicts with authorities over rights.
- **Political Mobilization:** Incidents like clashes over sand mining in Banswar village led to political parties making specific promises to the community, such as forming cooperative societies and providing financial assistance.

Aspirations and Demands:

- Nishads seek inclusion in the Scheduled Castes (SC) category in Bihar, highlighting their socio-economic backwardness through surveys and ethnographic studies.
- Political leaders like Sanjay Nishad and Priyanka Gandhi have supported community demands, emphasizing economic empowerment and cultural representation.

3. Education:

3.1 Centralized Hiring leads to cultural Barriers in Eklavya Schools:

- **Centralised Recruitment:** Recruitment for tribal residential schools (Eklavya Model Residential Schools, EMRS) has been centralised, introducing a mandatory Hindi competency requirement.

Centralised hiring leads to cultural barriers in Eklavya schools

GS Paper I: Society
Abhinav Choudhary
NEW DELHI

The recent centralisation of recruitment for tribal residential schools across the country, which introduced Hindi competency as a mandatory requirement, has resulted in a flood of requests for transfers.

The large numbers of staff recruited from the Hindi-speaking States are protesting postings to the Eklavya Model Residential Schools (EMRS) located in southern States, where the language, food and culture are unfamiliar to them.

Though Central government officials point out that the willingness to be posted anywhere in the country was part of the requirement for those applying for jobs, the bigger worry may be the impact on tribal students being taught by teachers who are

unfamiliar with the local language and culture.

Until last year, staff recruitment for the Ministry of Tribal Affairs' flagship Eklavya schools was done by the State authorities.

In the 2023 Budget Session of Parliament, however, Finance Minister Nirmala Sitharaman announced that the responsibility was being shifted to the National Education Society for Tribal Students (NESTS), which has now been given the task of staffing 38,000 positions in over 400 Eklavya schools across the country.

Staff shortage

Officials said the centralisation of recruitment was meant to address a severe shortage of teachers in the EMRS system, and to standardise recruitment rules across States, which had earlier used varying criteria and applied reservation quotas as per their State legislation.



Officials said the centralisation of hiring was meant to address a severe shortage of teachers in the EMRS system. FILE PHOTO

The examination for this centralised recruitment process – the 2023 EMRS Staff Selection Examination – was entrusted with the National Testing Agency, now beleaguered by several scandals.

The examination was for the first round of 4,000 vacant teaching and non-teaching positions across the Eklavya schools.

In June, NESTS said that 303 principals and 707 junior secretariat assistants had been selected, along with thousands of other teaching and non-teaching

positions.

However, given the new requirement of Hindi competency, a large number of selected candidates hail from Hindi-speaking States, many of whom now want transfers from their postings.

Transfer policy

NESTS has been forced to post a notification on its website, saying, "At present, no request for change of place of posting is being considered."

Government sources said that NESTS will soon roll out a transfer policy, which is likely to be modelled on similar policy for the Jawahar Navodaya Vidyalayas (JNV) and Kendriya Vidyalayas (KV).

They added that there was "nothing unusual" about the requirement of basic Hindi language competency as this is mandato-

ry for JNV and KV recruitment as well.

Unlike in KVs, however, where students hail from across the country as they are often family members of Central government employees, most tribal students in Eklavya schools would benefit from teachers who understand their local cultural contexts.

"The issue is that for EMRSs especially, teachers and school staff being hired from within their local communities is the obvious way to go ahead. These communities have very specific contexts under which learning can be made conducive and it would naturally help to have teachers who understand that context," said Aparna Choudhary, a social worker who runs the Delhi-based Karta Initiative, which has worked with JNVs and EMRSs.

Transfer policy

- **NESTS Notification:** NESTS has posted a notification on its website stating that no requests for change of place of posting are currently being considered.
- **Transfer Policy:** NESTS plans to introduce a transfer policy soon, likely modeled after similar policies in Jawahar Navodaya Vidyalayas (JNVs) and Kendriya Vidyalayas (KVs).
- **Hindi Competency Requirement:** Basic Hindi language competency is mandatory for recruitment in Eklavya Model Residential Schools (EMRS), similar to requirements in JNVs and KVs.
- **Cultural Context:** Unlike KVs, where students come from diverse backgrounds, EMRS primarily serve tribal communities who benefit from teachers familiar with their local cultural contexts.
- **Local Community Involvement:** There is a strong argument for hiring teachers and school staff from within local communities to create conducive learning environments tailored to specific cultural contexts of EMRS students

4. News In Short:

4.1 Cases related to LGBTQIA+ Community:

National Legal Services Authority v. Union of India (2014):

- This judgment recognized the "third gender" or transgender persons.
- The court acknowledged the rights of individuals who don't identify as male or female to self-identify their gender.
- It directed the government to grant legal recognition to transgender identities and provide them with various welfare benefits.

Navtej Johar v. Union of India (2018):

- This case involved a curative petition challenging the earlier judgment of Suresh Kumar Koushal v. NAZ Foundation (2013) that upheld Section 377 of the Indian Penal Code, criminalizing consensual same-sex relationships.
- A five-judge bench of the Supreme Court, in a historic decision, struck down Section 377 to the extent that it criminalized homosexuality.
- This judgment recognized the right to equality and dignity for LGBTQ individuals and paved the way for greater acceptance.

Anjali Guru Sanjana Jaan v. Union of India (2022):

- This case expanded the definition of family to include same-sex couples and queer relationships.
- This judgment has implications for inheritance rights, property rights, and other aspects where family status is considered.

"Same-Sex Marriage Petitions Case" or "Same-Sex Marriage Legalization Petitions Case":

- It's important to note that in October 2023, the Supreme Court rejected petitions seeking to legalize same-sex marriage in India.
- The court clarified that it doesn't have the authority to modify the Special Marriage Act and that the responsibility lies with the legislature.

4.2. The Medical Termination of Pregnancy (MTP) Act, 1971

- **Purpose:** The MTP Act aims to provide safe and legal access to abortion services to protect the health of women and prevent unsafe abortions.
- **Legal Framework:** It permits abortions under certain circumstances up to a specified gestational limit, which was amended in 2021 to extend the upper limit to 24 weeks under certain conditions, such as when there is a risk to the life or physical or mental health of the pregnant woman, or there is a substantial risk that the child, if born, would suffer from physical or mental abnormalities.
- **Conditions for MTP:** The Act specifies that abortions can be performed by registered medical practitioners (doctors) in registered hospitals or clinics. It requires the opinion of one doctor for pregnancies up to 20 weeks and the opinion of two doctors for pregnancies between 20 to 24 weeks.
- **Protection and Regulation:** The MTP Act provides legal protection to doctors performing abortions in accordance with its provisions and aims to prevent the exploitation of women seeking abortions.
- **Amendments and Updates:** Over the years, the MTP Act has been amended to address changing medical practices and societal needs, such as increasing the gestational limit for legal abortions and improving access to safe abortion services.

4.3. SC: Man Should Share funds to Empower their Wives:

- Justice B.V. Nagarathna of the Supreme Court emphasized the need for married Indian men to financially support their homemaker wives who lack independent income.
- She highlighted that financial empowerment through access to financial resources is crucial for the security and empowerment of such wives.
- Justice Nagarathna praised men who provide for their wives' personal expenses, suggesting joint bank accounts or ATM cards as ways to ensure financial accessibility.

- She distinguished between financially independent married women and homemakers who rely solely on their husbands for personal expenses.
- Many homemakers save money from household budgets to avoid asking their husbands or families for personal expenses, indicating their financial dependence.
- Justice Nagarathna noted that many husbands may not realize the financial constraints faced by their homemaking wives, who are dependent not just emotionally but also financially.
- She underscored the emotional security homemakers seek from their husbands and families, which isn't always fulfilled in households.
- Justice Nagarathna also mentioned the vulnerability of married women concerning the security of their residence in their matrimonial homes.
- She concluded that strong families and society contribute to building a stronger nation, advocating for support systems that empower homemakers and respect their contributions.

4.4. Does India Have Laws Against Superstition:

Does India have enough laws to combat superstition?

GS Paper I: Society



Alok Prasanna Kumar
Co-Founder and Lead of Vidhi Karnataka



Avinash Patil
President of the Maharashtra Andhashradha Nirmulan Samiti

PARLEY

The recent stampede at a religious congregation in Hathras, Uttar Pradesh, resulting in more than 120 deaths, has reignited the debate on whether India has adequate legislation to address exploitative religious and superstitious practices. Experts have advocated for a national law akin to existing legislation in Maharashtra and Karnataka to effectively address superstition, black magic, witch-hunting, and other inhuman practices. Does India have enough laws to combat superstitious practices? Avinash Patil and Alok Prasanna Kumar discuss the question in a conversation moderated by Aaratrika Bhaumik. Edited excerpts:

Is there a need for a national anti-superstition law or are the existing State laws and criminal law provisions adequate?

Avinash Patil: For the last two decades, my organisation has been demanding the enactment of a central law to combat superstitious practices. The existing criminal law statutes do not have any dedicated provisions targeting such practices. As a result, police authorities are often reluctant to register cases against the fraudulent activities of godmen. While the **Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954, exists, it contains numerous loopholes.** Therefore, a law, modelled on the Maharashtra and Karnataka State laws, must be implemented nationwide.

Alok Prasanna: If we were to take the example of the Karnataka law, a common criticism is its broad definitions of 'evil practices'. This ambiguity can make it difficult to distinguish religious beliefs from superstitions. For instance, is making donations to one's church or temple exploitative and thus an evil practice? State governments are often more attuned to the needs and traditions of the local population. Given India's diversity, a national law might impose sweeping generalisations that could inadvertently empower already dominant communities. Thus, State-specific laws are preferable because they can better accommodate local practices and realities.

A common criticism against the State laws is that they employ expansive and vague definitions, allowing enforcing authorities subjective and potentially discriminatory powers. Do you share these concerns?

Alok Prasanna: There will never be one



Relatives mourn the death of stampede victims in Hathras district, Uttar Pradesh. REUTERS

commonly acceptable definition of what a superstition is. For me, it is about instilling a sense of fear and being forced to undertake degrading practices. Take, for example, the **snana ritual in Karnataka where Dalits are made to roll over the leftover food eaten by Brahmins to attain punya.** There should, however, be more restrictive definitions to curb any misuse by linking the practice to some specific harm caused to the concerned individual. Nonetheless, there will always be scope for grey areas, which we have to be open to debating.

Avinash Patil: Following the enactment of a national legislation, individual States can introduce specific amendments addressing local concerns to enhance the law's effectiveness. These amendments can also include additional clauses to refine and narrow down definitions.

Mr. Patil, based on your experience, what are the challenges in implementing these laws at the grassroots level?

Avinash Patil: There is an acute lack of sensitisation when it comes to law-enforcement agencies. **Police officers are often constrained by cultural sensibilities and biases which prevent them from addressing these issues with a scientific bent of mind.** Significant effort is required to persuade the police to file FIRs in such cases, and even when they do, investigations are often compromised by political influence, leading to low conviction rates. Moreover, caste discrimination is a facet of superstitious beliefs that often goes unnoticed. This underscores the importance of conducting training programmes for all echelons of the police force since they are typically the first responders.



There is an acute lack of sensitisation when it comes to law-enforcement agencies. Police officers are often constrained by cultural sensibilities and biases which prevent them from addressing these issues with a scientific bent of mind.

AVINASH PATIL

Mr. Kumar, many oppose such laws due to their potential conflict with the fundamental right to profess one's religion under Article 25 of the Constitution. How can we strike a balance between protecting the public interest and ensuring that these laws withstand constitutional scrutiny?

Alok Prasanna: Article 25 permits reasonable restrictions on the grounds of public order, morality, and health. Justice Arnoold's opinion in the Maharaja Libel case before the Bombay High Court encapsulates this wonderfully – "that what is morally wrong cannot be theologically right". So, you cannot say that your religious belief permits you to do something that is morally unconscionable. Thus, practices that are inherently exploitative will also fall foul of other fundamental rights, including the right to life and the protection against untouchability.

Is it important for these laws to prioritise restorative measures instead of just being punitive in nature? For instance, studies have shown that victims of witch-hunting in States such as Jharkhand, Chhattisgarh, and Maharashtra frequently endure social ostracisation, which severely limits their access to essential resources and services.

Avinash Patil: Yes, the laws must focus on restorative justice. However, there is a notable lack of political resolve when it comes to implementing social security measures for victims of such crimes. Witch-hunting persists as a serious problem in tribal districts, where women from socially and economically disadvantaged communities are often targeted. **Despite tribal communities constituting about 8% of India's population, dedicated welfare schemes for victims of witch-hunting are conspicuously absent.** To address this disparity, comprehensive training programmes are essential for key stakeholders such as public health workers, schoolteachers, and district magistrates. This would enable them to effectively support and provide redress for victims seeking assistance. Additionally,

establishing a victim compensation fund is essential to meet the immediate and long-term needs of victims affected by such practices.

Alok Prasanna: Even though the Constitution has come into existence, we still have a very colonial state. Authorities are adept at arresting and prosecuting individuals when instructed, but they often struggle when tasked with providing restorative justice. Ideally, implementing such mechanisms would require a fundamental rethinking of how the Indian state operates. It is also important to ensure that these laws are not weaponised against the Adivasi communities. At the core of many issues related to witch-hunting are property disputes. There is a prevalent fear that women inheriting property may contravene community norms, so a conspiracy is hatched to attack them.

Are laws enough to curb superstitions? What more can be done especially since cultural sensibilities tend to pose a significant hurdle in framing or implementing such laws?

Alok Prasanna: There is an interesting phenomenon unfolding across the country where people are increasingly retreating into the arms of godmen, spanning across religions. It is important to reflect on why people no longer feel a sense of protection from the state or their own community, prompting them to seek refuge in blind faith. Consider the case of Bhole Baba, a former police constable who claims to be the voice of some divine being. His congregation attracted not just a small group, but lakhs of people. This suggests a larger societal issue beyond isolated incidents of misguided faith. I think that is what worries me more and we must investigate what is the deeper cause.

Avinash Patil: Many people believe that such superstitious beliefs are for their own good, which enables godmen to deceive them. There is a widespread tendency to seek solace in spirituality at the cost of rationality. It is crucial to move beyond this mindset and embrace scientific temperament in our daily lives. We have forgotten to question, which reflects a failure of our education system and state institutions. It is high time that state authorities abide by their constitutional duty to promote rational thinking and scientific practices.



To listen to the full interview Scan the code or go to the link www.thehindu.com

Geography

1. Earthquake:

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

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

- Scientists cannot predict when or where an earthquake will occur, especially minor ones within tectonic plates' interiors.
- Major earthquakes at plate boundaries measuring over 7.5 on the Richter scale cause significant infrastructure damage and loss of life.
- These seismic events in oceans can also trigger tsunamis.
- Scientific deep drilling involves strategically digging boreholes to study deeper layers of the Earth's crust.
- The Borehole Geophysics Research Laboratory (BGRL) in Karad, Maharashtra, under the Ministry of Earth Sciences, conducts India's scientific deep drilling program.
- BGRL aims to drill up to 6 km deep into the Earth's crust to study reservoir-triggered earthquakes in the Koyna-Warna region of Maharashtra.
- The Koyna region has experienced frequent earthquakes since the impoundment of the Koyna Dam in 1962.
- BGRL has completed a 3-km-deep pilot borehole in Koyna and aims to reach a depth of 6 km to enhance understanding of earthquake mechanisms and related phenomena.

Do You Know?

Difference between the Mercalli and Richter scale:

- The Mercalli and Richter scales measure the impacts of seismic activity.
- The Richter scale measures the magnitude of the earthquake, indicating the force of the earthquake.
- The Mercalli scale measures the physical impact of the earthquake within a given location.
- Example: An earthquake with a Richter scale magnitude of 5 is considered moderate in strength.
- However, the same earthquake could be recorded as VIII on the Mercalli scale, indicating major physical damage.
- The difference between the scales can occur in areas where buildings are less resilient.
- The same magnitude earthquake can have different physical impacts depending on the location.

Benefits of a deep-drilling mission

- Earthquakes are complex to study due to their unpredictable nature and the limitations of surface-level observations.
- The Koyna region's earthquakes coincide with the loading and unloading of the Koyna Dam during monsoon and post-monsoon periods, providing insights into earthquake mechanisms.

- Scientifically drilled boreholes allow direct in situ experiments and observations deep within the Earth's crust.
- These boreholes monitor fault lines, seismic behavior, and provide precise data on crust composition and structure.
- Scientific deep drilling supports validation of surface-based models and enhances understanding of geohazards and geo-resources.
- Investment in scientific deep drilling promotes technological innovation in seismology and related fields, including drilling tools, sensors, and data analysis techniques.
- Challenges include the high cost, technical complexity, and harsh conditions (heat, pressure) of drilling deep into the Earth's interior.
- Despite challenges, scientific deep drilling is essential for expanding earth-science research and understanding phenomena like earthquakes and climate interactions.

What is the drilling technique?

- The Koyna pilot borehole is approximately 0.45 meters wide at the surface and extends to a depth of around 3 kilometers.
- It employs a hybrid drilling strategy combining mud rotary drilling and air hammering techniques.
- In mud rotary drilling, a steel drilling rod with a diamond-embedded drill bit rotates and generates heat due to friction. Drilling mud is used to cool the bit, lubricate the drill, and bring rock cuttings to the surface.
- Air hammering involves pushing compressed air through the drilling rod to deepen the borehole and flush out cuttings.
- Operators choose between techniques based on factors like rock type, fractures, water zones, and sample collection needs.
- Downhole measurements include physical and chemical properties such as temperature, density, electrical conductivity, sonic velocity, porosity, and radioactivity.
- As the depth increases beyond 3 km towards the goal of 6 km, equipment and capacity must be upgraded significantly.
- Challenges include drilling through fractured rocks, potential equipment jams, and managing heavy granite core samples.
- Troubleshooting is complex due to limited access and the technical demands of deep drilling.
- Human resources are crucial, requiring skilled personnel for continuous on-site operations lasting 6-8 months for a 3 km borehole and longer for deeper drilling.

What have scientists found?

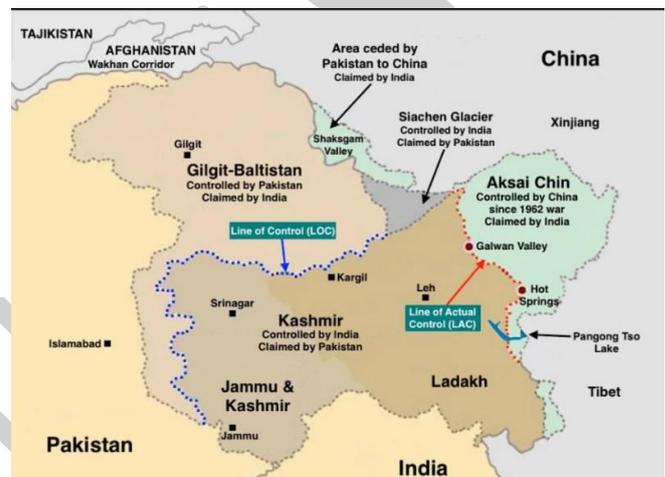
- The pilot drilling mission at Koyna was successful, revealing important geological insights.
- It discovered Deccan trap lava flows dating back 65 million years and granitic basement rocks from 2,500-2,700 million years ago.
- Downhole measurements provided new data on rock properties, chemical composition of fluids and gases, temperature, stress regimes, and fracture orientations.
- High-resolution images of the borehole wall were captured using acoustic and micro-resistivity techniques, validating data useful globally.
- Hydraulic fracturing experiments measured stress regimes in rocks, crucial for understanding recurring earthquakes.

- Water was found at 3 km depth, likely meteoric or rain-fed, indicating deep percolation and circulation.
- The Koyna region was identified as critically stressed, where minor stress changes could trigger small earthquakes.
- Future plans include drilling deeper to explore temperatures estimated at 110-130 degrees Celsius and designing appropriate equipment and sensors.
- Samples and data from Koyna are being used by over 20 research groups across India for various studies, including rock friction properties and microbial life in extreme environments.
- International geological researchers are also interested in Koyna samples for projects like carbon capture and storage, enhancing global scientific cooperation and knowledge.

2. Lakes/Reservoirs/Dams:

2.1. Pangong Tso

- It is a high-altitude lake located in the Ladakh region of India, stretching from India to western Tibet which is administered by China.
- **Pangong Lake Overview:**
- **Location:** Situated in Ladakh, Pangong Lake is the world's highest saltwater lake, located at an altitude of nearly 4,350m.
- **Geographical Distribution:** Extending over almost 160km, one-third of Pangong Lake is in India while the remaining two-thirds are in China.
- **Name Origin:** The name "Pangong Tso" is derived from Tibetan, meaning "high grassland lake".
- **Scenic Beauty:** Surrounded by arid mountains, the lake's blue-colored water contrasts vividly with its surroundings.
- **Color Variations:** Known for its changing hues, Pangong Lake can appear blue, green, and red at different times.
- **During winter:** The lake freezes completely, despite being saline water. It has a land-locked basin separated from the Indus River basin by a small elevated ridge, but is believed to have been part of the latter in prehistoric times.



2.2. The Lal Bahadur Shastri Reservoir:

- It is commonly known as the **Almatti Dam**, is a significant hydroelectric project situated on the **Krishna River in North Karnataka**.
- Completed in July 2005, it serves as the main reservoir for the Upper Krishna Irrigation Project.
- **Key Features**
- **River:** Krishna River
- **Location:** Almatti, Nidgundi, Bijapur district, Karnataka
- **Height:** 160 meters (originally), raised to 524 meters MSL
- **Length:** 1565.15 feet

- **Catchment Area:** 33,375 square kilometers
- **Storage Capacity:** 200 TMC (after raising the height)
- **Power Generation:** 290 MW (55 MW x 5 generators + 15 MW generator)
- **Annual Electric Output:** 560 MU (or GWh)
- **Operator:** Karnataka Power Corporation Limited



- **Purpose:**
 - The primary objectives of the Almatti Dam are:
 - **Irrigation:** To provide water for irrigation to drought-prone areas in Bagalkot, Kalaburagi, Yadgir, and Raichur districts of Karnataka.
 - **Hydroelectric Power Generation:** To produce electricity for the region.
 - **Significance:**
 - The Almatti Dam is crucial for the development of the region. It has transformed the lives of rural communities by providing irrigation facilities and generating electricity.
 - The reservoir also supports biodiversity and attracts migratory birds during the summer.
 - **Challenges:**
 - The construction of the Almatti Dam was a subject of inter-state disputes between Karnataka, Maharashtra, and Andhra Pradesh over water sharing.
 - The project faced delays and legal challenges due to these disputes.
- **Additional Information:**
 - The dam was named after former Prime Minister Lal Bahadur Shastri.
 - The reservoir is known for its scenic beauty and attracts tourists.
 - The backwaters of the dam host several migratory birds during summer.

2.3. Krishna Raja Sagara (KRS) Dam:

- Krishna Raja Sagara (KRS) is a lake and the dam that creates it.
- Located close to the **settlement of Krishna Raja Sagara in Karnataka, India.**
- The gravity dam is made of surki mortar.
- Situated below the **confluence of the river Kaveri with its tributaries Hemavati and Lakshmana Tirtha**, in the Mandya district.
- **Constructed by Krishna Raja Wadiyar IV, Maharaj of Mysore.**
- Built during a famine despite the critical financial condition of the State.

2.4. Polavaram Irrigation Project

The Polavaram Irrigation Project is a large multi-purpose project under construction on the Godavari River in Andhra Pradesh, India.

Aim:

- Provide irrigation water to around 23 lakh hectares (2.3 million hectares) of land in the Krishna and Godavari delta regions, aiming to improve agricultural productivity and drought-proofing.
- Generate hydroelectricity with a capacity of 960 MW, contributing to renewable energy production and meeting power needs.
- Regulate Godavari river flows for better flood management and reduce downstream flooding.

Benefits:

- **Irrigation:** The project aims to provide irrigation water to a vast area of agricultural land, potentially leading to increased agricultural production, improved food security, and higher income for farmers.
- **Hydropower:** The project will generate clean hydroelectric power, contributing to energy security and reducing reliance on fossil fuels.
- **Flood Control:** Improved management of Godavari river flows aims to mitigate the risk of floods and protect downstream areas from devastation.
- **Drinking Water Supply:** The project also plans to provide drinking water to urban and rural areas in the surrounding districts.
- **Socio-Economic Development:** The project is expected to create jobs during construction and operation, stimulate economic activity in the region, and improve the overall quality of life for affected communities.

3. Rivers:**3.1. Bagmati River:**

- The Bagmati river, which flows from the Himalayas in Nepal into Bihar, is currently experiencing high water levels.
- The Bagmati river flows through several districts in Bihar: Darbhanga, Sitamarhi, Sheohar, Muzaffarpur, and Khagaria, before joining the Kamala river in Samastipur.

New course

- The Bagmati river used to flow directly into the Ganga, but its new course is causing flooding issues.
- The most severe flooding from the Bagmati occurred in 1994, and the problem has continued to recur.
- The Bihar government is seeking a solution to this ongoing issue.
- Bihar is urging Nepal to build infrastructure to prevent annual flooding caused by cross-border river systems.
- Nepal, Bhutan, and Bangladesh share many cross-border rivers that impact states like Assam, Bihar, Uttar Pradesh, West Bengal, Meghalaya, and Tripura.

3.2. River Systems in India:



Classification of Indian River Systems:

- **Himalayan Rivers:** Originating from the Himalayas and flowing through the Northern Plains.
- **Peninsular Rivers:** Emerging mainly from the Western Ghats, flowing either eastwards into the Bay of Bengal or westwards into the Arabian Sea.

Major Himalayan River Systems:

- **Indus River System:**
 - Originates in Tibet near **Mansarovar Lake**.
 - Flows westwards through Jammu and Kashmir, Himachal Pradesh, Punjab, and enters Pakistan.
 - Tributaries: Zaskar, Nubra, Shyok, Hunza, Sutlej, Ravi, Beas, Chenab, Jhelum.
- **Ganga (Ganges) River System:**
 - Originates from the **Gangotri glaciers**.
 - Main source: **Bhagirathi, which joins Alaknanda at Devprayag to form the Ganga.**

- Tributaries: Yamuna, Son (right bank); Gomti, Ghaghara, Gandak, Kosi (left bank).
- Flows through Uttarakhand, Uttar Pradesh, Madhya Pradesh, Himachal Pradesh, Bihar, and West Bengal to the Bay of Bengal.
- **Yamuna River System:**
 - Originates from Yamunotri.
 - Flows through Uttarakhand, Uttar Pradesh, and Haryana; passes through Delhi, Mathura, and Agra.
 - Tributaries: Tons, Chambal, Hindon, Betwa, Ken.
 - Joins the Ganga at Allahabad.
- **Brahmaputra River System:**
 - Originates from the **Angsi glacier in Tibet (Tsangpo River), Mansarovar Lake**
 - Enters India in Arunachal Pradesh (Dihang River).
 - Flows through Assam, enters Bangladesh, and falls into the Bay of Bengal.
 - Tributaries: Dibang, Lohit, Kenula.

Major Peninsular River Systems:

- **Mahanadi:**
 - Originates in the Sihava mountains, Chhattisgarh.
 - Flows through Odisha, and cities like Sambalpur, Cuttack, and Banki.
- **Godavari:**
 - Originates at Triambakeshwar, Maharashtra.
 - Flows through Maharashtra, Chhattisgarh, Madhya Pradesh, Odisha, Telangana, Andhra Pradesh, Karnataka, and Puducherry.
 - Tributaries: Pravara, Indravati, Maner, Sabri.
 - Known as Dakshina Ganga.
- **Krishna:**
 - Originates from Mahabaleshwar, Maharashtra.
 - Flows through Karnataka, Telangana, Andhra Pradesh.
 - Tributaries: Ghataprabha, Malaprabha, Bhima, Tungabhadra.
- **Kaveri (Cauvery):**
 - Originates from Kogadu, Karnataka (Brahmagiri Hill).
 - Flows through Karnataka, Kerala, Tamil Nadu, and touches Puducherry.
 - Tributaries: Hemavati, Moyari, Shimsha, Arkavati, Honnuhole, Kabini, Bhavani, Noyill, Amaravati.
- **Narmada:**
 - Originates from Amarkantak, Madhya Pradesh.
 - Flows through Madhya Pradesh, Maharashtra, Gujarat, and empties into the Arabian Sea.
- **Tapti (Tapi):**
 - Flows parallel to the Narmada.
 - Originates in the Satpura range, flows through Maharashtra and Gujarat.
 - Tributaries: Purna, Girna, Panjhra.
 - Empties into the Gulf of Khambhat.

Polity

1. Fundamental Rights:

1.1. Right to Correct Information:

- The Union government defended the formation of a **fact-checking unit (FCU)** in the Bombay High Court.
- The government argued that the **right to know correct information** and not be misled is as important as the **right to freedom of speech under Article 19(1)(a)**.
- Stand-up artist Kunal Kamra, the Editors Guild of India, and the Association of Indian Magazines **challenged the constitutionality of the 2023 IT Amendment Rules**.
- These rules allow an FCU to identify and demand the removal of fake or misleading content related to the Central Government.
- Justice A.S. Chandurkar is hearing the case after a split verdict by a Division Bench.
- Solicitor-General Tushar Mehta argued the **FCU prevents misinformation** and is the least restrictive method to counteract false information.
- He stated that private companies also maintain fact-checking units, justifying the government's role in providing accurate information.
- Petitioners argued the **amendment allows the government to act as prosecutor, judge, and executioner, violating principles of natural justice** and creating a chilling effect on free speech.
- Mr. Mehta refuted the chilling effect argument, stating the FCU is a methodical way for the government to highlight falsehoods and the final arbiter is a court.



1.2. Reservation:

- The **Karnataka State Employment of Local Candidates Bill, 2024**, aims to provide reservation for **Kannadigas** in the private sector.
- The Bill has been put on hold due to backlash from business leaders and industry representatives.
- It was cleared by the Cabinet but not yet introduced in the Assembly.
- The government promised wider consultations with stakeholders before proceeding.
- The legality and constitutionality of such quotas are in doubt, as similar steps elsewhere faced legal challenges.
- The Bill proposes that factories, industries, or establishments must appoint local candidates **to 50% of managerial roles and 70% of non-managerial roles**.
- A **'local candidate'** is defined as someone born in Karnataka, domiciled for at least 15 years, and who can read, write, and speak Kannada.
- Candidates without a secondary school certificate with Kannada must pass a Kannada proficiency test.

- If qualified candidates are unavailable, establishments have three years to train local candidates.
- Establishments can apply for relaxation of norms, but not less than 25% for managerial roles and 50% for non-managerial roles.
- Industry opposition includes concerns that the Bill would drive companies out of the State and impact foreign investment.
- **NASSCOM stated the Bill would hamper industry growth**, affect jobs, and harm Karnataka's global technology brand.
- Many industry representatives view the Bill as regressive and short-sighted.

What about Similar laws in other States?

- **Andhra Pradesh, Haryana, and Jharkhand** have proposed laws to reserve jobs for local residents.
- **Andhra Pradesh's 2019 Act** aimed for 75% reservation for locals in industries and projects, with a three-year period for training if suitable candidates weren't available. The Act is currently challenged in the Andhra Pradesh High Court and is not being strongly implemented.
- **Haryana's 2020 Act**, which provided 75% reservation for jobs paying up to ₹30,000 per month in the private sector, was struck down by the Punjab and Haryana High Court. The matter is now before the Supreme Court. The court found the Act violated fundamental rights and was beyond the State Assembly's authority, creating "artificial walls."
- **Jharkhand's 2022 Bill aimed for 100% reservation for locals** in Class III and IV jobs but was returned by the Governor due to potential unconstitutionality. The Bill was re-enacted in December 2023 despite the Governor's concerns.

What are the Constitutional Issues that Arise?

- Issues with reserving private sector jobs for locals arise from:
 - No constitutional provision for private sector job reservation.
 - State Assemblies lacking authority to set residential criteria for employment.
 - Constitutional guarantees of freedom from discrimination based on place of birth or residence.
 - Fundamental right to practice any profession or carry out any occupation, trade, or business.
- **Article 16** ensures equality of opportunity in public employment and prohibits discrimination based on race, religion, caste, sex, descent, place of birth, or residence.
- **Article 16(3)** allows Parliament to make laws requiring residence within a State or Union Territory for public office appointments. Only Parliament can enact such laws, not State legislatures (**Article 35(a)**).
- Local quotas may affect the freedom of movement of citizens (**Article 19(1)(d)**) and their right to reside and settle in any State (**Article 19(1)(e)**).
- Restrictions on hiring choices may infringe on the right to carry on any occupation, trade, or business (**Article 19(1)(g)**).

1.3. The problems with sub-caste reservations:

- The Supreme Court is considering sub-caste reservations for SC/STs.
- Decisions need legal and academic justification.
- The academic basis for sub-caste reservation is weak.

- The government uses three policy instruments:
 - Legal safeguards against caste discrimination.
 - Reservation in legislature, public jobs, and education.
 - Measures to improve ownership of capital assets like land, businesses, and education.
- Dr. B. R. Ambedkar justified these measures due to the denial of equal rights, employment, and education to untouchables.
- These measures address the isolation and suffering of untouchables as a whole, not specific sub-castes.
- Legal safeguards, reservation, and economic/education empowerment are complementary, not substitutes.
- Legal safeguards alone are insufficient for fair share in legislature, jobs, and education.
- Reservation supplements legal measures to ensure fairness in the present.
- Legal safeguards and reservations do not address past denials of property, employment, and education.
- Improving ownership of capital assets complements the reservation policy to enhance capabilities of untouchable youth.
- Reservations in legislature, public jobs, and education are needed for untouchables as a whole with a social group focus.
- Economic empowerment policies should focus on untouchable individuals lacking income-earning capital assets and education.
- Any decision on sub-caste reservation must consider these propositions.
- Supporters argue that some sub-castes benefit more than others, so lagging sub-castes should have separate quotas.
- Low share in jobs may not be due to discrimination by other sub-castes, but due to low education and lack of capital assets.
- Improving job and education share should focus on enhancing capital assets and education for those SC individuals who lack them.
- Without improving capital ownership and education, sub-caste reservations may not help as the better-off will continue to have an edge.
- Economic and educational empowerment, as suggested by Ambedkar, is a better alternative than sub-caste reservations with low capital ownership and education.
- Legal solutions for discriminated groups must consider economic and social realities.
- The extent of under-representation of some SC sub-castes in jobs needs to be understood.
- If under-representation is due to discrimination by other sub-castes, sub-caste reservations might be justified.
- However, under-representation is more likely due to low income and education, not discrimination.
- An individual-focused policy to improve income and education is better for enabling effective use of job reservations.
- Legal authorities should base decisions on academic justification and factual data about sub-castes.
- Without this, sub-caste reservations may not effectively address the problem and could lead to widespread demands.
- Such a scenario could mirror the complexity of caste society with numerous sub-castes under SC/ST/OBC categories.

1.4. Spiritual Orientation, Religious Practices and Courts:

- Chief Justice Latham of Australia remarked that what is religion to one is superstition to another in the 1943 case *Adelaide Company of Jehovah's Witnesses Inc vs Commonwealth*.
- Religion has been central to human society, with a rise in religiosity and a decline in spirituality.
- In the controversial 2024 case *P. Navin Kumar*, Justice G.R. Swaminathan of the Madras High Court allowed the religious practice of *angapradakshinam*, involving rolling over banana leaves with leftover food.
- This order overruled Justice S. Manikumar's 2015 order, which had prohibited the practice due to allegations of caste discrimination involving Dalits and non-Brahmins.
- Justice Manikumar had based his decision on a Supreme Court order that stayed a similar 500-year-old ritual involving Dalits in Karnataka.
- Justice Swaminathan noted that temple trustees were not heard in the 2015 case, and since people from all castes participated, there was no caste discrimination.

Revival of a debate

- The order has sparked debate on defining religion, determining essential religious practices, and judicial consistency in such determinations.
- Justice Swaminathan cited important Supreme Court judgments to support that *P. Navin Kumar's* practice of *angapradakshinam* is protected under **Article 25 (freedom of religion)**, **Article 21 (right to privacy)**, and **Article 19(1)(d) (freedom of movement)**.
- Justice Swaminathan recognized *angapradakshinam* as an established religious practice without strict evidence examination, unlike similar cases.
- He did not question whether it is an essential and integral part of Hinduism or merely a superstitious practice.
- The practice was described as noble in the *Krishna Yajur Veda* and *Bhavishyapurana*, but not all noble acts are mandatory religious practices.

The subject of Essential Practices

- The Indian Constitution prioritizes other fundamental rights over freedom of religion, subjecting it to public order, health, and morality, and allowing the state to enact social reforms.
- Courts have limited religious freedom to essential religious practices, accepting such pleas in only 7 out of 47 cases.
- Justice Swaminathan's decision allowing *angapradakshinam* needs critical evaluation, particularly regarding potential health hazards and the applicability of the right to privacy in a public event.
- Justice Swaminathan argued that privacy is not lost in public and linked spiritual orientation to privacy rights.
- In ***Sri Shirur Mutt (1954)***, the Supreme Court ruled that **Article 25** protects religious beliefs and their outward expression, and essential parts of religion should be determined by the religion's doctrines.
- Over time, the Court became inconsistent in defining essential religious practices, introducing its own rationality, as seen in ***The Durgah Committee, Ajmer (1961)*** case, which limited protection to essential practices and excluded superstitious beliefs.
- The question arises why *angapradakshinam* was not evaluated against these criteria.

- In **Gramsabha of Village Battis Shirala (2014)**, the court ruled that capturing and worshipping a live cobra during Nagpanchami was not an essential religious practice because it was not mentioned in the general Dharmashastra text.
- In **Mohammed Fasi (1985)**, the Kerala High Court rejected a Muslim policeman's plea to grow a beard, focusing on empirical evidence rather than religious texts, and noting that it was a noble act but not mandatory in Islam.
- In **Acharya Jagdishwarananda Avadhuta (2004)**, the Supreme Court overruled the Calcutta High Court, stating that the tandava dance was not essential to the Ananda Margi faith since the practice was adopted after the religion's founding.
- The court's logic in Acharya Jagdishwarananda Avadhuta implies that religious practices must have existed when the religion was founded, which would freeze religious practices in time.
- In **M. Ismail Faruqui (1995)**, the Supreme Court held that offering prayers is essential in Islam, but offering them in a mosque is not, unless the mosque has particular religious significance, despite the centrality of congregational prayer in Islam.

The Constitution is supreme

- In a progressive nation like India, even essential religious practices should not be allowed if they contradict constitutional values.
- The Constitution of India, not religions, should govern the country.
- Only religious freedom permitted by the Constitution should be granted.

2. Constitutional/Statutory/Non-Constitutional Bodies:

2.1. Finance Commission:

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

How do other countries devolve funds to their local governments? Why is the Census significant?

GS Paper II: Constitutional Body

The story so far: 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. 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.

What about cities? 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

GS Paper III: Taxation

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.

Despite the efforts of five commissions since the 11th Finance Commission, financial devolution to cities remain inadequate. The fiscal health of municipalities is poor, affecting both city productivity and quality of life. Rapid urbanisation without appropriate fiscal action has adverse effects on development. Intergovernmental transfers (IGTs) to Urban Local Bodies (ULBs) in India are about 0.5% of GDP, much lower than the 2-5% typical of other developing nations. For instance, South Africa allocates 2.6%, Mexico 1.6%, the Philippines 2.5%, and Brazil 5.1% of their GDPs to their cities. Although IGTs make up about 40% of ULBs' total revenue, issues persist regarding their predictability, earmarking for vulnerable groups, and horizontal equity. IGTs are

crucial for ULBs, given their financial state and the need for stable support until their own revenues improve.

What about the taxation system?

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.

How important is the Census?

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.

Author is former Deputy Mayor, Shimla, and Member, Kerala Urban Commission.

THE GIST

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The 16th FC must consider India's urbanisation dynamism and ensure IGTs to urban areas are at least doubled.

Finance Commission outlined in Article 280 of the Constitution of India:

Composition

- **Appointment:** The Finance Commission is constituted by the President of India every five years or earlier as deemed necessary.
- **Members:** It consists of a **Chairman and four other members** appointed by the President. They serve for a term specified by the President and may be eligible for reappointment.

- **Qualifications and Selection:** Parliament determines the qualifications of Commission members and the selection process. The Chairman is typically someone with experience in public affairs, while the other members are chosen from individuals with expertise in:
 - Judiciary (High Court judge or qualified to be one)
 - Finance and government accounts
 - Financial administration
 - Economics

Functions

- **Distribution of Tax Proceeds:** Recommending the division of net tax proceeds between the Union Government and State Governments. It also advises on the allocation of these shares among the states.
- **Grants-in-Aid:** Determining the principles governing grants-in-aid to states from the Consolidated Fund of India under Article 275 of the Constitution. These grants are aimed at supporting state finances.
- **Local Bodies' Resources:** Advising on measures to augment the Consolidated Fund of a state to enhance the resources of Panchayats and municipalities within the state. This is based on recommendations from State Finance Commissions.
- **Other Matters:** Addressing any additional issues referred by the President that are crucial for maintaining sound financial management and stability.

15th FC's nine Guiding Principles:

- **Equity:** Ensuring fairness and equity in the distribution of financial resources among states, taking into account their respective needs and capabilities.
- **Efficiency:** Promoting efficient use of resources by encouraging fiscal discipline, rationalization of expenditures, and effective governance practices.
- **Balance:** Striking a balance between the requirements of national development and the needs of individual states, with due consideration to regional disparities.
- **Sustainability:** Ensuring sustainability of public finances and fiscal stability, both at the Union and State levels, to promote long-term economic growth and stability.
- **Inter-State and Intra-State Equity:** Addressing disparities not only between states but also within states, particularly focusing on equitable development across regions and communities.
- **Core Commitments and Fiscal Federalism:** Upholding the principles of fiscal federalism and respecting the autonomy of states while ensuring compliance with core national objectives.
- **Accountability and Transparency:** Promoting accountability and transparency in financial transfers, allocation of resources, and utilization of funds by states and local bodies.
- **Incentivizing Reforms:** Providing incentives to states for implementing reforms in areas such as public finance management, revenue mobilization, and governance.
- **Inclusivity:** Ensuring that the allocation of resources and financial transfers benefit all segments of society, including marginalized and disadvantaged groups.

2.2. The Attorney-General for India (Article 76):

- The Attorney-General for India is a person who is **appointed by the President** of India.

- To qualify for this position, the person must be **eligible to be appointed as a judge of the Supreme Court of India**, which means they must have extensive legal knowledge and experience.

Duties and Responsibilities:

- The main duty of the Attorney-General is to **provide legal advice to the Government of India** on various matters.
- They also perform other legal tasks that are assigned to them by the President.
- Additionally, they carry out specific functions given to them by the Constitution of India or any other laws in force at that time.

Authority in Courts:

- The Attorney-General **has the right to represent the Government of India in all courts** across the country. This means they can argue legal cases on behalf of the government in any court in India.

Tenure and Remuneration:

- The Attorney-General serves in their position **at the pleasure of the President**, which means they can be removed from office at the President's discretion.
- They receive **compensation for their services as determined by the President**.

2.3. Union Public Service Commission (UPSC):

- Independent constitutional body, powers defined in **Articles 315-323**.
- Responsible for recruitment to All India Services, Central Services - Group A & B.
- Advises government on promotion and disciplinary matters.
- **Composition and Appointment:**
- Consists of a Chairman and other members appointed by the President of India.
- Commission's strength (**9-11 members including the Chairman**) determined by the President.
- No specific qualifications required, except half the members must have served at least 10 years in central or state government.
- President determines the conditions of service for the Chairman and members.
- Term of office: 6 years or until 65 years of age, whichever is earlier

3. Federal Structure:**3.1. States have unlimited right to tax mineral-rich lands:**

- A nine-judge Constitution Bench, led by Chief Justice D.Y. Chandrachud, ruled that Parliament cannot limit State legislatures' power to tax mineral-bearing lands and quarries.
- This judgment supports federalism and states' ability to raise revenues for welfare and development.
- The court found that the Mines and Minerals (Development and Regulation) Act of 1957 does not restrict states from legislating on mining land taxation.
- The court clarified that royalty paid by mining lease holders is not a tax but a contractual payment for mineral rights.
- The decision came from appeals involving various State governments and companies, stemming from a dispute between India Cements Ltd. and Tamil Nadu.
- Chief Justice Chandrachud stated that State legislatures' power to tax is based on Article 246 and Entry 49 of the State List in the Constitution.

- Justice B.V. Nagarathna dissented, arguing that the power to tax under Entry 49 did not include mineral-bearing lands but agreed that royalty is not a tax.
- The Centre argued that Entry 50 in the State List allowed Parliament to impose limitations on taxes related to mineral rights through laws like the MMDR Act.
- Chief Justice Chandrachud responded that Entries 50 and 49 of the State List address different subjects and operate in separate areas.
- The MMDR Act, related to mineral development, does not affect State taxation of mining lands under Entry 49, as there is no constitutional provision allowing such influence.
- Entry 50 does not create an exception; the power to tax mineral rights belongs to State Legislatures, while Parliament's power is limited to regulating development under Entry 54 of the Union List.
- Chief Justice Chandrachud emphasized that Parliament cannot use its residual powers to tax mineral rights, as this power is specifically outlined in List II for States.
- Justice Nagarathna agreed that the MMDR Act, particularly its provision allowing the Centre to control mineral regulation, limited States' right to tax.

Mines and Minerals (Development and Regulation) Act of 1957 (MMDR Act)

The Mines and Minerals (Development and Regulation) Act of 1957 (MMDR Act) is a comprehensive legislation enacted by the Indian Parliament to regulate the mining sector in India. This act provides the framework for the regulation of mining activities, ensuring the development of minerals in an orderly manner while addressing environmental and social concerns.

MMDR Act, 1957:

- **Objective:**
 - To regulate the mining sector in India.
 - To ensure systematic and scientific development of mineral resources.
- **Grant of Mining Leases:**
 - The act lays down the procedures for the grant of reconnaissance permits, prospecting licenses, and mining leases for minerals.
 - It stipulates the eligibility criteria and conditions for obtaining these permits and licenses.
- **Role of Central and State Governments:**
 - The Central Government is responsible for framing policies and issuing guidelines for mineral development.
 - State Governments are primarily responsible for the administration of mineral resources within their territories, including granting leases and licenses.
- **Royalty and Taxes:**
 - The act provides for the imposition of royalties and taxes on minerals extracted from mines.
 - It prescribes the rates of royalties and the manner of their collection.
- **Regulation of Minor Minerals:**
 - Minor minerals, such as building stones, gravel, ordinary clay, etc., are regulated by State Governments.
 - The act provides flexibility to State Governments to frame their rules for minor minerals.
- **Environmental and Social Concerns:**
 - The act mandates measures to protect the environment during mining activities.

- It requires mining companies to implement rehabilitation and resettlement plans for displaced communities.
 - **Penalties and Offences:**
 - The act prescribes penalties for illegal mining activities and violations of its provisions.
 - It provides for the seizure and confiscation of illegally mined minerals.
 - **Amendments and Revisions:**
 - The act has been amended multiple times to address emerging challenges and improve the regulatory framework.
 - Significant amendments include the introduction of auction-based allocation of mineral resources and provisions for a sustainable mining environment.
- Recent Amendments and Changes:**
1. **MMDR Amendment Act, 2015:**
 - Introduced auction-based allocation of mining leases to bring transparency and increase revenue.
 - Established the District Mineral Foundation (DMF) to address the impact of mining on local communities.
 2. **MMDR Amendment Act, 2021:**
 - Allowed private players to explore and mine certain minerals.
 - Simplified the process for mineral concession transfers.

3.2. Union Government Financial Transfer to States:

- Since 2015-16, the Union government has reduced financial transfers to States despite recommendations from the Fourteenth Finance Commission to increase the share of Union tax revenues to States to 42%.
- The Fifteenth Finance Commission continued with a recommendation of 41% (or 42% including Jammu and Kashmir and Ladakh as Union Territories).
- Grants-in-aid to States decreased from ₹1.95 lakh crore in 2015-16 to ₹1.65 lakh crore in 2023-24.
- Gross tax revenue of the Union government more than doubled from ₹14.6 lakh crore to ₹33.6 lakh crore between 2015-16 and 2023-24.
- States' share in Union tax revenue also doubled but at a slower rate, increasing from ₹5.1 lakh crore to ₹10.2 lakh crore over the same period.
- The share of States in gross tax revenue declined from 48.2% to 35.32% due to deductions such as revenue from cess and surcharges.
- Revenue collection through cess and surcharge increased significantly, rising from 5.9% (₹85,638 crore) in 2015-16 to 10.8% (₹3.63 lakh crore) in 2023-24.
- These funds collected via cess and surcharge are utilized by the Union government for specific sectoral schemes, without being shared with the States.
- This reduction in financial transfers and increase in cess and surcharge collections affect States' financial autonomy and their ability to fund state-specific developmental projects.

More centralisation of public expenditure

- Reduced financial transfers or inadequate increases to States from Union tax revenues lead to larger discretionary funds for the Union government.
- Centrally Sponsored Schemes (CSS) and Central Sector Schemes (CSEC Schemes) are direct financial transfers from the Union to States.
- CSS involve partial funding by the Union government, with States committing their own financial resources.

- Between 2015-16 and 2023-24, CSS allocation increased from ₹2.04 lakh crore to ₹4.76 lakh crore, comprising 59 schemes.
- States must commit matching finances to avail of CSS grants, affecting inter-state equity in financial resources.
- Wealthier States can afford these commitments independently, while less wealthy States may increase liabilities by borrowing.
- CSec Schemes are fully funded by the Union government and increased from ₹5.21 lakh crore in 2015-16 to ₹14.68 lakh crore in 2023-24 for over 700 schemes.
- These schemes are implemented directly by the Union government, with only ₹60,942 crore devolved to States in 2023-24.
- Combined allocation for CSS and CSec Schemes in 2023-24 was ₹19.4 lakh crore, with only ₹4.25 lakh crore devolved to States, potentially skewing resource allocation towards specific states or constituencies.

Scope for anti-federal fiscal policies

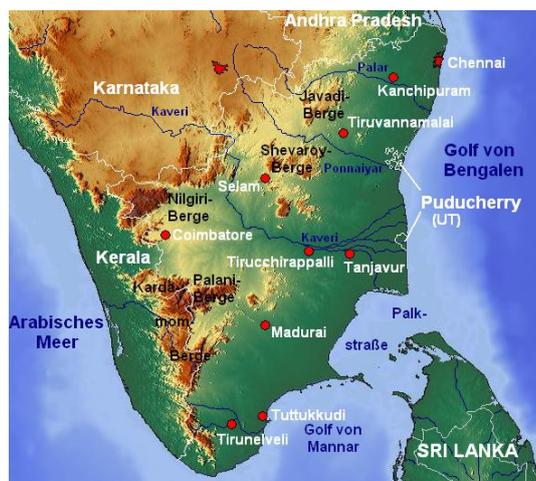
- CSS and CSec Schemes are non-statutory transfers not mandated by legal provisions or Finance Commission formulas.
- These schemes constitute 12.6% of gross tax revenue and are tied grants, meaning they must be spent on specific allocated schemes.
- In 2023-24, total financial transfers, including statutory and non-statutory grants, amounted to 47.9% of gross tax revenue.
- Non-statutory grants restrict States' flexibility in public expenditure decisions.
- The Union government retains over 50% of gross tax revenue and incurs a fiscal deficit of 5.9% of GDP, concentrating significant financial power.
- The Fifteenth Finance Commission retained States' share in Union tax revenue at 41%, despite earlier recommendations for 42%.
- The Union government's arguments for reducing States' share may continue in future finance commission discussions, impacting cooperative federalism concerns.

3.3. Kaveri River Water Dispute

The Kaveri River water dispute is a long-standing conflict between the Indian states of Karnataka and Tamil Nadu, along with Kerala and Puducherry, over the sharing of the waters of the Kaveri River. The river, which originates in Karnataka and flows through Tamil Nadu, has been the subject of contention due to the varying needs and demands of these states for irrigation and drinking water.

The key events and aspects of the dispute:

1. **Origins and Early Disputes:** The conflict dates back to agreements made during the British colonial period in 1892 and 1924, which allocated water between the states. These agreements were perceived as unfair by Karnataka after its reorganization in 1956.
2. **Post-Independence Developments:** After independence, disputes arose with Karnataka arguing for a larger share of water to support its agricultural expansion. Tamil Nadu, with



established agriculture relying heavily on the Kaveri, resisted changes to the existing allocations.

3. **Tribunal and Interim Orders:** In 1990, the Government of India constituted the Cauvery Water Disputes Tribunal to adjudicate the dispute. The tribunal issued an interim order in 1991 mandating Karnataka to release a specific quantity of water to Tamil Nadu, leading to significant protests in Karnataka.
4. **Final Award:** The tribunal's final award came in 2007, which allocated specific shares of water to each state. Karnataka and Tamil Nadu both filed review petitions, leading to further legal battles.
5. **Supreme Court Intervention:** The Supreme Court of India delivered a verdict in 2018, slightly modifying the tribunal's award and increasing Karnataka's share while reducing Tamil Nadu's share. The court also directed the central government to form the Cauvery.

3.4. Maharashtra Security Bill:

What are its key provisions?

- The Maharashtra Special Public Security (MSPS) Act allows the state to designate suspected organizations as 'unlawful' and specifies four offenses.
- Offenses under the MSPS Act include membership in an unlawful organization, raising funds for such organizations, managing or assisting in their management, and committing or planning unlawful activities.
- Penalties under the MSPS Act range from two to seven years of imprisonment and fines ranging from ₹2 lakh to ₹5 lakh.
- Former Chief Minister Prithviraj Chavan criticized the MSPS Act as 'draconian,' arguing that existing laws are adequate to handle Naxalism.
- Chavan accused the government of introducing the bill hastily in response to pressure from the central government, describing it as an attempt to suppress protests.
- He noted that the MSPS Act would lapse with the dissolution of the Assembly and stated that if the Maha Vikas Aghadi (MVA) returns to power, they would not reintroduce the legislation.

What does Maharashtra's Public Security Bill stipulate?

What are the concerns? Which other States have enacted laws to curb Naxalism in urban areas?

[GS Paper II: Polity](#)

Abhinav Deshpande

The story so far:

On July 11, the Bharatiya Janata Party (BJP)-led MahaYuti government tabled the Maharashtra Special Public Security (MSPS) Act, 2024, aimed at curbing the 'menace of Naxalism' in urban areas. The provisions of the proposed Bill, which allows the State to declare any organisation as 'unlawful' with offences categorised as cognisable and non-bailable, has raised concerns and is being dubbed the 'urban naxal' law. The Maoist-hit States of Andhra Pradesh, Telangana, Chhattisgarh and Odisha have already implemented Public Security Acts to prevent unlawful activities.

Why was the Bill proposed?

According to Deputy Chief Minister Devendra Fadnavis, who tabled the Bill in the State Assembly, Naxalism is not limited to rural areas, but is increasing in urban areas through frontal

organisations. These active frontal organisations of Naxal groups give constant and effective support in terms of logistics and safe refuge to its armed cadre, he said. Citing 'safe houses and urban dens of the Maoist network in the cities of Maharashtra,' the senior BJP leader said such unlawful groups 'propagate their ideology of armed rebellion against the constitutional mandate and disrupt public order in the State. He further stated that unlawful activities of such frontal organisations need to be controlled through effective legal means and that existing laws are ineffective to tackle the issue.

"In the absence of a similar law - which is in force in AP, Telangana, Chhattisgarh and Odisha - such organisations are active in Maharashtra. Therefore, the government considers it expedient to enact a special law for more effective prevention of unlawful activities," said Mr. Fadnavis, who is also the guardian minister of the Naxal-affected Gadchiroli bordering Chhattisgarh and Telangana.

How different is it from the UAPA?

The Unlawful Activities (Prevention) Act, 1967 (UAPA) is invoked in cases related to Naxalism and terrorism. This law empowers the state to classify organisations as 'unlawful associations.' Both the laws are almost the same. However, in the MSPS Act, an advisory board of three persons who are or have been qualified to be appointed as judges of the High Court shall oversee the confirmation process, while under UAPA, a tribunal led by a High Court judge verifies the State's declaration.

In addition to the UAPA, the State also enforces the Maharashtra Control of Organised Crime Act, 1999 (MCOCA) to address perceived extreme situations involving individuals labelled as 'urban Naxals'. If the proposed legislation is passed, it would allow the State police and security agencies to arrest individuals without a warrant and often without informing them of the charges. All offences under this Act would be cognisable and non-bailable.

What are its key provisions?

The MSPS Act empowers the State to designate any suspected 'organisation' as an 'unlawful organisation' and outlines four offences for which a person may be penalised - (i) being a member of an unlawful organisation, (ii) being a member and raises funds for an unlawful organisation or harbours any member of the unlawful organisation, (iii) whoever manages or assists in the management of an unlawful organisation, or promotes or assists in promoting a meeting, and (iv) whoever commits or abets or attempts to commit or plans to commit any unlawful activity. These offences carry sentences ranging from two to seven years, along with fines between ₹2 lakh and ₹5 lakh.

What is the stance of the Opposition?

Former Chief Minister Prithviraj Chavan has criticised the measure as 'draconian,' arguing that existing laws are sufficient to address the Naxal issue. "By introducing the bill in the Assembly first instead of the Council, the government clearly shows a lack of interest, while Delhi (Union government) is pressuring them to act. This is simply an attempt to suppress protests... We already have laws with the necessary provisions; why introduce another? This is a 'draconian' measure, and we strongly oppose it," he stated. Mr. Chavan also noted that the Bill would automatically lapse with the dissolution of the Assembly, asserting that if the Maha Vikas Aghadi (MVA) returns to power, it would not reintroduce the Bill.

THE GIST

On July 11, the Bharatiya Janata Party (BJP)-led MahaYuti government tabled the Maharashtra Special Public Security (MSPS) Act, 2024, aimed at curbing the 'menace of Naxalism' in urban areas.

According to Deputy Chief Minister Devendra Fadnavis, Naxalism is not limited to rural areas, but is increasing in urban areas through frontal organisations. These active frontal organisations of Naxal groups give constant and effective support in terms of logistics and safe refuge to its armed cadre, he said.

Former Chief Minister Prithviraj Chavan has criticised the measure as 'draconian,' arguing that existing laws are sufficient to address the issue.

3.5. Enemy Property:

When a home is 'enemy property'

The Indian government has begun to auction properties belonging to erstwhile citizens of the country who now hold Pakistani and Chinese passports. Uttar Pradesh has the maximum number of estates classified as 'enemy properties'. **Mayank Kumar** explores the Lucknow cityscape to understand the real estate challenges.

Faisal Azim Abbasi, 48, is worried for himself and his joint family of eight. He has been getting notices to sign an 11-month license agreement with the Custodian of Enemy Property for India (CEPI), a department under the Ministry of Home Affairs, formed after the Indo-Pak war of 1965 and the two Indo-China wars in 1962 and 1967.

Abbasi has known no other home other than the single-storey, 800-square-foot space in Lucknow's Maulviyanj. The house, popularly known as Zareef Manzil or Lal Kothi, has been inhabited by his family for four generations.

"My grandfather took the property on rent from the Raja of Mahmudabad in the late 1930s," says Abbasi. They paid 16 and 8 annas (50 paise). In 1957, the erstwhile raja moved to Pakistan and took citizenship there.

Abbasi is among hundreds of residents across India who occupy 'Enemy Properties', declared thus after the Enemy Property Act, 1968, came into being. The Act enabled the state to regulate and appropriate real estate belonging to those who had left India and got citizenship of countries it has gone to war with: Pakistan and China.

Now, the Union government has begun to auction many of the 12,611 properties across the country, out of which 126 belong to Chinese citizens. Uttar Pradesh has the maximum number, at 6,041, followed by West Bengal at 4,354. Lucknow itself has 361 such properties, with 105 occupied, the highest in U.P. and all in disrepair. Shami district has 482, Sitapur 378, Muzaffarnagar has 274, and Budaan 250, besides the others.

These 'enemy properties' could be "any property that belongs to, is held or managed on behalf of an enemy, an enemy subject, or an enemy firm". The word "enemy" signifies any country that has committed an act of aggression or declared war against the Union of India, and "property" is immovable assets and all negotiable instruments such as shares, debentures, and other commerce.

Family dynamics

Abbasi's grandfather, Matloob Alam, signed the original lease and the family was told on September 24, 1966, via a letter from the then Sub-Divisional Magistrate (SDM), Lucknow, S.S. Nigam that the building they lived in had become 'enemy property', and was owned by the state. "I, SDO Lucknow hereby direct Shri Matloob Alam, the occupant of the property, to pay monthly rent, dues etc. to Tehsilidar Lucknow with immediate effect," the letter had said.



The proposed arrangement is only for 11 months, and it adds that on the expiry of this period or an earlier termination, the licensee shall hand over the property to the licensor, which is CEPI. It is frightening.

MOHAMMAD HAIDER RIZVI
Lawyer, who is fighting the legal battle of tenants occupying 'enemy properties'

Thereafter, the rent was paid to the CEPI. The amount was increased to ₹22.28 in 1972 and further increased to ₹312 in April 2013.

However, Abbasi claims that the rent has not been collected by the CEPI since December 2016. "Where will we go from here? If they sell it to us at a reasonable rate, we will take it," he says. He considers ₹50 lakh a reasonable sum to buy five times what he is paying on rent if the lease is renewed.

Over the years, the Enemy Property Act has seen several amendments, with the most significant and recent being The Enemy Property (Amendment and Validation) Act, 2017. It expanded the meaning of the term "enemy subject", and "enemy firm" to include the legal heir and successor of an "enemy", whether a citizen of India or a citizen of a country which is not an enemy, and the succeeding firm of an "enemy firm", irrespective of the nationality of its members. The Act also made it clear that once a property is declared 'enemy property', it remains so. The amendment nullified a Supreme Court judgment which ruled in favour of Mohammed Amir Mohammad Khan, son of the erstwhile Raja of Mahmudabad.

Though the erstwhile Raja of Mahmudabad took Pakistani citizenship, Amir stayed behind as an Indian citizen, and asserted claims over various properties that were originally in his family's name. After a prolonged legal struggle of over three decades, the Supreme Court ruled in his favour in 2005, declaring him the rightful owner, even though they have been declared 'enemy properties'. Amir was a two-time MLA in the Uttar Pradesh State Assembly in the 1980s from the Congress party and died in October 2023 at the age of 80.

The most well-known among these properties is the three-storied Butler Palace, built on the banks of the Gomti river in the 1910s. The palace was originally constructed in a mix of Indo-Mughal and Rajasthani styles as the official residence of the commissioner of Avadh, Harcourt Butler, in Lucknow. It has remained empty since the 1960s, and has been branded 'haunted', by the Lucknowis—either by ghosts of the past or ad-dicts of the present.

It is now missing its best brass bit and anything of value. Sometime in September-October 2023, the Lucknow Development Authority (LDA) began refurbishing it as a tourist attraction



Halwasia Market, situated in the older part of Lucknow, Hazratganj. SANDHEEP SAXENA

after receiving a no-objection certificate from the CEPI.

Another prime property is Halwasia market in Lucknow's Hazratganj, the older part of the city, where real estate prices start at approximately ₹15,000 per square foot, if the buyer is lucky enough to get a place.

Sued from many sides

Like Abbasi, many shopkeepers received notices for a fresh lease and licence agreement for the 'enemy property' they were occupying, but no one has signed one with CEPI until now. The occupants proposed a long-term lease for at least a decade, which was not accepted by CEPI.

Ali Khan Mahmudabad, the next in line from the family, is still fighting for various properties in the Supreme Court. He declined to comment on the matter since it is sub-judice. Niraj Gupta, who has been his lawyer since 2003, says, "The Supreme Court has maintained the status quo relating to our petition challenging the Act and its amendment provisions. The government cannot sell, auction, or create third-party rights on our properties." Ali is an associate professor in a private university and a member of the Samajwadi Party.

Mohammad Haider Rizvi, a Lucknow-based lawyer who is fighting the legal battle of tenants occupying enemy properties, says many of his clients have been living as tenants for 70-80 years. They are all nervous after receiving renewed agreements.

"Now, the proposed arrangement is only for 11 months, and it adds that on the expiry of this period or an earlier termination, the licensee shall hand over the property to the licensor, which is



Where will we go from here? If they sell it to us at a reasonable rate, we will take it.

FAISAL AZIM ABBASI
A resident of an 'enemy property'

CEPI. It is frightening," he says.

In 2020, the Union government set up a Group of Ministers led by Home Minister Amit Shah to monitor the disposal of 'enemy properties'.

The value of the earlier 9,000 surveyed 'enemy properties' across the country was estimated to be ₹1 lakh crore. Later, over 3,000 such properties were identified, taking the numbers above 12,000.

The guidelines for the disposal of enemy properties stipulate that if the property is valued below ₹1 crore, the custodian must offer the occupant the choice of purchase. If they refuse, the property will be e-auctioned.

Those valued at over ₹1 crore but less than ₹100 crore will be disposed of by the CEPI through e-auction or through a rate determined by the Enemy Property Disposal Committee, unless the Central government chooses to retain it. All auctions take place through the Metal Scrap Trade Corporation Limited, a Central public sector undertaking. In 2023, the Central government earned over ₹3,400 crore from the disposal of movable 'enemy properties', like shares and gold.

In U.P., 79 enemy properties identified as agricultural land, each valuing less than ₹1 crore were auctioned across Muzaffarnagar, Sultanpur, and Amroha districts till March 2024.

"A person interested in buying these properties can visit the site and talk to the local *tehsildar* to check documents before going ahead with the e-auction," says Kamlesh Verma, a Home Ministry official who is the supervisor for such properties in Sonbhadra district.

Before the process of the disposing of such properties began, the U.P. government, on the directions of the Home Ministry, conducted surveys of the properties to free them of legal hindrances and set their value, so they could be auctioned off. Roughly half of such properties are without any legal hindrance.

"Our role was to help in surveying the properties and send notices to encroachers. The rest is done by the CEPI," says Saurav Singh, Sub-Divisional Magistrate (SDM), Mallhabad, Lucknow.

3.6. The problem of Special Packages

- Coalition politics has returned significantly at the Union level.
- The BJP relies on Janata Dal (United) from Bihar and Telugu Desam Party from Andhra Pradesh for its parliamentary majority.
- This contrasts with 2014 and 2019 when single-party governments were in power.
- With single-party majorities fading, demands for State-specific discretionary grants or 'special packages' have resurfaced in public discussions.
- Coalition partners can act as checks on unitary trends, tempering single-party dominance.
- A hypothesis suggests that single-party dominance at the Union level diminishes federal tendencies, whereas coalition governments enhance them.
- To nurture a healthy federal structure, fiscal boundaries, tax assignments, and grant bases must be transparent and objective.
- A federal setup in a diverse country can be asymmetric but should be addressed through constitutional provisions that ensure transparency and stability.
- The Constitution has provisions for specific States with special status (Articles 371A to H and formerly Article 370 for Jammu and Kashmir).
- Special packages are discretionary and often result from the bargaining power of State-level political parties.

- These packages, granted under Article 282, are additional grants and not always based on need.
- This discretionary approach can undermine fiscal federalism and the principle of equitable resource distribution.
- States' demands for funds should be addressed through the Finance Commission, constituted every five years to recommend tax distribution and grants as per Articles 280 and 275.
- The 16th Finance Commission cannot be bypassed for partisan political reasons.
- When the same party governs both Union and State levels, it is termed a 'double-engine sarkar,' but now coalition partners are making their own demands.
- While individual States may need special packages, the process of granting them is crucial.
- These developments have impacted political and fiscal relations between the Union and States.

Federal Tendencies

- The Constitution is described as having a quasi-federal framework.
- C.H. Alexandrowicz argued that except during an Emergency, the Constitution assumes a federal character.
- The Supreme Court described India's polity as amphibian, assuming unitary or federal characters based on whether there is an Emergency under Articles 352 and 356 (State of Rajasthan and Others v Union of India, 1977).
- The prevailing political environment significantly influences federal tendencies.
- The hypothesis that federal tendencies bloom or wilt depending on single-party dominance can be tested.
- Fiscal distribution is crucial in determining the strength of federalism.
- Some States recently raised concerns about their declining share in the divisible pool of Union taxes.
- Tax distribution is formula-based, and it is the task of the 16th Finance Commission to balance the interests of the States and the Centre.
- Disbursement of grants has more discretion compared to tax distribution.
- The Finance Commission primarily recommends grants to States in need of assistance unless Parliament legislates otherwise.
- Discretionary grants to States through Article 282 have surpassed grants recommended by the Finance Commissions by almost a factor of four.
- Special packages demanded by State-based parties can divert national resources from other States with pressing needs, weakening fiscal federalism.
- If this continues, federal tendencies may wilt instead of blooming as single-party dominance fades.

4. Judiciary:

4.1. Contempt of Court in India

Constitutional Provisions

- **Article 19(2):** When the Indian Constitution was adopted, it included contempt of court as one of the restrictions on the freedom of speech and expression.
- **Article 129:** Empowers the Supreme Court to punish contempt of itself.
- **Article 215:** Grants similar powers to the High Courts.

Statutory Backing

- **The Contempt of Courts Act, 1971:** Provides statutory backing to the concept of contempt of court in India.

Types of Contempt of Court

1. **Civil Contempt:**
 - Wilful disobedience to any judgment, decree, direction, order, writ, or other process of a court, or wilful breach of an undertaking given to a court.
2. **Criminal Contempt:**
 - Publication of any matter or the doing of any act which:
 - Scandalises or lowers the authority of any court.
 - Interferes with the due course of any judicial proceeding.
 - Obstructs the administration of justice in any other manner.

Exceptions

- Fair and accurate reporting of judicial proceedings does not constitute contempt of court.
- Fair criticism on the merits of a judicial order after a case is heard and disposed of is also not considered contempt.

Punishment

- **The Contempt of Courts Act, 1971:** Provides for punishment which may include:
 - Imprisonment for up to six months.
 - Fine up to Rs 2,000.
 - Or both.

Amendment in 2006

- Introduced "truth and good faith" as a defence.
- Specified that the court may impose punishments only if the act of the person substantially interferes, or tends to interfere with the due course of justice.

Examples:

Civil Contempt

- **Maharashtra Political Crisis (2022):** During the political crisis in Maharashtra, the Supreme Court issued a notice for contempt to the Maharashtra Speaker for not adhering to the court's directive regarding the disqualification proceedings of MLAs, demonstrating an instance of civil contempt through wilful disobedience.

Criminal Contempt

- **Justice Karnan Case (2017):** Justice C.S. Karnan of the Calcutta High Court was sentenced to six months imprisonment by the Supreme Court for making derogatory remarks against judges and the judiciary. His actions were deemed to scandalize the court and obstruct the administration of justice.

4.2. The SC ruling on Portrayal of Disability in Films

Are the laws governing rights of differently abled persons being implemented properly?

- On July 8, the Supreme Court ruled on a plea to ban the film Aankh Micholi for derogatory portrayal of people with disabilities (PwDs).
- The Supreme Court laid down comprehensive guidelines to prevent stereotyping and discrimination of PwDs in visual media, including films and documentaries.

- The framework focuses on preventing stigmatisation and discrimination, recognising their impact on the dignity and identity of PwDs.
- Guidelines include avoiding words like "cripple" and "spastic" that contribute to negative self-image and perpetuate discriminatory attitudes.
- The court called for an end to stereotyping differently-abled persons in visual media and films, asking for accurate representation of disabilities instead of mocking them.
- Language that individualises impairment and overlooks disabling social barriers, such as "afflicted," "suffering," and "victim," should be avoided.
- Creators should practice the principle of "nothing about us, without us" and involve persons with disabilities in the creation and assessment of visual media content.

What are laws which grant disability rights?

- The Rights of Persons with Disabilities (RPwD) Act, 2017, replaced the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- Other laws governing disability rights include the National Trust Act (1999), Rehabilitation Council of India Act (1992), and Mental Health Care Act (2017).
- Shashank Pandey, a Delhi-based lawyer, explains that there are two main models for disability rights: medical and social.
- The human rights model is an evolution of the social model and emphasizes that people with disabilities are part of society and have the same rights as everyone else.
- The Supreme Court's emphasis on the human rights model makes it obligatory for the government and private parties to facilitate the full and effective participation of persons with disabilities.
- The human rights model allows disabled individuals to claim all human rights principles applicable to everyone but is abstract and difficult to implement.
- The Supreme Court's framework focuses only on visual media and could have been extended to all departments for better sensitisation.
- V. Muralidharan from the National Platform for the Rights of the Disabled supports the ruling but notes that the 2016 legislation is not properly implemented.
- Disabled people are still viewed as objects of charity, and terms like 'Divyang' reinforce a patronising mindset.
- The Supreme Court stated that creative freedom in films must not include lampooning, stereotyping, misrepresenting, or disparaging marginalised communities.
- The court stressed the importance of considering the intention and overall message of the film.
- Collaboration with disability advocacy groups is essential for respectful and accurate portrayals.
- Training programmes for writers, directors, producers, and actors are necessary to emphasise the impact of portrayals on public perceptions and the lived experiences of persons with disabilities.

4.3. Gram Nyayalayas

- It is Village Courts, with unique feature of India's judicial system, designed to provide accessible and affordable justice at the grassroots level. These courts were established to address the challenges faced by rural populations in accessing higher courts.
- Village-level courts in rural areas for quick and easy access to justice.

- Established under the **Gram Nyayalayas Act, 2008**.
- Operate as mobile courts within their jurisdiction.
- **Nyayadhikari:** The presiding officer of a Gram Nyayalaya is called a Nyayadhikari, who is selected based on specific qualifications and experience.



Key Details:

- Passed by Parliament on December 22, 2008, and effective from October 2, 2009.
- Established by state governments in consultation with high courts.
- A total of 476 notified; 257 are operational in 10 states.

Purpose:

- Provide access to justice for rural people who face barriers in the formal judicial system.

Challenges:

- Despite the noble objectives, the implementation of Gram Nyayalayas has faced challenges such as inadequate infrastructure, lack of trained personnel, and low public awareness.

Objectives:

- **Access to Justice:** Provide rural populations with justice at their doorsteps.
- **Affordable Justice:** Offer justice at a low cost, reducing the need for lawyers.
- **Speedy Disposal of Cases:** Dispose of cases within six months.
- **Promote Alternative Dispute Resolution:** Encourage mediation, conciliation, and arbitration.
- **Empower Rural Population:** Empower rural people with access to legal remedies.
- **Educate About Legal Rights:** Increase legal literacy and awareness in rural areas.

4.4. Collegium System:

- The system empowers a group of the senior-most judges of the Supreme Court, including the Chief Justice of India (CJI), to make recommendations regarding the appointment and transfer of judges to the higher judiciary.
- The Collegium System was established through three landmark judgments, known as the Three Judges Cases.

Evolution through the Three Judges Cases:

1. **First Judges Case (1981):**
 - The Supreme Court ruled that the word "**consultation**" in **Articles 124 and 217** of the Constitution does not mean "concurrence."
 - The President of India was not bound to follow the recommendations of the CJI.
 - This judgment gave the Executive the final say in the appointment of judges.
2. **Second Judges Case (1993):**
 - This judgment overruled the decision in the First Judges Case.
 - It established that the CJI must consult the two senior-most judges of the Supreme Court.
 - It gave primacy to the opinion of the CJI in the appointment and transfer of judges.
3. **Third Judges Case (1998):**
 - This case further clarified the Collegium System.

- The CJJ must consult a Collegium of four senior-most judges of the Supreme Court.
- If two judges give an adverse opinion, the CJJ should not send the recommendation to the government.

Can't ask for Collegium's reasons for rejecting candidates, says HC

GS Paper II:
Judiciary (Collegium System)

The Delhi High Court has held that reasons for rejection of recommendations for appointment of High Court judges by the Supreme Court Collegium cannot be made public as it will be "detrimental to the interests of the people concerned" and will stifle the appointment process.

The court made the observation while dismissing an appeal challenging an order that had rejected a petition seeking a direction to the Supreme Court Collegium to provide detailed reasons while refusing to

accept recommendations for such appointments.

The Bench said the appointment of a judge to a High Court or the Supreme Court is an "integrated, consultative and non-adversarial process" which cannot be challenged in a court except on the ground of want of consultation with the named constitutional functionaries or lack of any condition of eligibility in case of an appointment or a transfer being made without the recommendation of the Chief Justice of India.

"Further, publication of reasons for rejection will be detrimental to the inter-

ests and standing of people whose names have been recommended by the High Courts, as the Collegium deliberates and decides on the basis of information which is private to the individual being considered. Such information, if made public, will have the effect of stifling the appointment process," a Bench of Acting Chief Justice Manmohan and Justice Tushar Rao Gokhale said.

The court said the single judge Bench has correctly noted that this court cannot sit in appeal over the subjective satisfaction of the Supreme Court Collegium.

Composition of the Collegium:

- **Supreme Court:** The Collegium for the Supreme Court appointments consists of the CJJ and four senior-most judges of the Supreme Court.
- **High Court:** The Collegium for High Court appointments consists of the CJJ, the two senior-most judges of the Supreme Court, and the Chief Justice of the concerned High Court along with two senior-most judges of that High Court.

Functions of the Collegium:

1. **Appointment of Judges:** The Collegium recommends names of judges to be appointed to the Supreme Court and High Courts.
2. **Transfer of Judges:** It also recommends the transfer of High Court judges from one High Court to another.
3. **Elevation of Judges:** The Collegium recommends elevation of High Court judges to the Supreme Court.

Criticisms of the Collegium System:

- **Lack of Transparency:** The system has been criticized for its opaque functioning and lack of transparency in decision-making.
- **Accountability:** There is little accountability, as the decisions of the Collegium are not open to scrutiny.
- **Subjectivity:** Critics argue that the Collegium System can be subjective and may lead to favouritism and nepotism.
- **No Formal Guidelines:** There are no formal guidelines to assess the suitability of a candidate, leading to arbitrary decisions.

Attempts to Reform:

- **National Judicial Appointments Commission (NJAC):** The 99th Constitutional Amendment Act and the NJAC Act, 2014, aimed to replace the Collegium System with the NJAC, which included members from the judiciary, executive, and civil society. However, the Supreme Court struck down the NJAC in 2015, reinstating the Collegium System.

5. Parliament:

5.1. Expunction Powers in Parliament:

What about remarks against an MP?

- Rule 353 of the Lok Sabha allows MPs to make allegations with advance notice, prompting an inquiry by the concerned Minister to present facts.
- Allegations not defamatory or incriminatory do not fall under Rule 353's purview.

- MPs have the right to question Ministers and criticize their conduct under parliamentary accountability.
- Expunction of remarks is governed by Rule 261 in the Rajya Sabha and Rules 380 and 381 in the Lok Sabha.
- Chairs can expunge words deemed defamatory, indecent, unparliamentary, or undignified from parliamentary records.
- Expunged remarks are marked with asterisks and footnotes stating 'expunged as ordered by the Chair' or 'not recorded'.
- Despite expungement, digital access through live telecasts and social media sharing raises questions about the effectiveness of expunging remarks.

On expunction powers in Parliament

Why did the Opposition engage in a war of words with the government over expunging certain remarks? What is the process to expunge remarks in Parliament? Can a member of the Lok Sabha direct a remark against a Minister? What do the various rules state?

GS Paper: Parliament
EXPLAINER

Sumeda

The story so far:

The first special session of the 18th Lok Sabha witnessed heated discussions, with the Opposition clashing with the government over a range of issues, ultimately concluding with a war of words over the expunction of the remarks of the leaders of Opposition in both Houses. Rajya Sabha Chairman Jagdeep Dhankhar removed portions of Leader of Opposition (LoP) Mallikarjun Kharge's speech, which was critical of Prime Minister Narendra Modi and the Rashtriya Swayamsevak Sangh. Meanwhile, in the Lower House, parts of Rahul Gandhi's remarks on the PM and the BJP were expunged from the records on the orders of Speaker Om Birla, sparking allegations of different yardsticks being applied for different MPs.

When are remarks expunged?

Parliament maintains a verbatim record of everything that is spoken and takes place during proceedings. While Article 105 of the Constitution confers certain privileges and freedom of speech in Parliament on MPs, it is subject to other provisions of the Constitution and the rules of the House. On the orders of the presiding officer, that is, the Chairman in the Upper House and the Speaker in the Lower House, words, phrases and expressions which are deemed "defamatory, indecent, unparliamentary or undignified" are deleted or expunged from records. For this purpose, the Lok Sabha Secretariat maintains a comprehensive list of 'unparliamentary' words and expressions.

The rules of parliamentary etiquette, which are laid out to ensure discipline and decorum in the Rajya Sabha, say, "When the Chair holds that a particular word or expression is unparliamentary, it should be immediately withdrawn without any attempt to raise any debate



War of words: Leader Of Opposition in Rajya Sabha Mallikarjun Kharge speaks in the House. ANI

over it. Words or expressions held to be unparliamentary and ordered to be expunged by the Chair are omitted from the printed debates."

There have been recorded instances where the scope of expunction has been broadened. Speakers, at their discretion, have ordered the expunction of words deemed prejudicial to national interest or detrimental to maintaining friendly relations with a foreign State, derogatory to dignitaries, likely to offend national sentiments or affect the religious susceptibilities of a section of community, likely to discredit the Army, not in good taste or otherwise objectionable or likely to bring the House into ridicule or lower the dignity of the Chair, the House or the members, authors M. N. Kaul and S. L. Shaktiher note in their book *Practice and Procedure of Parliament*. For instance, Prime Minister Jawaharlal Nehru once

objected when a member referred to the President of Pakistan while asking a supplementary question about the international situation. Mr. Nehru said it would "not be proper" for the Head of a foreign state to be mentioned in the language the member had used. The objectionable words were then expunged.

Members must withdraw objectionable remarks deemed irrelevant to the debate upon the Chair's request and failure to comply may lead to expunction. Similarly, quoting from an unreferenced document or speaking after being asked to desist can result in an expunction.

What about remarks against an MP?

If an MP makes an allegation against their colleague or an outsider, Rule 353 of the Lok Sabha outlines the procedural framework to be followed. "The Rule does not prohibit the making of any allegation.

The only requirement is advance notice, on receipt of which the Minister concerned will conduct an inquiry into the allegation and come up with the facts when the MP makes the allegation in the House," former Lok Sabha Secretary General P.D.T. Achary says. If the allegation is neither defamatory nor incriminatory, the above rule would not apply, he adds.

"The rule does not obviously apply to an allegation against a Minister in the government. Since the Council of Ministers is accountable to Parliament, the Members of the House have the right to question Ministers and make imputations against their conduct as Ministers," Mr. Achary adds.

How do officers expunge remarks?

The Chairman and Speaker are vested with the power to order the expunction of remarks under Rule 261, and Rule 380 and 381 of the Rules of Procedure of the Rajya Sabha and Lok Sabha, respectively. Rule 261 states, "If the Chairman is of opinion that a word or words have or have been used in debate which is or are defamatory or indecent or unparliamentary or undignified, he may in his discretion, order that such word or words be expunged from the proceedings of the Council." The Lower House has a similar provision.

The expunged portions are marked by asterisks with an explanatory footnote stating 'expunged as ordered by the Chair.' If the Chair directs that nothing will go on record during a member's speech or interruption, footnote 'not recorded' is inserted. A comprehensive list of words and phrases is circulated to media outlets at the end of the day's proceedings. Once expunged, these words or phrases cease to exist on the official record. However, the relevance of the practice of expunging remarks has lately come into question, in a digital age where expunged content remains accessible due to the live telecast of proceedings and wider circulation of screenshots and videos on social media.

THE GIST

▼ Rajya Sabha Chairman Jagdeep Dhankhar removed portions of Mallikarjun Kharge's speech, which was critical of Prime Minister Narendra Modi and the RSS. Meanwhile, in the Lower House, parts of Rahul Gandhi's remarks on the PM and the BJP were expunged from the records on the orders of Speaker Om Birla.

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5.2. Representation of women in Lok Sabha:

- Representation of women in the Lok Sabha has increased over the years:
 - In the first Lok Sabha (1952), 22 out of 489 MPs were women (4.5%).
 - By the 17th Lok Sabha (2019), the number rose to 78 women out of 543 MPs (14.4%).
 - In the 18th Lok Sabha (2024), there are 74 women MPs out of 543 (13.6%).
- Comparison between 2019 and 2024 Lok Sabha elections:
 - BJP increased the proportion of tickets to women candidates from 12.6% in 2019 to 15.7% in 2024.
 - Congress fielded 41 women candidates in 2024 (same as in 2019), maintaining a 12.3% share due to contesting fewer seats.

- Trinamool Congress reduced its women candidates from 23 in 2019 to 12 in 2024.
- BJP's success rate among women candidates decreased to 44.9% in 2024 from 74.6% in 2019 despite fielding more candidates.
- Congress saw an increase in success rate for women candidates to 18.8% in 2024 from 11.5% in 2019, with 13 women elected.
- Trinamool Congress had a high success rate of 91.6% among women candidates in 2024, with 11 out of 12 getting elected.
- Samajwadi Party had a success rate of 35.7% among women contestants in 2024, with 5 out of 14 elected.
- Trinamool Congress had 40.9% women MPs in 2019, which decreased to 37.9% in 2024, the highest among all parties.
- BJP's women MPs constituted 12.9% in 2024, similar to 13.5% in 2019.
- Congress' women MPs constituted 13.1% in 2024, slightly lower than the 2019 figure of 13.5%.
- **Women's voting patterns varied across states:**
 - West Bengal: 53% of women voters favoured Trinamool Congress, leading to its victory.
 - Karnataka: 52% of women voters favoured Congress over BJP/NDA.
 - Bihar: 50% of women voters favoured NDA, while 37% favoured INDIA bloc.
 - Haryana: 49% of women voters favoured Congress/INDIA, with 42% favouring BJP/NDA.
 - Madhya Pradesh: 60% of women voters chose BJP, while 34% chose Congress.
 - Delhi: 57% of women voters chose BJP, with 41% opting for INDIA.
 - Rajasthan: 55% of women voters chose BJP, while 39% chose Congress.
 - Uttar Pradesh and Telangana: Slightly favoured INDIA bloc.
 - Maharashtra: Slightly favoured NDA.

Do You Know?

Article 171: Composition of Legislative Councils

- The strength of the Legislative Council can be up to **one-third** of the strength of the State Legislative Assembly.
- The strength **must not be lower than 40**.
- One-Third of members shall be elected by electorates consisting of members of Municipalities, District Boards, and other local bodies as specified by Parliament.
- One-Twelfth members shall be elected by electorates consisting of Graduates for at least three years of any university in India, or similar qualifications as specified by Parliament.
- One-Twelfth members shall be elected by electorates consisting of teachers teaching for at least three years in educational institutions of level secondary school and above, or as specified by Parliament.
- One-third of members shall be elected by members of State Legislative Assemblies.
- The remaining one-sixth members shall be nominated by Governor. They must have special knowledge or experience in Literature, Arts, Science, Social Science and Cooperative Movement (Cooperative movement is not mentioned for Rajya Sabha).

5.3. Anti Defection Law:

Why in News - Jharkhand Assembly Speaker's Tribunal disqualified two MLAs, Lobin Hembrom (JMM) and J.P. Patel (BJP), for defection, effective from July 26, 2024. The disqualification was under the **anti-defection law (10th Schedule of the Constitution)**.

- The conscious abandonment of allegiance or duties to one's political party is termed "defection".
- All MPs of the Parliament and the MLAs and MLCs of the state legislatures are covered by anti-defection law.
- The anti-defection law aims to prevent the defection of the legislators due to the reward of office or other considerations.
- The idea behind the anti-defection law is to ensure the stability of government at the state and the central levels.
- **The grounds for disqualification under anti-defection law:**
- **For members of a political party:**
- If one voluntarily gives up membership of the party.
- If a person is suspended/expelled by the political party then it will not be a ground of defection.
- If a person votes or abstains from vote contrary to the whip of the party.
- A whip is an instrument used by a political party to direct its members to either vote or abstain from voting.
- **For the independent members:**
- If independent members join a political party then liable for disqualification.
- **For nominated members:**
- If nominated members belong to a political party then they continue to be part of that political party.
- If nominated members don't belong to a political party but join a political party after 6 months of the nomination then liable for disqualification.
- **The exemption to anti-defection law:**
- It does not apply to presiding officers in certain cases:
- If the presiding officer resigns from the party he/she belongs to just before getting elected to the office and does not re-join the party or not join any other political party during the tenure in the office.
- If the presiding officer re-joins the political party he/she belonged to after demitting the office.
- The exemption in case of mergers of political parties:
- **91st Constitution Amendment Act** provided that if **at least 2/3 of the members of a political party** in the house joins some other political party it would be an exception under the anti-defection law.
- The presiding officer of the house decides on the defection of a member and his/her decision is final.

Kihoto Hollohon vs. Zachilhu Case:

- In this case, the supreme court of India upheld the constitutional validity of the anti-defection law.
- The court stated that the objective behind the anti-defection law is to prevent corruption in politics and reduce the role of money power in parliamentary proceedings.
- The court held that the law ensures the stability of government at center and state and therefore can be treated as an exception to other provisions of the constitution.
- However, the supreme court held that the **decision of the presiding officer of the house cannot be final** and would be subject to judicial review of the court that is part of the basic structure of the constitution.
- The court also held **paragraph 7 to be invalid not only on the grounds of violating the principle of judicial review but also because such a provision falls under proviso to Article 386(2) and requires ratification by at least half of the state legislature.**

- There is no time limit for the presiding officer to decide on the case of anti-defection.
- **The arguments in favor of anti-defection law:**
 - Ensures stability.
 - Prevents horse-trading.
 - Ensures loyalty to the party.
 - Promotes party discipline.
 - Reduces possible corruption.
- **The arguments against anti-defection law:**
 - The independence of the legislators is lost.
 - It is against the freedom of speech of the legislators.
 - The legislators become mere puppets of the political party.
 - It promotes the high command culture.
 - It undermines the principle of representative democracy.

For Practice:

Question: With reference to anti-defection law in India, consider the following statements:
(UPSC 2022)

1. The law specifies that a nominated legislator cannot join any political party within six months of being appointed to the House.
2. The law does not provide any time-frame within which the presiding officer has to decide a defection case.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Do You Know?

Cabinet Committee	Chaired By
Cabinet Committee on Security	Prime Minister
Cabinet Committee on Economic Affairs	Prime Minister
Cabinet Committee on Parliamentary Affairs	Defence Minister
Cabinet Committee on Political Affairs	Prime Minister
Cabinet Committee on Investment and Growth	Prime Minister
Cabinet Committee on Skill, Employment and Livelihood	Prime Minister
Cabinet Committee on Accommodation	Home Minister

Governance

1. Should Education be Brought Back to the State List:

Should education be brought back to the State list?

When was the subject added to the concurrent list? How do other countries govern education?

GS II: Education

Rangarajan. R

The story so far:

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.

What is the historical background?

The Government of India Act, 1935 during the British rule created a federal structure for the first time in our polity. The legislative subjects were distributed between the federal legislature (present day Union) and provinces (present day States). Education which is an important public good was kept under the provincial list. After independence, this continued and education was part of the 'State list' under the distribution of powers.

However, during the Emergency, the Congress party constituted the Swaran

Singh Committee to provide recommendations for amendments to the Constitution. One of the recommendations of this committee was to place 'education' in the concurrent list in order to evolve all-India policies on the subject. This was implemented through the 42nd constitutional amendment (1976) by shifting 'education' from the State list to the concurrent list. There was no detailed rationale that was provided for this switch and the amendment was ratified by various States without adequate debate.

The Janata Party government led by Morarji Desai that came to power after Emergency passed the 44th constitutional amendment (1978) to reverse many of the controversial changes made through the 42nd amendment. One of these amendments that was passed in the Lok Sabha but not in the Rajya Sabha was to bring back 'education' to the State list.

What are international practices?
In the U.S., State and local governments

set the overall educational standards, mandate standardised tests and supervise colleges and universities. The federal education department's functions primarily include policies for financial aid, focussing on key educational issues and ensuring equal access. In Canada, education is completely managed by the provinces. In Germany, the constitution vests legislative powers for education with landers (equivalent of States). In South Africa, on the other hand, education is governed by two national departments for school and higher education. The provinces of the country have their own education departments for implementing policies of the national departments and dealing with local issues.

What can be the way forward?

The arguments in favour of 'education' in the concurrent list include a uniform education policy, improvement in standards and synergy between Centre and States. However, considering the vast diversity of the country, a 'one size fits all

approach is neither feasible nor desirable.

Further, as per the report on 'Analysis of Budgeted expenditure on Education' prepared by the Ministry of Education in 2022, out of the total revenue expenditure by education departments in our country estimated at ₹6.25 lakh crore (2020-21), 15% is spent by the Centre while 85% is spent by the States. Even if expenditure by all other departments on education and training are considered, the share works out to 24% and 76% respectively.

The arguments against restoring 'education' to State list include corruption coupled with lack of professionalism. The recent issues surrounding the NEET and NTA have however displayed that centralisation does not necessarily mean that these issues would vanish.

Considering the need for autonomy in view of the lion's share of the expenditure being borne by the States, there needs to be a productive discussion towards moving 'education' back to the State list.

This would enable them to frame tailor-made policies for syllabus, testing and admissions for higher education including professional courses like medicine and engineering. Regulatory mechanisms for higher education can continue to be governed by central institutions like the National Medical Commission, University Grants Commission and All India Council for Technical Education.

Rangarajan. R is a former IAS officer and author of 'Polity Simplified'. Views expressed are personal.

THE GIST

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2. National Research Foundation:

No Indian industry presence in Board of National Research Foundation

GS Paper III: S&T

Jacob Jacoby
NEW DELHI

The Executive and Governing Boards of the Anusandhan National Research Foundation (ANRF) – a high-level body conceived to give strategic direction to scientific research in India – has no representation from Indian industry, suggests a perusal of the list of members made public by the Ministry of Science and Technology (MoST) earlier this week.

There is also no presence of State universities, which the ANRF had said would be among the major beneficiaries of the new structure.

The absence of Indian industry is glaring as the ANRF Act, passed in August 2023, was expected to galvanise research by having close to ₹36,000 crore or 70% of its five-year out-

lay of ₹50,000 crore from "non-government sources, industry & philanthropists, from domestic as well as outside sources".

Science Minister Jitendra Singh had said this in discussions surrounding the passage of the Bill in Parliament last year.

Appoint members

To this end, the text of the Act specifically empowered the President of the Governing Board – in this case the Prime Minister of India – to nominate or appoint up to "...five members from business organisation or industry", into the Board.

The 15-member Governing Board, as notified by the MoST, however, has only one industrialist – Romesh Wadhvani, an American billionaire of Indian origin and former CEO and chairperson of the Sym-



The foundation seeks to promote basic research in science and engineering.

phony Technology Group. There are two other Americans with Indian roots – Manjul Bhargava, Professor, Princeton University, U.S.; and Subra Suresh, Professor at Large, Brown University and former head of the U.S. National Research Foundation, from which the ANRF draws inspiration.

Only two universities are represented in the Body by the Directors of the

Indian Institute of Science, and the Tata Institute of Fundamental Research.

Ajay Sood, Principal Scientific Adviser to the Union government, is the Member Secretary of the governing body, with the rest of the members being the Ministers of Science, and Education, and the Secretaries of the departments under the MoST.

The ANRF replaces the Science and Engineering Research Board (SERB), established in 2008.

The ANRF is a significant reform in that it proposes a more expansive definition of research, which includes science, engineering, Information Technology, Liberal Arts, Social Sciences, and the Humanities – the ANRF Board has among its members Raghuvendra Tanwar, Chair, Indian Council of Historical Research.

3. Kerala's Four Year Under Graduate Program:

- **FYUGP:** Four-Year Undergraduate Programme launched in Kerala's higher education institutions.
- **Launch:** Initiated by Chief Minister Pinarayi Vijayan to enhance digital skills and knowledge economy participation.
- **Implementation:** Rolled out in affiliated colleges of Kerala, Calicut, Kannur, and Mahatma Gandhi Universities for 2024-25.
- **Programme Structure:** Allows for a flexible curriculum with interdisciplinary study options.
- **Institutional Involvement:** Cochin University of Science and Technology, Mahatma Gandhi University, Sree Sankaracharya University of Sanskrit, and Thunchath Ezhuthachan Malayalam University offering the programme.
- **Flexibility:** Students can choose their disciplines, adjust semester-wise academic loads, and switch institutions or modes of learning as needed.

What are the pathway options?

- Kerala launched the Four-Year Undergraduate Programmes (FYUGP) on July 1, aimed at enhancing digital skills and preparing students for the knowledge economy.
- FYUGP introduced in affiliated colleges of Kerala, Calicut, Kannur, and Mahatma Gandhi Universities for the 2024-25 academic year.
- Cochin University of Science and Technology and Mahatma Gandhi University offer integrated five-year programs with a four-year exit option.
- Sree Sankaracharya University of Sanskrit, Kalady, and Thunchath Ezhuthachan Malayalam University also offer FYUGP.
- Features include student-centric curriculum with flexibility in choice of disciplines and learning pace.
- Allows students to switch disciplines and institutions, and offers alternative learning modes like offline, distance, online, and hybrid.
- Pathways include three-year undergraduate degree, four-year undergraduate honours degree, and honours with research stream.
- Concerns raised by experts and activists about unilateral rollout potentially dismantling existing arts and science courses.
- Criticisms include concerns about the lack of in-depth subject study and infrastructure gaps in campuses.
- Teachers' concerns about inadequate training for implementing the new programme

4. National Tuberculosis Elimination Program (NTEP):

- The National Tuberculosis Elimination Program (NTEP) of India, previously known as the Revised National Tuberculosis Control Program (RNTCP), is a public health initiative launched in 1997.
- It aims to eliminate tuberculosis (TB) in India by 2025 through the National Health Mission (NHM).
- The program offers free TB diagnosis and treatment services nationwide, focusing on "Prevent, Detect, Treat, and Build" strategies.
- **Key components of the NTEP include:**

- **Designated Microscopy Centers (DMC):** These centers use sputum smear microscopy with Ziehl–Neelsen staining to diagnose TB. Two sputum samples from patients are tested to ensure high diagnostic accuracy.
- **Rapid Molecular Testing Labs:** Utilizing Cartridge-Based Nucleic Acid Amplification Tests (CBNAAT) and TruNat, these labs provide rapid TB diagnosis and detect Rifampicin resistance. There are about 1200 CBNAAT and 200 TruNat labs across India.
- **Culture and Drug Susceptibility Testing Labs (C&DST):** These labs offer advanced tests like Line Probe Assay and Liquid and Solid Culture to test for drug resistance.
- **Treatment Services:** The program offers standardized treatment regimens with multiple anti-TB drugs. New cases receive a six-month regimen of first-line drugs, while drug-resistant cases are treated with various combinations of 13 drugs.
- The NTEP also includes public-private partnerships to address the significant number of TB patients seeking treatment in the private sector. However, adherence to the NTEP protocol is variable among private providers, leading to issues with treatment consistency and quality. Efforts are being made to regularize anti-TB treatment regimens in the private sector to improve outcomes.

Appointment:

- **Dr. Soumya Swaminathan**, former Director-General of the Indian Council of Medical Research and Chief Scientist of the World Health Organization, **has been appointed Principal Adviser at the Union Ministry of Health and Family Welfare.**
- She will serve in this role for the **National Tuberculosis Elimination Programme (NTEP)** on a pro bono basis.
- Dr. Swaminathan will be based in Chennai, where she leads the M.S. Swaminathan Research Foundation focusing on agriculture and climate change.
- Her role as Principal Adviser involves providing technical advice on the strategy for achieving NTEP goals and advising on research strategies.

5. Foreign Contribution (Regulation) Act, 2010 (FCRA)

- **Purpose:** Regulate acceptance and utilization of foreign contributions or hospitality by certain individuals, associations, or companies and prohibit such contributions if detrimental to national interest.
- **Predecessor:** Corrects shortfalls in the 1976 Act.
- **Passed by:**
 - Rajya Sabha: 19 August 2010
 - Lok Sabha: 27 August 2010
- **Assented:** 26 September 2010
- **Commenced:** 1 May 2011

Amendments:

- **2020 Amendment:**
 - Introduced by Home Minister Amit Shah.
 - Mandatory for NGO office bearers to provide Aadhaar numbers.

NGO working on rights issues loses FCRA registration

Ministry tells CACIM that cancellation is due to incorrect filings of returns in 2018 and 2019; Centre for Financial Accountability is one of its projects

GS Paper II: Governance: NGOs
VIEW ANSWER
NEW DELHI

The Union Home Ministry on Wednesday cancelled the Foreign Contribution Regulation Act (FCRA) registration of the parent entity of the non-profit Centre for Financial Accountability (CFA), which monitors and critically analyses the role of financial institutions and their impact on development, human rights, and the environment.

In a recent report, the CFA had highlighted how additional projects sanctioned in a Special Economic Zone operated by the Adani Group in the Kutch region of Gujarat "will compound environmental hazards and increase health risks for the people while further polluting the environment and accelerating degradation of the ecology".

In December 2023, the CFA organised an online meeting with the All-India Bank Officers Confederation to discuss the issues



faced by public sector banks and the road ahead.

Speaking with *The Hindu*, Joe Athialy, Executive Director, CFA said they were yet to receive the orders cancelling the FCRA registration of CACIM (India Institute for Critical Action Centre in Movement), but they had been informed online. CFA is one of the projects of CACIM.

"We have been told that the cancellation is due to the incorrect filings (of return) of financial years 2018 and 2019. This may be just an excuse, as they had all the years to ask us to rectify the mistakes. We certainly believe that the work we did has contributed to this action," Mr. Athialy said. He said the government want-

ed to throttle the organisations that were critical of its work.

"We are not going to get bogged down by such actions. We will continue our work. We recognise that the government wanted to throttle our work. We will find innovative ways to carry forward our work, which includes domestic donations. There is a life beyond FCRA," he said.

Earlier in January, the Ministry cancelled the FCRA registration of Centre for Policy Research (CPR), a leading public policy research institution in New Delhi.

Since 2015, the FCRA registration of more than 16,000 NGOs have been cancelled on account of "violation." As on Wednesday, there were 15,946 FCRA-registered NGOs active in the country. The FCRA registration of nearly 6,000 NGOs had ceased to operate from January 1, 2022 as the Ministry either refused to renew their application or the NGOs did not apply for renewal.

- Government can hold a "summary enquiry" to prevent misuse of foreign funds.
- Intended to increase transparency.
- Passed by Lok Sabha on 21 September 2020 and Rajya Sabha on 23 September 2020.
- **2022 Amendment:**
 - Omitted provision requiring quarterly declarations of foreign funds.
 - Now requires annual audited balance sheet filings on the Ministry's or organization's website.

Controversies:

- **NGO Impact:** Intelligence Bureau report claimed some NGOs with foreign funding were involved in anti-development activities affecting economic growth.
- **Educational Institutions:** Registrations of institutions like JNU, IIT-Kanpur, and Jamia Millia Islamia were canceled for not maintaining proper FCRA accounts, later restored for Jamia.
- **Greenpeace India:**
 - FCRA license canceled for obstructing development activities and promoting US-based solar energy equipment.
 - Accused of harming national economic security and growing influence.
- **Teesta Setalvad's NGOs:** Cancellation of FCRA licenses for NGOs run by activist Teesta Setalvad.
- **Compassion International:** Shutdown due to denied foreign funding permissions amid allegations of encouraging religious conversions.
- **Amnesty International:** Shut down operations in India due to a financial freeze by the Indian government after the 2020 amendment.

International Reactions:

- **UN Human Rights Council:** Faced criticism from U.S., Germany, and other European nations for the FCRA Act's arbitrariness during the 2017 peer review in Geneva.
- **FCRA Bribery Scams:**
- **CBI Raids:** Initiated against FCRA officials and NGOs involved in bribery scams for facilitating clearances.

6. Jurisdiction of CBI:

- **Supreme Court Ruling:** On July 10, the Supreme Court upheld the West Bengal government's right to file a suit against the Union government for using the CBI to investigate cases in the state despite its withdrawal of general consent on November 16, 2018.
- **Preliminary Objections:** The Centre argued that it should not be made a defendant in the suit as it does not control the CBI, claiming it is an independent agency. However, the Supreme Court rejected these objections.
- **DSPE Act, 1946:** The Court examined provisions of the Delhi Special Police Establishment (DSPE) Act, which governs the CBI, and concluded that powers, jurisdiction, and superintendence over the CBI vest with the Government of India.
- **Cause of Action:** The Court found that West Bengal's suit raised valid concerns about constitutional overreach and decided that the case should proceed to a full hearing on its merits, scheduling the next hearing for August 13.
- **General Consent:** Under Section 6 of the DSPE Act, States must grant consent for the CBI to initiate investigations within their jurisdiction, especially in matters related to police and public order, which are State subjects.
- **Revocation of General Consent:** Since 2015, several states including Chhattisgarh, Jharkhand, Kerala, Mizoram, Punjab, Rajasthan, Telangana, Meghalaya, and West Bengal have revoked

their general consent. This action restricts the CBI from initiating new investigations without specific permission from the respective State governments.

- **Controversy:** States allege that the Centre misuses the CBI to target political opponents, leading to the withdrawal of general consent to prevent unwarranted interference in State affairs.
- **Impact:** Without general consent, the CBI's ability to investigate new cases in these states is severely restricted, requiring explicit permission from the State governments for each case.

What does the case filed by the West Bengal government allege?

- **Original Suit by West Bengal Government:** In August 2021, West Bengal filed an original suit under Article 131 of the Constitution in the Supreme Court. The suit argued that the Union government's actions, including the CBI's involvement in the state despite withdrawal of general consent in 2018, infringed upon its sovereignty.
- **Grounds of Suit:** West Bengal highlighted that despite withdrawing general consent for CBI investigations, the agency continued to register new cases in the state, totaling 12. The state deemed this as a "constitutional overreach" and sought annulment of these cases and a restraint on the CBI from filing any new cases.
- **Article 131 Jurisdiction:** The Constitution provides the Supreme Court with original and exclusive jurisdiction to resolve disputes between the Union and State governments. For a suit under Article 131 to be maintainable, it must involve a dispute crucial to legal rights between the Union and one or more State governments.
- **Judicial Precedents:** In previous cases like *State Of Karnataka vs Union Of India (1977)* and *State Of Rajasthan & Ors. vs Union Of India (1977)*, the Supreme Court emphasized the broad interpretation of Article 131 to uphold federal principles and protect State rights against federal overreach.
- **Union Government's Defence:** Solicitor-General Tushar Mehta argued against the suit's maintainability, stating that the CBI, not being a 'State' under Article 131, cannot be made a defendant in such disputes. He initially claimed the CBI operates independently from the Union government's direct control.
- **CBI's Dependency on Union Authorization:** Despite initial arguments, Tushar Mehta acknowledged that the CBI cannot initiate investigations without explicit authorization from the Union government under Section 5 of the DSPE Act, indicating some level of control.
- **Argument for State Sovereignty:** Senior advocate Kapil Sibal argued that the case goes beyond CBI's operational independence, focusing on whether the agency can disregard a State's withdrawal of consent. Sibal asserted that once consent is withdrawn by a State, the CBI lacks jurisdiction to operate within that State.

What did the verdict state?

- **Court's Observations on DSPE Act:**
 - The Supreme Court noted that according to the Delhi Special Police Establishment (DSPE) Act, the Central government holds significant authority over the CBI, including its constitution, the types of offenses it investigates, and its administration.
 - It emphasized that apart from cases under the Prevention of Corruption Act, where the Central Vigilance Commission has oversight, the superintendence of DSPE in all other matters remains with the Central government as per Section 4 of the DSPE Act.
 - Section 6 of the DSPE Act mandates prior consent from the State government for CBI investigations within its jurisdiction, reinforcing the State's role in regulating the agency's activities.
- **Independence vs. Administrative Control:**

- While acknowledging the CBI's operational independence in conducting investigations, the Court asserted that this autonomy does not diminish the administrative control and superintendence vested in the Central government.
- It rejected the argument presented by the Solicitor General that the CBI operates as an independent agency separate from direct Central government control.
- **Implications of the Verdict:**
 - Allowing the CBI to proceed with investigations in States that have withdrawn their general consent could strain Centre-State relations, particularly since policing is a State subject under the Constitution.
 - Granting the CBI such powers could equate its authority with that of State police forces, potentially compromising federal principles and State autonomy.
 - The Supreme Court clarified that its observations on the CBI's autonomy were made to address preliminary objections and do not influence the eventual decision on the merits of West Bengal's suit.
- **Broader Legal Context:**
 - The final ruling on West Bengal's suit will significantly impact similar pending cases involving disputes between Central agencies and State governments over jurisdiction and federalism.
 - Another case involving the Enforcement Directorate (ED) and Tamil Nadu's Directorate of Vigilance and Anti-Corruption underscores the ongoing legal challenges regarding the jurisdiction of Central agencies in states governed by opposition parties.

7. Draft Digital Competition bill:

What is the draft Digital Competition Bill?

How is an ex-post framework different from an ex-ante framework? Why does the draft Bill encourage an ex-ante competition regulation? What framework does the European Union follow? What are systemically significant digital enterprises?

GS Paper II: Governance

Trishree Goyal

The story so far:

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. The CDCL deliberated on the issue for a year and came to the conclusion that there was a need to supplement the current ex-post framework under the Competition Act, 2002 with an ex-ante framework. It laid out this ex-ante framework in the draft Digital Competition Bill.

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. The CDCL agrees with this approach because of the unique characteristics of digital markets. First, digital enterprises enjoy economies of scale and economies of scope, that is, reduction in cost of production per unit



ISTOCKPHOTO

as the number of units increase and reduction in total costs of production with increase in number of services respectively. This propels them to grow rather quickly as compared to players in the traditional market. Second, this growth is aided by network effects – utility of the digital services increases with the increase in the number of users.

In this context, given that markets can tip relatively quickly and irreversibly in favour of the incumbents, it was found that the extant framework provided for a time-consuming process, allowing offending actors to escape timely scrutiny. Therefore, the CDCL has advocated for preventative obligations to supplement the ex-post facto enforcement framework.

What is the draft's basic framework? The draft Bill follows the template of the EU's Digital Markets Act. It does not

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.

What has been the response?

The overriding sentiment towards the draft Bill has been one of opposition. First, 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.

Interestingly, a group of Indian start-ups have supported the draft Bill arguing that it would address concerns against monopolistic practices by big tech. However, they have argued for a revision of financial and user based thresholds citing concerns that it may lead to domestic start-ups being brought within the regulatory net.

The writer is a technology policy consultant.

THE GIST

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8. Rules for IAS Probationer:

Who conducts the examination? Who is responsible for checking details supplied by candidates?

- On July 19, UPSC registered a criminal case against Puja Khedkar, a 2022 batch IAS officer on probation, and issued a show cause notice cancelling her candidature from the Civil Services Examination-2022.
- Ms. Khedkar allegedly fraudulently availed attempts beyond the permissible limit by changing her identity details.
- Earlier in July, Ms. Khedkar was transferred from Pune to Washim in Maharashtra following complaints of misuse of power.
- She allegedly demanded special privileges she was not entitled to, such as a separate office, house, car, and staff.
- Ms. Khedkar, daughter of a retired bureaucrat, allegedly submitted fake disability and OBC certificates to clear the civil services exam.
- The Department of Personnel and Training (DOPT) formed a single-member committee to verify her candidature claims and other details.
- The committee will submit its report within two weeks.
- In 2023, the Central Administrative Tribunal (CAT) noted that Ms. Khedkar skipped six medical examinations to prove her disability before a medical board at AIIMS, Delhi.
- The CAT order stated that her candidature is liable to be cancelled.
- Despite this, Ms. Khedkar was inducted into the services after reappearing for the exams in 2022 and received PwBD reservation benefits under a different category.
- Ms. Khedkar appeared for the civil services examination 12 times by forging her identity.
- General category candidates are allowed six attempts till 32 years of age, OBC and PwBD candidates are allowed nine attempts till 35 and 42 years respectively, and SC/ST candidates have unlimited attempts till 37 years of age.

How are documents scrutinised?

- The UPSC conducts exams and interviews for the Union Government and recommends candidates for various services.
- Candidates must submit documents supporting their reservation claims for SC, ST, OBC, EWS, and PwBD categories.
- The UPSC initially scrutinizes these documents.
- After the personal interview, all candidates undergo a medical check-up at government hospitals.
- PwBD candidates must appear before a medical board at AIIMS, Delhi.
- The files are then sent to the DOPT, which assigns services based on quotas.
- The probation period usually lasts two years but can be extended up to four years if needed.
- Probation assesses a candidate's suitability for absorption into the Service.
- Probation is not a mere formality.
- Disciplinary action during probation can include discharge from service.
- Discharge can occur if a candidate fails to clear exams, is found ineligible, is unsuitable for the Service, neglects studies or duties, or lacks necessary qualities of mind and character.

9. Reasonable Accommodations and Disability Rights:

- The Rights of Persons with Disabilities (RPwD) Act, 2016 defines reasonable accommodations (RAs) as adjustments ensuring equal rights for Persons with Disabilities (PwD).
- RAs can include building ramps, providing assistive technologies, restructuring job requirements, and modifying workplace policies.
- Institutions are exempt from RAs if they can prove it would cause an undue burden.
- The Convention on the Rights of Persons with Disabilities (CRPD) provides factors to determine undue burden.
- Indian institutions are reluctant to bear the costs of RAs, often citing undue burden for expediency rather than actual hardship.
- Prejudices and cost concerns lead to utilitarian approaches, compromising PwDs' rights.
- A uniform legal standard for undue burden is needed to prevent misuse.
- Compliance with this standard requires institutions to see RAs as beneficial investments.
- The Constitution of India obliges the state to create conditions for equality, requiring accessible institutions for PwDs.
- The state must create positive ecosystems that mandate and encourage accommodation for PwDs.

A model that can be implemented

- Sensitize institutions about the low cost of most requested RAs.
- Provide targeted incentives to institutions for RAs, such as deductions, subsidies, or tax credits.
- Share the costs of RAs with institutions demonstrating actual hardship due to resource shortfalls.
- This model can reduce disadvantage and stigma against PwDs and increase their participation in institutional ecosystems.
- The model is practically implementable using provisions in the RPwD Act.
- Section 86 of the RPwD Act highlights the creation of a National Fund for PwDs, with contributions from banks and financial institutions.
- Rule 42 of the RPwD Rules, 2017 mandates using the National Fund to implement the objectives of the RPwD Act.
- The National Fund remains underutilized, with restricted scope and low coverage.
- Ensure a continuous flow of funds to the National Fund and optimize the use of existing funds.
- Designate the National Fund as a separate line item in every annual budget and frame rules for its disbursement.

Ensuring a welfare approach

- Institutions should assess their resource deficit preventing them from procuring RAs, considering any incentives received.
- Submit a request to the National Fund's governing body to cover the shortfall.
- Requests should include details of financial resources, access to external funding, and the lack of alternative, cost-effective RAs.
- The National Fund's designated authority will conduct a fact-finding inquiry to verify resource-deficit claims.
- The governing body consults the Office of Chief Commissioner for Persons with Disabilities to assess the proportionality of requested RAs.

- The Incentive and Cost-Sharing Model aims to:
 - Reduce institutions' reluctance to accommodate PwDs.
 - Provide positive market outcomes for new and upcoming institutions.
 - Ensure institutions meet a uniform legal threshold of 'undue burden' before avoiding RA costs.

10. Government Schemes:

10.1 Samarthya:

Aim: Samarthya is an umbrella scheme that subsumes several existing schemes for women's empowerment. It focuses on providing comprehensive support for shelter, income generation, skill development, and overall well-being.

Components of Samarthya:

- **Ujjwala:** Provides LPG connections at subsidized rates to eligible women below poverty line, promoting a cleaner and healthier cooking environment.
- **Swadhar Greh:** Offers short-term shelter, food, medical care, counselling, and legal aid to women in difficult circumstances like victims of domestic violence, trafficking, or those who are homeless.
- **Working Women Hostel:** Provides safe and affordable accommodation for working women from economically weaker sections.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY):** Offers financial compensation for wage loss to pregnant and lactating women.
- **National Creche Scheme (Palna):** Provides safe and secure daycare facilities for children of working mothers.
- **Gap Funding for Economic Empowerment:** A new component that provides flexible funding for critical gaps in other schemes related to women's safety, well-being, and economic empowerment.

Eligibility:

- Schemes target women below poverty line, working women, victims of violence, and women in difficult circumstances.

Benefits:

- Improved living conditions, safety, and access to basic necessities.
- Financial support for wage loss and child care needs.
- Skill development opportunities for income generation.
- Legal and psychological support for women facing challenges.

10.2. Swadhar Greh

Aim: Swadhar Greh is a specific component within the Samarthya umbrella scheme. It offers short-term (up to 3 months with the possibility of extension) residential care to women in difficult circumstances.

Eligibility:

- Women in difficult circumstances like victims of domestic violence, trafficking, or those who are homeless.
- Age limit is generally 18-60 years old, with exceptions for some categories.

Benefits:

- Safe and secure shelter with basic necessities like food, clothing, and medical care.
- Counselling and psychological support to help overcome trauma.
- Legal aid and guidance on accessing justice.
- Skill development training to enhance employability and economic independence.

10.3. Pradhan Mantri Matru Vandana Yojana (PMMVY):

Aim: PMMVY is a maternity benefit scheme that aims to compensate for wage loss and improve the health of pregnant women and lactating mothers.

Eligibility:

- Pregnant women and lactating mothers who are eligible for pre-conception and maternity care under the Mother and Child Tracking System (MCTS).

Benefits:

- Cash incentive of Rs. 5,000 per month for the first three months after childbirth, totalling Rs. 15,000.

10.4. Saksham Anganwadi and Poshan 2.0 (Ministry of Women and Child Development):

Aim: This flagship program tackles malnutrition in children (below 6 years), pregnant women, lactating mothers, and adolescent girls (14-18 years). It focuses on improved nutrition and Early Childhood Care and Education (ECCE).

Eligibility:

- Children under 6 years old.
- Pregnant women and lactating mothers.
- Adolescent girls aged 14-18 years.

Benefits:

- **Nutritional Support:** The program provides hot cooked meals, take-home rations, and micronutrient supplementation.
- **Early Childhood Care and Education (ECCE):** It offers pre-school education, play-based learning activities, and health checkups for children.
- **Infrastructure Upgrade:** Upgradation of Anganwadi centers with improved facilities like LED screens, RO water purifiers, smart learning aids, and internet connectivity (where available).
- **Awareness Campaigns:** The program promotes awareness about nutrition, hygiene, and good health practices.

10.5. Mission Vatsalya (Ministry of Women and Child Development):

Aim: This mission focuses on ensuring the well-being, safety, and holistic development of children in challenging circumstances. It includes children in institutions, children in need of care and protection (CICP), and vulnerable children.

Eligibility:

- Children living in Child Care Institutions (CCIs) including orphanages, shelter homes, and observation homes.
- Children in Need of Care and Protection (CICP) like abandoned children, victims of abuse, neglect, or exploitation.
- Vulnerable children facing various risks or deprivations.

Benefits:

- **Improved Care and Protection:** The mission aims to strengthen the quality of care provided in CCIs through training staff, improving infrastructure, and ensuring access to education, healthcare, and rehabilitation services.
- **Child Tracking System:** It aims to strengthen the child protection system through a robust online tracking system for missing children.
- **Support for Foster Care:** The mission promotes foster care as an alternative care option for vulnerable children.
- **Life Skill Development:** It focuses on equipping children with life skills and vocational training for a brighter future.

10.6. Mission Shakti (Ministry of Women and Child Development):

Aim: This mission empowers rural women through economic and social empowerment initiatives. It fosters entrepreneurship, leadership skills, and financial inclusion for women.

Eligibility:

- Rural women of all ages, with a particular focus on marginalized communities.
- Self-Help Groups (SHGs) of women.

Benefits:

- **Skill Development & Entrepreneurship:** Mission Shakti provides skill development training to women to start and run micro-enterprises.
- **Financial Inclusion:** It promotes access to micro-credit and financial services for women entrepreneurs.
- **Leadership Development:** The mission empowers women through leadership training and capacity building programs.
- **Convergence:** It fosters collaboration with other government schemes for holistic women's development.

International Relations

1. India Russia Relations:

- Prime Minister Narendra Modi's visit to Russia, his first bilateral trip in his third term, has stirred reactions in the U.S. and Europe.
- The warm reception between Modi and Russian President Vladimir Putin drew criticism from Ukrainian President Volodymyr Zelenskyy and dissatisfaction from U.S. officials.
- India has emphasized its "freedom of choice" in foreign policy, trying to reassure that its broader perspective hasn't changed.
- The timing of Modi's visit, two years into the Ukraine conflict, is notable, especially since he previously skipped the India-Russia summits in 2022 and 2023.
- Modi's earlier public statements, such as "this era is not of war," indicated a cautious stance on the conflict.
- The nature of the Ukraine conflict has evolved: Russia faced significant early setbacks, including failed offensives, underestimated Ukrainian resistance, and heavy casualties.
- Currently, Russia is better positioned to maintain its territorial gains in eastern Ukraine, which it has reinforced through constitutional changes.
- Western countries are now pushing for a peace process following a conference in Switzerland (June 2024).
- India has concluded that a frozen conflict is the most likely outcome, with any change requiring a significant escalation by Ukraine and increased support from its Western allies.
- India anticipates a shift in Washington's stance with a potential change in U.S. leadership, as former President Donald Trump may be less committed to Kyiv and less antagonistic towards Moscow.
- Modi's visit to Russia reflects the belief that Russia has weathered the worst of the conflict and that continuing to disrupt annual summits would harm bilateral relations.
- The India-Russia joint statement's wording, referring to the conflict "around Ukraine" rather than "in Ukraine," subtly acknowledges Russian claims.
- India's appreciation for peace proposals in line with international law and the UN Charter indicates some alignment with Russian positions.
- India has abstained from criticizing Russia at the UN, including during a recent vote on July 11, 2024, regarding a ceasefire resolution.
- Despite interactions with Ukrainian officials and some humanitarian aid, India has hesitated on other Ukrainian requests, such as allowing Indian companies to assist with infrastructure and medical needs.

Keeping Russia from China

- Modi's visit to Moscow, shortly after canceling a trip to Astana for the SCO Summit, highlights his preference for meeting Putin over Chinese President Xi Jinping.
- This move contrasts with Western calls for China to reduce its support for Russia, rather than vice versa.
-

India and Russia have doubled rupee-rouble payments in 2024'

According to figures shared by Russia's state-controlled Sberbank, the number of transactions has also increased; despite Western sanctions, businessmen push for Indian manufacturers to look towards Moscow and counter China's inroads

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India and Russia have doubled their payments in national currencies (rupee-rouble) since last year despite sanctions by the U.S. and European Union, says Russia's state-controlled and largest bank, Sberbank, that handles a majority of payments for Indian exports to Russia. Rupee deposits by Indian corporates have also increased multi-fold in 2024.

According to figures shared by Sberbank, in January-June 2024, the volume of payments processed doubled from the January-June 2023 amount, and the number of transactions Sberbank handled increased by 80% in the first half of 2024.

While Sberbank has operated branches in India since 2010, sanctions were imposed by the U.S. in the immediate aftermath of Russia's invasion of Ukraine in February 2022, and then by the European

Union in July 2022.

The surge may rise further after Prime Minister Narendra Modi's visit to Moscow last week, economists and Indian businessmen working in Russia hope, warning that in the absence of the Indian rupee, Chinese businesses and the yuan would continue to benefit from the "vacuum" created by the exit of Western companies.

"We are witnessing an increase in trust towards the rupee from our clients. Today, not only have rupee-denominated current accounts become a reality, but also rupee deposits, which businesses are showing great interest in. Since the beginning of the year, the volume of corporate deposits in rupees has increased sixfold," a Sberbank spokesperson told *The Hindu* in response to queries about potential growth areas, adding that the rupee is now "easily convertible" in Russia, and that Sberbank hopes to serve as a "Sherpa" for more businesses given the



Boost to trade: Sberbank says it is witnessing an increase in trust towards the Indian rupee from its clients. REUTERS

\$100 billion trade target by 2030 set by Mr. Modi and Russian President Vladimir Putin during talks.

"Prime Minister Modi's journey to Moscow was very important because it was the first visit at a time when economic cooperation between the two countries has come to a qualitatively new level," said Lydia Kulik, Head of India Studies at the SKOLKOVO Institute for Emerging Market Studies, at Moscow School of Management. "Secure payment mechanisms, insu-

rance and logistics are among the most important areas to focus on," she added, listing auto and aviation components, chemicals, microelectronics, consumer electronics, machinery, medical devices and agricultural products as sectors in which Indian companies should consider exporting to Russia.

According to a growing number of Indian businessmen now based in Russia, the government must move quickly as China has taken more advantage of the sanctions to fill

the space vacated by nearly all Western brands, and already has bilateral trade of \$240 billion, which is more evenly balanced. At present, even Indian companies are being forced to consider payments in the Chinese yuan, they say.

"I think sanctions have created new opportunities, and China has gained a lot compared to India. Of course, the Indian government has been very positive about [trade with Russia], but somehow it has not been achieved on the same scale as China," explained Sukrit Sharan, a St. Petersburg-based board member of a joint venture between International Institute for Advanced Aerospace Technologies (IIAAT) and Indian firm Millennium Aerodynamics that produces "hybrid aerobots". "Indian businesses should come and venture into the market, they should fill up the Russian market with Indian products for which there is a vacuum in the region," he said.

- India prioritizes maintaining strong ties with Russia amid ongoing tensions with China at the Line of Actual Control, despite its partnerships with Western countries in the Indo-Pacific.
- The Biden administration's actions, including forming AUKUS and engaging various regional partners, have made some in New Delhi cautious.
- India's hesitation to fully commit to the Quad (India, Japan, Australia, U.S.) as a strategic entity risks limiting its effectiveness compared to other regional groups.
- The visit to Russia underscores India's strategic autonomy and serves as a reminder that India has multiple options in its foreign policy.

Geo-economics thrust

- Modi's visit to Russia should be viewed in terms of geo-economics as well as geopolitics.
- Despite the ongoing Ukraine conflict, Western sanctions on Russia will persist, allowing India to continue importing discounted Russian oil.
- India-Russia trade, which was previously around \$5 billion-\$10 billion, surged to \$65 billion last year and increased by 20% in early 2024.
- The growth is unsustainable without new payment mechanisms for oil imports, which the Modi-Putin summit addressed with a Joint Vision statement on trade by 2030.

- The summit also focused on boosting energy supplies from Russia and enhancing trade through the Chennai-Vladivostok maritime corridor.
- India and Russia are seeking mutual investments, with past deals including Rosneft's \$23 billion acquisition of Nayara Energy and Indian investments in Russian oil fields.
- The U.S. and Europe have not sanctioned these transactions, accepting processed Russian oil as "Indian products."
- India's interest in the North Sea trade route is strategic as it looks for new connectivity options, especially given potential U.S. restrictions on Iran-led projects.
- With reduced military hardware imports due to diversification and Russia's focus on Ukraine, these geo-economic strategies offer India new leverage in its relationship with Russia.
- The Moscow visit underscores Modi's commitment to strengthening India-Russia ties despite potential future uncertainties.

2. Trade imbalance, Indians in Russian Army among key concerns for diaspora

- Prime Minister Narendra Modi will address a community event in Moscow during his visit, attended by members of the Indian diaspora.
- Issues stemming from the Ukraine war will dominate discussions, including trade imbalances, payment issues, and concerns for Indians in the Russian military.
- The event will host over 500 invitees, including businessmen, students, and doctors among the Indian diaspora of approximately 14,000 working and 25,000-30,000 studying in Russia.
- Rameshwar Singh, an NGO leader in Russia, sees the post-Ukraine period as pivotal for India-Russia relations but notes a vacuum left by Western companies withdrawing, urging Indian companies to step in.
- He hopes the Modi-Putin meeting will address payment issues faced by existing Indian companies in Russia.
- The issue of Indians recruited by the Russian military and sent to the Ukraine warfront is causing concern among the Indian diaspora.
- Families in India are pressuring the Ministry of External Affairs to secure early discharge for these individuals.
- Indian Ambassador to Russia, Vinay Kumar, acknowledges this as a public concern and states that India has raised this issue bilaterally with Russia, including in meetings with Foreign Minister Sergey Lavrov.
- Students like Beenish, volunteering as interpreters during PM Modi's visit, hope that India-Russia strategic ties, which have slowed in recent years, will strengthen.
- There is optimism among students that Russia sees India as a trusted partner and expects Prime Minister Modi to discuss enhancing bilateral relations during his visit.

3. Iran: Limited Democracy:

- The Ebrat Museum in Tehran, Iran, is located near Imam Khomeini Square in the historic neighborhood once known as Maidan-e-Toopkhaneh.
- It was originally built in the 1930s by German engineers and served as the headquarters of SAVAK, the Shah's secret police, until the 1979 revolution.
- The museum features a three-storey structure with torture wings, numerous cells, echo corridors, and iron doors.
- Inside, there is a circular, roofless inner courtyard where sculptures of prisoners hang from iron grills, symbolizing the past practice of hanging and torturing prisoners.

- SAVAK used to torture prisoners in this building, with their screams echoing through the corridors and their suffering displayed in the courtyard.
- The museum displays images and names of hundreds of inmates, including Ayatollah Ali Khamenei, who is now the Supreme Leader of Iran.

History Repeats

- The Ebrat Museum in Tehran, Iran, was established in 2002 within a former prison once operated by SAVAK, the Shah's secret police.
- It serves as a museum to highlight the brutalities and repression under the Shah's royal dictatorship.
- The museum symbolizes the regime's portrayal of the Shah's era as oppressive, contrasting with the Islamic Revolution's promise of liberation.
- Despite the revolution's ideals, Iran has faced ongoing protests accusing the Islamic regime of similar repressive practices.
- Voter turnout in Iranian presidential and parliamentary elections has declined significantly in recent years.
- In the 2021 presidential election, won by hardliner Ebrahim Raisi, voter turnout dropped to 48%, a record low.
- A subsequent snap presidential election saw turnout decrease further to 39.9%, down from over 80% in 2009, raising questions about the regime's legitimacy and public discontent.

A Unique System

- Iran's political system is influenced by Shia clergy, granting them ultimate authority over critical state matters despite regular elections.
- The 1979 revolution, often termed the "Islamic revolution," involved diverse political factions including nationalists, liberals, leftists, and trade unionists.
- Ayatollah Ruholla Khomeini led the movement against Shah Mohammed Reza Pahlavi's monarchy, supported by various dissenting groups seeking freedom from dictatorship.
- The Shah, backed by the CIA in a coup against Prime Minister Mohammad Mossadegh, centralized power and suppressed political opposition through SAVAK.

GS Paper II: Iran

Waiting for a reformist

Iran's theocratic state is unlikely to give space to a popular reformist

As no candidate managed to win 50% vote in the first round of Iran's snap presidential elections, the country is headed for a run-off on July 5 between the top two vote getters – reformist Masoud Pezeshkian and conservative Saeed Jalili. Mr. Pezeshkian, a surgeon and lawmaker who was the Minister of Health in the government of reformist President Mohammed Khatami, won 42.5% votes, while Mr. Jalili, Iran's former chief nuclear negotiator, got 38.8% votes. Conservative Parliament Speaker Mohammad Baqer Qalibaf finished third with 13.8% vote share. The election, which was necessitated by President Ebrahim Raisi's death in a helicopter crash in May, is taking place at a crucial time for Iran. There is much public anger amid economic hardships and heightened cultural policing. Iran is facing pressure to rein in its proxies, mainly Yemen's Houthis and Lebanon's Hezbollah, particularly after the Israel-Hamas war began. Iran is also expanding its nuclear programme, defying international pressure, and tensions with Israel rocketed in April when Tehran launched a missile attack towards the Jewish state after its embassy building in Damascus was bombed. A new President, reformist or conservative, is unlikely to change core policies, but the highest elected official in the republic can have a say on how critical policies are being implemented.

In the past, reformist politicians such as Mr. Khatami and Hassan Rouhani won huge mandates on promises of change, but did little in opening up the system that is tightly controlled by the Shia clergy. The failure to reform the system from within and alleviate the economic woes, which are a result of the western sanctions, have turned sections of the electorate apathetic. There was a time when Iran's clerical rulers would invoke the high participation of voters as a measure of popular legitimacy for the revolutionary regime, which is partly representative and fully theocratic. If the voter turnout was above 80% in 2009, it was a record low this year – 39.9%. This is not a surprise. All branches of the state are under conservative control, and several reformist politicians were barred from contesting. Even if reformists win, they are constrained by unelected institutions such as the office of the Supreme Leader and the Islamic Revolutionary Guard Corps. The near-total dominance of the conservatives over the institutions and the clergy's refusal to change are hollowing out even the limited democracy that the revolution had promised. Economic hardships and repression over the Islamic code are adding fuel to the fire. Iran can take pride that it held a presidential election amidst crises. But its rulers should also take a cue from the growing dissent and falling voter interest, and be ready for political and social reforms.

- Historical precedents of political rebellion in Iran, such as the 1896 assassination of Naser al-Din Shah and the Constitutional Revolution of 1905-1911, underscore Iranians' history of defiance.
- Reza Shah Pahlavi's authoritarian rule and suppression of protests eventually led to his overthrow in 1979.
- Khomeini returned from exile and established an Islamic revolutionary government, combining elected institutions with clerical oversight under the concept of Vilayat-e Faqih (Guardianship of the Islamic Jurist).

Clerical Control

- Iran's political system features both elected and unelected branches, where unelected entities hold more power.
- Elected branches include the President, Parliament (Majles), and Assembly of Experts.
- Unelected branches include the Supreme Leader, Guardian Council, and Expediency Council, appointed by the clergy.
- The President manages day-to-day government affairs but is not the head of state.
- The Supreme Leader serves as both the political leader and spiritual guide, holding the highest authority in Iran.
- Presidential terms are limited to four years with a maximum of two consecutive terms.
- Election processes are generally deemed fair, though the Guardian Council vets candidates and can disqualify a significant majority.
- The Majles, with 290 members, legislates but its bills must pass through the Guardian Council for compliance with Islamic principles.
- The Guardian Council, composed of religious and legal experts, is influenced by the Supreme Leader's office, controlling elections and holding veto power over Parliament.

Absolute Authority

- The Supreme Leader of Iran does not have a fixed term unlike the President.
- Since the 1979 revolution, Iran has had two Supreme Leaders: Khomeini (died in 1989) and Khamenei.
- The 88-member Assembly of Experts is tasked with electing and overseeing the Supreme Leader.
- Candidates for the Assembly are vetted by the Guardian Council, indirectly controlled by the Supreme Leader.
- In case of disputes between the elected Majles and unelected Guardian Council, the 45-member Expediency Council, appointed by the Supreme Leader, holds ultimate adjudicating powers.
- The Supreme Leader serves as Commander-in-Chief of Iran's armed forces and has significant influence over all branches of the state, ensuring clerical control per the Islamic Constitution.

Principalists and Reformists

- Iran's political landscape divides broadly into two groups: principalists (hardliners) and reformists.
- Principalists are conservative and supported by the clergy, advocating for traditional values and policies.
- Reformists seek political and social reforms from within the system.

- Mohammad Khatami's election as President in 1997 marked a significant moment for reformist politics, but major changes were not realized during his tenure.
- Hassan Rouhani, another reformist President, served before Ebrahim Raisi, a principalist who is the current President.
- Recent presidential elections in Iran resulted in a runoff between reformist Masoud Pezeshkian and conservative Saeed Jalili.
- After the 1979 revolution, Ayatollah Khomeini consolidated clerical rule amidst internal dissent and the Iran-Iraq war.
- Iran's current political system faces challenges including mass protests, state violence, economic crises, and declining public interest in elections.
- Despite challenges, Iranian leaders aim to project stability and continuity in governance.

4. India- Myanmar Relations:

- Conflict between **ethnic armed organizations (EAOs)** and Myanmar's military junta has led to a severe humanitarian crisis.
- The UN Security Council discussed this crisis on July 3, highlighting its international significance.
- Experts suggest India should **re-evaluate its Myanmar policy due to:**
 - a. Direct impact on India, including an influx of refugees.
 - b. EAOs receiving support from China, contrasting with China's relations with the military junta.
 - c. Control of major trade routes linking India, Myanmar, China, and Thailand by resistance groups.
- Nandita Haksar emphasizes that since October 2023, EAOs and the People's Defence Force have coordinated efforts, holding 45% of Myanmar's territory.
- Rajiv Bhatia argues for a policy review, noting Myanmar's evolving situation where the military struggles to maintain control despite widespread opposition.
- He stresses India's goals: fostering bilateral relations, incorporating Myanmar in its 'Act East' policy, and balancing Indian and Chinese influences.
- Bhatia suggests consulting national and regional experts to ensure stability in Myanmar, crucial for the collective interests of neighboring countries like Thailand, Bangladesh, Laos, and potentially China.
- Nandita Haksar suggests that while Myanmar's situation is in flux, India should start providing humanitarian assistance, especially in border areas.
- She emphasizes that Myanmar's people lack basic necessities like water, sanitary napkins, and medical facilities for surgeries.
- Haksar believes offering humanitarian aid could improve India's relations with Myanmar and help those affected by the conflict.
- She acknowledges India's past support for Myanmar's democracy movements but notes limitations in operational freedom for groups like the National Unity Government in Delhi.
- Providing humanitarian aid is seen as a less controversial intervention to assist Myanmar's people and potentially negotiate for rebuilding bombed villages.
- Rajiv Bhatia points out the complexity, acknowledging Myanmar's divided governance where some areas are controlled by non-central authorities.
- He advises India to engage with Naypyidaw, Myanmar's administrative capital, to explain humanitarian efforts are in mutual interest despite governance complexities.

- Bhatia suggests this approach could enhance India's humanitarian reputation while navigating Myanmar's internal governance sensitivities.
- Bangladesh Prime Minister Sheikh Hasina suggested an international plan to create a Christian state in Myanmar, reflecting concerns about potential fragmentation.
- Rajiv Bhatia acknowledges these concerns as indicative of a Balkanization risk, detrimental to Myanmar's people and regional stability.
- India engages in Track 1.5 and Track 2 dialogues with Myanmar through initiatives like the Bangkok process, aiming for regional stability.
- Nandita Haksar notes discussions in Northeast India about a proposed Kuki state spanning into Myanmar, influencing Hasina's comments.
- She highlights the need for dialogue between Myanmar's National Unity Government (NUG) and the military junta to discuss federal structures, amid resistance from armed groups.
- Haksar stresses India's interest in Myanmar's federal dialogue to prevent Balkanization, which could impact India directly.
- Rajiv Bhatia advises the Indian government to maintain communication with Myanmar's military while leveraging influence to address humanitarian crises.
- He emphasizes the importance of stability and prosperity in Myanmar for the well-being of its people and neighboring countries like India.

5. China:

Freedom and control in Xinjiang

The north-western province in China is home to more than 50 'ethnic minorities', most of whom are Uyghur Muslim. For several years, the Chinese Communist Party has been accused of persecuting the community and attempting to erase their culture. Radhika Santhanam reports on the overarching emphasis on assimilation and nationalism in Xinjiang, a rapidly developing province which is crucial to the country's Belt and Road Initiative

- Nine musicians dressed in bright outfits perform at an accordion museum in Yining city, Xinjiang, China, on Eid-Ul-Adha, June 17.
- Thousands of tourists and locals enjoy street food, performances, and drinks despite the heat.
- Musicians introduce themselves by ethnicity (Uyghur, Kazhak, Mongolian, Uzbek, etc.) and proclaim, "We are all part of the Chinese nation."
- Xinjiang Uyghur Autonomous Region is home to 56 ethnic groups and followers of various religions including Islam, Taoism, Buddhism, and Christianity.
- China faces accusations of committing crimes against humanity against mostly Muslim ethnic groups in the region, particularly Uyghurs.
- Reports claim Uyghurs are detained and abused in "detention centres," but China denies this, calling them "education and vocational training centres."
- In 2019, Xinjiang's regional government announced plans to gradually close these centres if they are no longer needed.
- Studies claim Han Chinese population in Xinjiang has grown while Uyghur population declined since 1949.

Official data shows Uyghur population grew from 3.6 million in 1953 to 11.6 million in 2020, partly due to exemptions from China's one-child policy.

The 'Sinicisation' of Religion

- Imam Ma Jirong of the Shaanxi mosque in Yining dismisses accusations against China as exaggerated.
- The mosque, built in traditional Chinese architectural style, lacks domes and minarets, and the call to prayer is only heard within the premises.
- The mosque's construction involved multiple ethnic communities, symbolizing Xinjiang's integration with China.
- Imam Abud Rakev Tumunyaz of the Xinjiang Islamic Institute emphasizes the "Sinicisation" of religion, adapting it to Chinese socialism.
- Tumunyaz argues there is no contradiction between Chinese socialism and Islam, as both prioritize people's happiness.
- The Kuqa mosque has traditional Islamic features, and the Islamic Institute's library houses Korans in Uyghur, Arabic, and Chinese.
- Standard Chinese is promoted in public education in Xinjiang, with lessons not taught in Uyghur or other local languages.
- A government booklet claims ethnic minorities are enthusiastic about learning Chinese and that ethnic languages are used in various public domains.
- The Chabuchar Daily newspaper in the Xibo language is published twice a week for the 30,000 Xibo speakers, showcasing government support for ethnic cultures and languages.

Deradicalisation Programme

- Ma and Tumunyaz stress the importance of laws and regulations for practicing Islam in China.
- Government designates areas for prayers and religious activities.
- Students at the Kuqa Islamic Institute learn the Koran, Chinese culture and history, and laws and regulations about religion.
- Xinjiang has a history of terror attacks, with the government blaming the East Turkestan Islamic Movement.
- China combats extremism, terrorism, and separatism through "education and vocational training centres."
- The curriculum in these centres includes learning Chinese, studying the law, and acquiring vocational skills.
- Uyghurs have spoken against these centres, and some ethnic minorities have fled China.
- Three Uyghurs who fled to India in 2013 have been in jail since, facing India's Public Safety Act.
- China tightens internet control to combat international influence and terrorism.
- Security in Xinjiang has improved, but some areas still have high security.
- Tumunyaz emphasizes that religion is not extremism but states that overt religiosity is discouraged.
- Tumunyaz, president of the Xinjiang Islamic Institute and vice chairman of the Chinese Islamic Association, handles Islam-related inquiries.

Thrust on Development

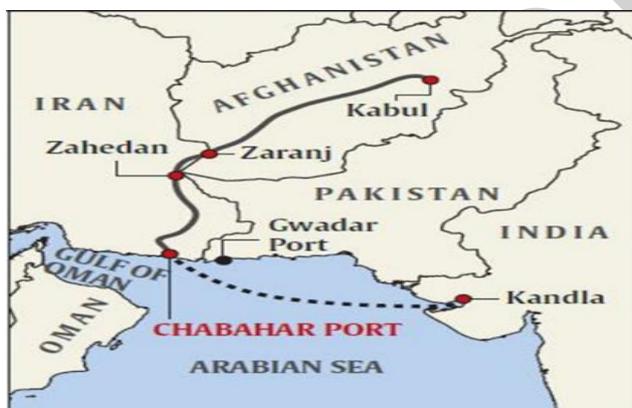
- The message of national unity is emphasized due to Xinjiang's strategic location, bordering several countries.
- Xinjiang is crucial for China's Belt and Road Initiative (BRI), linking Asia, West Asia, and Europe.

- Historically poor, Xinjiang has seen significant development with improved infrastructure and various industries.
- Xinjiang's GDP grew from \$167.2 billion in 2017 to \$278.4 billion in 2022.
- Tourism is a major revenue source, with attractions highlighting Uyghur culture and heritage.
- The concept of "museum-style multiculturalism" is noted by Professor James Leibold, while China claims it's protecting ethnic minority culture.
- Emphasis on ethnic group involvement in BRI-related projects, e.g., 20% ethnic staff at the Automobile Guangzhou Car Motor Company.
- The Xinjiang Software Park, part of the Digital Silk Road, supports economic development and societal stability.
- Surveillance is used to maintain stability, monitoring traffic, livestock, and movement, attributed to past terrorism influences.

6. International Organizations/Groups/Institutes/Cooperations:

6.1. International North-South Transport Corridor (INSTC):

- Iran is a crucial member of the INSTC, which is a multi-modal transportation network connecting India, Iran, Russia, and several Central Asian countries.
- The main participants in the INSTC include India, Iran, Russia, Azerbaijan, Kazakhstan, Turkmenistan, and Oman. Other countries in the region are also involved in various capacities.
- The corridor aims to shorten the transportation time for goods traveling between South Asia, Iran, and Europe by bypassing traditional routes through the Suez Canal.



Chabahar Port Development:

- Located in southeastern Iran, Chabahar Port is being developed in collaboration with India and Afghanistan.
- It serves as a strategic transit hub, providing India with access to Afghanistan and Central Asia while bypassing Pakistan.

The port's development aims to enhance trade and connectivity in the region.

6.2. The International Organization for Migration (IOM)

- The International Organization for Migration (IOM), established in 1951, is the leading intergovernmental organization dedicated to promoting humane and orderly migration.



- As a related organization within the United Nations system, IOM operates in over 171 countries with more than 550 field offices worldwide.

Mission and Objectives

- IOM is committed to the principle that humane and orderly migration benefits both migrants and society.
- The organization aims to ensure the dignity and well-being of migrants, manage migration effectively, and provide aid in migration crises.
- IOM's work is guided by the principles of the UN Charter, focusing on human rights and sustainable development.

Key Areas of Work

1. **Migration Management:** IOM assists governments in managing migration flows, promoting migration policies that respect human dignity and are economically beneficial.
2. **Crisis Response:** The organization provides emergency assistance, including shelter, healthcare, and psychosocial support, to migrants affected by natural disasters or conflicts.
3. **International Cooperation:** IOM fosters cooperation between countries to address migration challenges collectively.
4. **Data and Research:** IOM conducts research to inform migration policies and practices, ensuring they are based on accurate data and analysis.

Strategic Initiatives

IOM supports the 2030 Agenda for Sustainable Development by addressing migration-related issues that intersect with humanitarian assistance and long-term development goals. Some of its key initiatives include:

- **Gender Equality:** Promoting the rights and well-being of migrant women and ensuring their equal participation in migration processes.
- **Environment and Climate Change:** Addressing the impact of environmental changes on migration and developing strategies to manage climate-induced displacement.
- **Countering Xenophobia:** Promoting social cohesion and countering negative attitudes towards migrants.

Organizational Structure

- IOM is led by a Director General and a Deputy Director General, supported by various offices focusing on strategy, partnerships, advocacy, and performance.
- The organization operates through regional and country offices to implement its programs and provide support on the ground.

Partnerships

- IOM collaborates with a range of partners, including governments, NGOs, and the private sector, to enhance its capacity to address migration challenges.

6.3. The importance of both Quad and BRICS:

- The Quad Foreign Ministers' meeting in Japan, after a 10-month break, highlights ongoing global issues.
- The UNSC is ineffective, and international laws are being violated in Ukraine and Gaza.
- An axis of Russia, China, North Korea, and Iran is gaining influence.
- Chinese influence is growing globally, including in the Indo-Pacific.
- The U.S. is seeking partners like India for joint security initiatives and pluri-lateral groupings.

- ASEAN countries are becoming more vulnerable, with the South China Sea remaining a conflict zone.
- India's involvement in both Quad and BRICS presents strategic challenges and opportunities.
- India supports Quad's strategic goals, boosted by U.S. President Biden's endorsement.
- India's UNSC presidency in August 2021 focused on enhancing maritime security, emphasizing its commitment to the Indo-Pacific.

India's role in the Quad

- Quad aims to reshape the Indo-Pacific's security and techno-economic landscape, addressing critical technologies like digital, telecom, health, power, and semiconductors.
- India benefits from stronger bilateral relations with Quad partners, especially the U.S.
- AUKUS, formed by the U.S., Australia, and the U.K., focuses on military capabilities and deterrence against China, influencing India's approach to security in the Indo-Pacific.
- India's reluctance to fully embrace a security-focused Quad vision contrasts with the military-centric AUKUS approach, though India values its role in Quad beyond a military alliance.
- India's independent stance on Russia and the Ukraine war, and its call for diplomatic solutions, do not weaken its Quad engagement.
- India's involvement with BRICS is complex; while India helped found BRICS and supports its multilateral reform goals, it is cautious due to China's dominant role and its use of BRICS to challenge the West.
- BRICS initiatives like the New Development Bank and Contingent Reserve Arrangement are pioneering, but China's influence makes India wary of elevating BRICS' profile.

The potential of BRICS

- India was initially reluctant to expand BRICS, with Putin also expressing similar concerns in 2018.
- The changing global dynamics, including the Quad's activities and the situation in Ukraine, shifted Russia's stance, aligning with China on BRICS expansion.
- With Brazil's leadership change, India is now the primary country resisting China's influence within BRICS.
- India has decided to accept BRICS expansion rather than oppose it, with many new countries interested in joining.
- India needs to actively engage in BRICS to ensure its interests are supported and cannot afford to neglect its role in either BRICS or Quad.

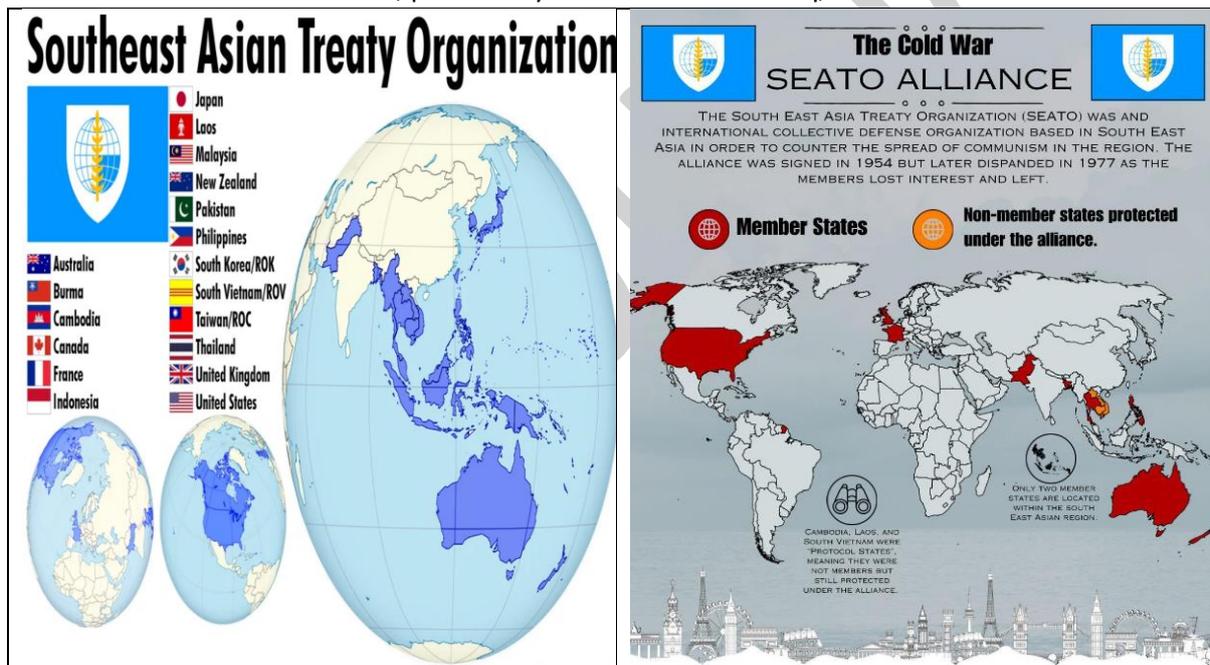
6.4. Southeast Asia Treaty Organization (SEATO)

- **Formation:** Established in 1954 in Manila, Philippines.
- **Members:** Australia, France, New Zealand, Pakistan, Philippines, Thailand, the United Kingdom, and the United States.
- **Purpose:** Created as a regional defense pact to prevent the spread of communism in Southeast Asia, particularly following the fall of Vietnam to the North Vietnamese communist forces. It was a Cold War response to the rise of communist influence in the region.
- **Key Actions:**
 - Provided military and economic aid to member states.
 - Held joint military exercises and training programs.
 - Condemned communist activities in the region.

- **Dissolution:** Disbanded in 1977 due to internal disputes and the changing political landscape. The decline of communist threat, the Vietnam War, and the emergence of new regional alliances played a role in its demise.

6.5. Central Treaty Organization (CENTO)

- **Formation:** Established in 1955 in Baghdad, Iraq.
- **Members:** Iran, Iraq, Pakistan, Turkey, and the United Kingdom. (The United States was a strong supporter but not a formal member.)
- **Purpose:** Aimed at containing the Soviet Union's influence in the Middle East and Central Asia. It was also a response to the Warsaw Pact, the communist military alliance established by the Soviet Union.
- **Key Actions:**
 - Conducted joint military exercises and training programs.
 - Shared intelligence on Soviet activities.
 - Promoted economic cooperation among member states.
- **Dissolution:** Disbanded in 1979 due to internal conflicts, the rise of Islamic nationalism, and the changing geopolitical landscape. The Iranian Revolution and the growing tensions between member states, particularly between Iran and Iraq, led to its demise.



6.6. The Shangri-La Dialogue

- The **Shangri-La Dialogue**, officially known as the **IISS Asia Security Summit**, is an annual inter-governmental security forum held in Singapore.
- Organized by the **International Institute for Strategic Studies (IISS)**, it takes its name from the Shangri-La Hotel in Singapore, where the event has been hosted since its inauguration in 2002.

Purpose and Objectives

The Dialogue aims to enhance regional security through multilateral cooperation, providing a high-level platform for defense ministers, military chiefs, and policymakers from the Asia-Pacific region and beyond. Key objectives include:

- Facilitating open discussions on security challenges.
- Promoting transparency in military expenditures and intentions.
- Building mutual understanding and trust among nations.

Participants

The forum sees participation from over **20 countries**.

Key participants include:

- **United States:** A regular and prominent participant, often using the platform to reaffirm its security commitments in Asia.
- **China:** Often discusses its strategic priorities and responses to regional issues.
- **Japan:** Addresses its security policies and regional concerns.
- **India:** Discusses its role in regional security dynamics.
- **ASEAN member states:** Engage in dialogues addressing regional security from their respective perspectives.
- **Other countries:** Including South Korea, Australia, the United Kingdom, France, Germany, and sometimes Russia.

Key Features

- **Plenary Sessions:** Senior officials deliver keynote speeches on current security issues. These sessions set the groundwork for further discussions.
- **Special Sessions and Breakout Groups:** These smaller, focused meetings allow for in-depth discussions on specific security topics.
- **Bilateral and Multilateral Meetings:** On the sidelines, participants often conduct private meetings to discuss sensitive issues bilaterally or in small groups.
- **Networking Opportunities:** The forum provides a significant opportunity for defense officials to build and strengthen international relationships.

Historical Context

- The inception of the Shangri-La Dialogue was a response to increasing security tensions in the Asia-Pacific, particularly due to China's rise, North Korea's belligerence, and various territorial disputes in the South China Sea.
- Over the years, it has grown in prestige and influence, considered a key fixture in the region's security calendar.

Major Themes and Issues

1. **China's Military Role:** Discussions often revolve around China's growing military capabilities and its strategic intentions, especially in the South China Sea and Taiwan Strait.
2. **US Engagement:** The US uses the Dialogue to affirm its commitment to the region, discussing its strategic policies and alliances.
3. **South China Sea Disputes:** The territorial conflicts involving China, the Philippines, Vietnam, Malaysia, Brunei, and Taiwan are frequently debated.
4. **North Korean Threat:** The forum addresses North Korea's nuclear and missile programs and ways to mitigate this threat.
5. **Counter-Terrorism:** Discussions on how to combat terrorism, especially in Southeast Asia, are key topics.
6. **Cyber Security:** With increasing threats of cyber warfare, the Dialogue explores strategies for cyber defense cooperation.
7. **Defense Modernization:** Spending on and modernization of military forces in the region are regularly reviewed.

Achievements and Impact

While the Shangri-La Dialogue does not produce actionable agreements, it has a significant impact:

- **Policy Influence:** The discussions influence national security policies.
- **Diplomatic Channel:** It opens unofficial communication lines, sometimes leading to greater diplomatic initiatives.
- **Confidence Building:** Promotes greater transparency and trust among participating nations.
- **Strategic Clarity:** Provides clarity on the strategic intentions of major military powers.

Criticisms and Challenges

- **Dominance of Major Powers:** Some argue that the dialogue mainly serves the interests of major powers, like the US and China, at the expense of smaller nations.
- **Rhetorical Outcomes:** Critics point out that the discussions often don't result in concrete policy actions or resolutions.
- **Balancing Interests:** The forum faces the challenge of balancing the diverse and sometimes contradictory interests of participating countries.
- **Non-binding Nature:** The non-binding nature of the forum can limit its practical impact on immediate security issues.

Locations and Participating Countries on the Map

Here are the key countries involved, with a brief indication of their geopolitical context:

- **United States:** Engages with Asia-Pacific countries to maintain its influence and alliances.
- **China:** Located in East Asia, it is a central figure in many of the region's security discussions.
- **Japan:** An East Asian country with substantial regional influence.
- **India:** A South Asian power actively involved in regional security dynamics.
- **Australia:** In the Pacific region, actively engages in Asia-Pacific security dialogues.
- **ASEAN Member States:**
 - **Singapore:** The host country, strategically positioned at a global maritime crossroads.
- **Indonesia, Malaysia, Philippines, Vietnam, Thailand, Brunei, Myanmar, Cambodia, Laos:** These Southeast Asian nations are directly involved in regional security concerns.

6.7. The Shanghai Cooperation Organisation (SCO) summit:

It is a yearly meeting of the heads of member states of the SCO.

Establishment and Background

- **Origins:** Established in 2001, the SCO evolved from the Shanghai Five, formed in 1996.
- **Founding Members:** China, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan initially formed the Shanghai Five.
- **Expansion:** In 2001, Uzbekistan joined, expanding the organization to the SCO.
- **Initial Expansion:** India and Pakistan joined in June 2017, expanding the SCO to eight member states.
- **Recent Addition:** Iran became a member in July 2023.
- **Recent Members:** China, India, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, Uzbekistan.
- **Headquarters:** Beijing, China

24th SCO Council of Heads of State Meeting (SCO Summit)

- **Date and Location:** July 4, 2024, in Astana, Kazakhstan.
- **Presidency:** Hosted by Kazakhstan.

Indian Delegation and Leadership

- **Leader:** External Affairs Minister, Dr. S. Jaishankar, will lead the Indian delegation.

India's Priorities in SCO (SECURE Vision)

- **Vision:** Prime Minister's vision of a 'SECURE' SCO.
- **Meaning of SECURE:**

- **Security:** Enhancing regional security cooperation.
- **Economic Cooperation:** Promoting economic ties and collaboration.
- **Connectivity:** Improving regional connectivity infrastructure.
- **Unity:** Strengthening unity among SCO member states.
- **Respect for Sovereignty and Territorial Integrity:** Upholding principles of sovereignty and territorial integrity.
- **Environmental Protection:** Commitment to environmental sustainability.

Organizational Structure

- **Heads of State Council (HSC):**
 - **Role:** Supreme decision-making body.
 - **Meetings:** Convenes annually to set policies and strategic directions.
- **Secretary-General:**
 - **Current Official:** Zhang Ming.
- **Regional Antiterrorist Structure (RATS):**
 - **Purpose:** Coordinates efforts among member states to combat terrorism.
- **Operational:** Functions within the SCO framework to enhance regional security.

6.8. Asian Infrastructure Investment Bank (AIIB):

- **Formation:** The AIIB was founded in 2015 and is headquartered in Beijing, China. It is a multilateral development bank initiated by China with the aim of providing financing for infrastructure projects in the Asia-Pacific region.
- **Membership:** The AIIB consists of over 100 member countries from Asia, Africa, Europe, and the Americas, including major economies like China, India, and members of the European Union.
- **Purpose:** The primary objective of the AIIB is to address the infrastructure financing gap in the region by investing in projects related to transportation, energy, telecommunications, water supply, and sanitation. It aims to promote sustainable development, regional connectivity, and poverty reduction.
- **Governance:** The AIIB follows a governance structure where decisions are made by its member countries based on voting rights. It emphasizes transparency, inclusivity, and accountability in its operations.
- **Projects:** The AIIB funds a variety of infrastructure projects, including sustainable energy initiatives, urban development programs, and cross-border connectivity projects across Asia.

6.9. New Development Bank (NDB):

- **Formation:** The NDB, also known as the BRICS New Development Bank, was established in 2014 by the BRICS countries (Brazil, Russia, India, China, South Africa) during the BRICS Summit in Fortaleza, Brazil.
- **Membership:** The NDB is jointly owned by its five founding members, with each country having an equal share in the bank's capital and voting rights.
- **Purpose:** The NDB focuses on financing sustainable infrastructure projects and promoting development in BRICS countries and other emerging economies. Its key areas of focus include renewable energy, transportation, water infrastructure, and social development projects.
- **Governance:** The NDB operates on the principles of equality, democracy, and mutual benefit among its member countries. Decisions are made through a consensus-based approach that reflects the interests of all member countries.

- **Projects:** The NDB provides financial support for projects that promote sustainable development, environmental protection, and economic growth in member countries. It aims to contribute to the global infrastructure development agenda and address challenges faced by emerging economies.

6.10. BIMSTEC: Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

BIMSTEC is an international organization connecting seven South Asian and Southeast Asian countries bordering the Bay of Bengal.

- **Founding:** Established on 6th June 1997, in Dhaka, Bangladesh.
- **Members:** The member countries of BIMSTEC are Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.
- BIMSTEC headquarters is located in **Dhaka, Bangladesh**.
- **Objectives:** BIMSTEC focuses on promoting regional cooperation in various sectors including trade, technology, energy, transport, tourism, fisheries, agriculture, counter-terrorism, environment, culture, and people-to-people contact.
- **Structure:** BIMSTEC summits are held every two years, with a Ministerial Meeting preceding each summit. The organization also has a permanent Secretariat located in Dhaka, Bangladesh.
- **Recent Activities:** The website highlights recent meetings of BIMSTEC Expert Groups on Cultural Cooperation and Fisheries and Livestock, finalizing plans of action in these areas.



6.11. SAARC: South Asian Association for Regional Cooperation

SAARC is a regional intergovernmental organization and geopolitical union of states in South Asia.

- **Member States:** There are eight member states: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Founding:** Established on December 8, 1985, in Dhaka, Bangladesh.
- **Headquarters:** Kathmandu, Nepal.
- **Goals:**
 - Promote the welfare of the peoples of South Asia and improve their quality of life.
 - Accelerate economic growth, social progress and cultural development in the region.
 - Provide all individuals the opportunity to live in dignity and to realize their full potentials.

Economy

1. Banking:

1.1. Indian Banks' Association (IBA) Banks

IBA banks refer to the member banks of the Indian Banks' Association (IBA), which includes a wide range of banks operating in India. These include:

- **Public Sector Banks (PSBs):** Banks where the majority stake is held by the government. Examples include State Bank of India (SBI) and Punjab National Bank (PNB).
- **Private Sector Banks:** Banks where the majority stake is held by private shareholders. Examples include HDFC Bank and ICICI Bank.
- **Foreign Banks:** Banks incorporated outside India but operating within the country. Examples include Citibank and HSBC.
- **Cooperative Banks:** Banks organized on a cooperative basis and owned by their members. Examples include Saraswat Bank and Cosmos Bank.
- **Regional Rural Banks (RRBs):** Banks aimed at serving rural areas, jointly owned by the central government, the state government, and sponsor banks.

1.2. Non-Banking Financial Companies (NBFCs)

NBFCs are financial institutions that provide banking services without meeting the legal definition of a bank. They are regulated by the Reserve Bank of India (RBI). Key characteristics include:

- **Services Offered:** Provide loans, credit facilities, retirement planning, underwriting, and investment in stocks, but do not offer traditional banking services like accepting deposits repayable on demand.
- **Types of NBFCs:**
 - **Asset Finance Companies (AFCs):** Finance physical assets.
 - **Investment Companies (ICs):** Deal in securities.
 - **Loan Companies (LCs):** Provide loans.
 - **Infrastructure Finance Companies (IFCs):** Finance infrastructure projects.
- **Examples:** Bajaj Finance, Shriram Transport Finance.

1.3. Small Finance Banks (SFBs)

- **SFBs** are a type of bank licensed by the RBI to provide basic banking services to the underserved and unserved sections of society, including small business units, small and marginal farmers, micro and small industries, and unorganized sector entities. Key characteristics include:
- **Objective:** Focus on financial inclusion by providing savings vehicles and supplying credit to small business units, small and marginal farmers, micro and small industries, and other unorganized sector entities.
- **Services Offered:** Accept deposits and provide loans and other financial services.
- **Regulation:** SFBs are subject to prudential norms and regulations similar to other commercial banks.
- **Examples:** Ujjivan Small Finance Bank, Equitas Small Finance Bank.

1.4. Differences Between IBA Banks, NBFCs, and SFBs

Feature	IBA Banks	NBFCs	SFBs
Regulation	Regulated by RBI, governed by Banking Regulation Act	Regulated by RBI, not governed by Banking Regulation Act	Regulated by RBI, similar norms as commercial banks
Deposit Acceptance	Can accept all types of deposits	Cannot accept demand deposits	Can accept all types of deposits
Credit Creation	Engages in credit creation	Engages in credit creation	Engages in credit creation
Services Offered	Full range of banking services	Limited to loans, credit, investments, but no demand deposits	Focus on financial inclusion, accept deposits, provide loans
Primary Customers	General public, businesses, government	Retail customers, businesses	Underserved and unserved sections, small businesses
Examples	SBI, HDFC Bank, ICICI Bank	Bajaj Finance, Shriram Transport Finance	Ujjivan Small Finance Bank, Equitas Small Finance Bank

2. Infrastructure:

2.1. Urban Transformation Strategies:

An outlining of urban transformation strategies

GS Paper III:

Cities are home to about 50 crore people, accounting for about 36% of India's population. The urban population has been growing at a steady pace of 2% to 2.5% annually. The ever-growing pace of urbanisation in India calls for sustained investments, with a vision and determination. The maiden Budget of the new government has recognised cities as the growth hubs and offered many options and opportunities for the planned development and the growth of cities.

The issue of housing

The Pradhan Mantri Awas Yojana (Urban) has been under implementation since 2015 and has provided as many as 85 lakh housing units for the Economically Weaker Sections (EWS)-Middle Income Groups (MIG) categories of population, with an investment of about ₹8 lakh crore. Of this, a quarter has been provided by the central government and the remaining by the beneficiaries and State governments. The Budget has proposed to give a further push to the scheme by announcing support for the construction of another one crore such units in urban areas with an investment of ₹10 lakh crore, which will include central assistance of ₹2.2 lakh crore in the next five years, against which ₹30,171 crore has been provided in the Budget for the current year. A part of this allocation will be available to provide interest subsidy to facilitate loans at affordable rates.

The migrant population working in industries has been surviving in general in slums and yearning for a roof over their heads and a functional housing unit close to their workplaces. The Budget has announced new rental housing with dormitory-type accommodation for industrial workers. This is envisaged to be developed in public-private partnership (PPP) mode with upfront financial support under the Viability Gap Funding (VGF) scheme. This is to the extent of 20% from the central government, with the possibility of similar support from the State government.

The core infrastructure requirement for cities includes water supply, sanitation, roads and sewerage systems. Specific to the cities, the Atal



Sudhir Krishna
former Secretary,
Urban Development,
Government of India

Mission for Rejuvenation and Urban Transformation (AMRUT) provides ₹8,000 crore, which, by itself, may not appear to be very substantial. However, the Finance Minister has announced the availability of the VGF window, provided that the project is taken up as a commercial venture in PPP Mode. Most cities have, over the years, got exposed to the PPP model, and it should be possible to speed up the development of such core infrastructure, where it is unavailable and upgrade it where it exists but is inadequate.

The Budget Speech also mentions a huge investment of ₹11.11 lakh crore for capex in infrastructure. While this would include highways and many other sectors, cities can also make efforts to partake a share in it. Similarly, a provision of ₹1.50 lakh crore is made available to States as an interest-free loan for infrastructure development. States could use this window also, for cities.

The Smart Cities Mission, that was launched in 2015, was provided budgetary support of ₹8,000 crore in 2023-24, which has been scaled down to ₹2,400 crore in 2024-25, to take care of the remnant commitments. However, a new window, the National Urban Digital Mission (NUDM), has been opened in this Budget, with a provision of ₹1,150 crore, with a focus on the digitisation of property and tax records and their management, with GIS mapping. These will help urban local bodies in managing their finances better, and also help property owners.

On city planning

The Budget has declared the intention of focusing on the planned development of cities. Municipalities would get the normal 'Finance Commission Grant' of ₹25,653 crore. In addition, a provision of ₹500 crore has been made for the incubation of new cities. With the development of mass rapid transit systems, cities can embark on transit-oriented development, wherein transit hubs can be surrounded by denser development without creating a traffic overload on roads. Moreover, a well-designed mobility plan can conveniently connect cities with their peri-urban areas and 'new cities'. Accordingly, the Budget

has announced an enhanced focus on economic and transit planning, with the orderly development of peri-urban areas utilising town planning schemes. The Budget has also proposed encouraging electric bus systems for cities and has provided ₹1,300 crore for it. E-buses offer an economical and eco-friendly operating system, but the main challenge is their higher upfront cost. However, with this budgetary support, it should get going.

Solid waste management

Solid waste management (SWM) is perhaps the biggest challenge that most cities face today. The Budget has announced a special thrust to introduce bankable projects for SWM in collaboration with State government and financial institutions. States and municipalities can also make use of the VGF for this purpose. Cities such as Indore, Madhya Pradesh, have shown the way in making SWM a financially viable proposition.

The Street Vendors Act, 2014, was enacted by Parliament to regulate street vendors in public areas and protect their rights. It also envisaged the preparation of street-vending plans and the creation of street-vending zones, with a view to make street-vending a healthy and safe option for consumers and vendors. The Budget has proposed to develop 100 weekly 'haats' or street food hubs in select cities. Perhaps States need not feel constrained with the number and can facilitate all cities in preparing street-vending plans and developing street vending 'haats' in various parts of the city, according to felt needs.

While the Budget has made a slew of provisions, financial as well as procedural, to push for planned urbanisation, cities, represented by the municipalities, and guided by the respective State governments, will have to show the vision and the determination to incorporate all the resources coming not only from the Union Budget but also augmented by their own resources.

Above all, the participation of citizens would remain the bedrock for the success of any city's development strategy.

The views expressed are personal

2.2. Slow Progress on Railway Safety:

- Kavach system deployed in just 2.14% of India's railtrack coverage; capex deployment increased by 77% over past five years; electronic interlocking systems in 46% stations.
- The Economic Survey 2023-24 highlights concerns about railway safety after recent accidents.
- Progress on safety improvements, like the automatic train protection system Kavach and signalling system updates, is limited.
- Kavach has been installed on 1,465 route kilometers, which is only 2.14% of India's total railway network.
- Of the 17 railway zones, eight have removed mechanical signalling.
- Capital expenditure in the Railways increased by 77% over the past five years, reaching ₹2.62 lakh crore in 2023-24 for projects like new lines and gauge conversion.
- By 2022-23, 2,981 railway stations had switched from mechanical to electronic signalling, covering 40% of the total stations.
- In 2023-24, 443 more stations switched to electronic interlocking, making it 46% of all stations.
- Automatic block signalling, which prevents collisions by controlling train movement, was added to 582 route kilometers in 2023-24.
- As of March 31, 2024, this system covers 4,431 route kilometers, or 6.47% of the railway network.

2.3. Extension of Smart Cities Mission Period:

Smart Cities Mission period extended till March 2025

GS Paper III:

Infrastructure

NEW DELHI

The Centre has extended the Smart Cities Mission (SCM) under the Union Urban Development Ministry till March 31, 2025.

Under the SCM, launched in June 2015, 100 cities were chosen through a competition to be developed as smart cities. The mission envisions developing areas within selected cities in the country as model areas based on an area development plan, which is expected to have a rub-off effect on other parts of the city and nearby cities and towns.

More than 8,000 multi-sectoral projects are being developed by the 100 cities amounting to around ₹1.6 lakh crore under the SCM.

As on July 3, the 100 cities have completed 7,188 projects (90% of total pro-



Under the SCM, 100 cities were chosen through a competition to be developed as smart cities.

jects) amounting to ₹1,44,237 crore as part of the mission.

The balance 830 projects amounting to ₹19,926 crore are also in advanced stages of completion, an official statement said on Wednesday.

The mission has an allocated a budget of ₹48,000 crore for the 100 cities. As on date, ₹46,585 crore or 97% of the allocated budget has been released.

Out of these funds released to the cities, 93% have been utilised as on date.

“The mission has been getting multiple requests from some States/city government representatives to grant some more time to complete the balance 10% projects. These balance ongoing projects are in advanced stage of implementation and got delayed due to various on-ground conditions. Taking cognisance of these requests, the Government of India has extended the mission period up to March 31, 2025 to complete these balance 10% projects,” the statement said.

This extension has been informed to the cities that it would be without any additional cost, beyond the already approved financial allocation under the mission.

3. Employment:

3.1. Karnataka Bill For Gig Workers:

- On June 29, Karnataka published the draft of the Karnataka Platform-based Gig Workers (Social Security and Welfare) Bill.
- Karnataka is the second Indian state to initiate such a move, the first being Rajasthan.
- The Bill aims to regulate the social security and welfare of platform-based gig workers in the state.
- It is expected to be placed in the monsoon session of the Assembly.
- The draft defines a gig worker as someone who performs work for a given rate of payment based on contract terms and is sourced through a platform for specified services.
- A 2022 NITI Aayog report estimates that India will have 23.5 million gig workers by 2029-30.
- Approximately two lakh gig workers work with platforms like Swiggy, Zomato, Uber, Ola, Urban Company, Porter, Dunzo, Amazon, and Flipkart in Bengaluru alone.
- Over the past two decades, many platforms have shaped the gig economy in India, impacting the labor market significantly.
- Aggregators do not onboard gig workers as employees but as 'partners,' making them independent contractors.
- This status leaves gig workers outside the security net of labor protection laws.
- Initially seen as an opportunity for autonomy and flexibility, gig workers have faced reduced payments, arbitrary dismissals, and other exploitative practices over the years in the absence of regulatory laws.

What are some of the highlights of the Bill?

- The Karnataka draft Bill is introduced as a 'rights-based bill' to protect platform-based gig workers.
- It places obligations on aggregators regarding social security, occupational health, and safety of workers.
- The draft aims to introduce safeguards against unfair dismissals.
- It proposes a two-level grievance redressal mechanism for workers.
- The Bill seeks more transparency in automated monitoring and decision-making systems used by platforms.
- The contract between the aggregator and the worker should list exhaustive grounds for contract termination.
- Aggregators must provide valid reasons in writing and give 14 days' prior notice before terminating a worker.
- Arbitrary terminations have been a major complaint by gig workers.
- Platforms often blacklist or terminate workers without hearing their side, using automated systems.
- These systems track work, earnings, and customer feedback, often favoring the customer.
- This system leaves no room for grievance redressal due to the absence of human intervention.

What are the other features of the draft?

The draft mandates aggregators to:

- Make payments at least weekly.
- Inform workers about reasons for payment deductions.
- Allow workers to refuse a specified number of gigs per week with 'reasonable cause' without adverse consequences.

The draft proposes:

- Establishing a welfare board and a social security and welfare fund for gig workers.

- Levies a welfare fee on transactions between workers and aggregators or on the company's overall turnover.
- Contributions from Union and State governments will also fund the welfare board.
- All gig workers must be registered, and aggregators should provide their database to the government.
- Contracts must be written in simple language and changes notified to the worker 14 days prior.
- Workers can terminate the contract without adverse consequences for existing entitlements.
- Aggregators must provide reasonable and safe working conditions, though 'reasonable' is not defined.

Other State initiatives:

- Rajasthan introduced the Rajasthan Platform-Based Gig Workers (Registration and Welfare) Bill, becoming an Act in September.
- Haryana is set to establish a State-level board for gig workers' social and economic security.
- Telangana is drafting a similar bill.

Union government initiatives:

- The 2020 Code on Social Security recognized freelancers and short-term workers, mandating employers to provide benefits similar to regular employees.

Do you Know?

1. **Code on Wages, 2019:** The Code on Wages subsumes and rationalizes four labor laws related to wages and payment of wages. It standardizes definitions, wage calculation methods, and wage payment regulations across sectors, ensuring a universal wage framework for workers.
2. **Industrial Relations Code, 2020:** The Industrial Relations Code consolidates and amends three laws related to industrial disputes, trade unions, and conditions of employment. It aims to streamline labor relations, simplify dispute resolution mechanisms, and promote a conducive environment for industrial growth.
3. **Occupational Safety, Health and Working Conditions Code, 2020:** This Code amalgamates and rationalizes 13 labor laws related to occupational safety, health, working conditions, and welfare of workers. It establishes standards for workplace safety, health, welfare facilities, and conditions of service for workers.
4. **Code on Social Security, 2020:** The Code on Social Security merges and simplifies nine central labor laws pertaining to social security benefits for workers. It expands the scope of social security coverage, including provisions for gratuity, insurance, pension, maternity benefits, and other welfare measures for workers.

The problem with the Karnataka gig workers Bill:

- Karnataka introduced the draft Karnataka Platform-based Gig Workers (Social Security and Welfare) Bill, 2024, to provide social security and welfare for gig workers.
- The draft was shared on July 9.
- Rajasthan enacted a similar law, the Rajasthan Platform Based Gig Workers (Registration and Welfare) Act, 2023.
- Both laws use a welfare board model, which is suitable for self-employed informal workers but does not address employment relations, which is crucial for gig workers.
- The gig workforce is growing, especially in the app-cab and retail delivery sectors, with projections by NITI Aayog suggesting it will reach 23.5 million by 2030.

- Gig work provides livelihoods amid a generally depressed employment generation scenario.
- Gig workers in India have protested over revenue sharing, working hours, and other conditions.
- Existing labour laws are based on employer-employee relationships, which are complicated or absent in the gig economy.
- Aggregators see themselves as technology providers and gig workers as independent contractors.
- Gig workers view aggregators as employers since the conditions of service are set by the aggregators.
- Gig workers seek fair treatment, improved working conditions, and access to social security as legal entitlements.

U.K. ruling

- The UK Supreme Court ruled that Uber is an employer, applying labour laws to Uber drivers.
- In India, gig workers are included in the Code on Social Security 2020 as informal self-employed workers, but not in other labour codes.
- The Rajasthan and Karnataka laws do not define employment relations in gig work, using the term 'aggregator' instead of 'employer'.
- Without recognizing employment relations, labour laws for minimum wage, safety, working hours, leave, and collective bargaining cannot apply.
- Gig workers lack guaranteed minimum earnings and regulated working hours.
- Aggregators are the de-facto employers as they set terms and conditions.
- The welfare board model provides some schemes but not full social security benefits like provident fund, gratuity, or maternity benefits.
- Historical welfare board models have been poorly implemented.
- The Karnataka Bill does not address minimum wages or working hours.
- Section 16 discusses payment deductions but not minimum income or revenue sharing.
- The Karnataka Bill, like other legislation, fails to address employment relationships, making it hard to protect workers' rights.

3.2. Survey stresses syncing skilling with learning to boost job prospects

- The Economic Survey emphasizes that implementing the New Education Policy (NEP) will improve learning outcomes and job prospects for Indian youth.
- Only 51% of India's graduates are currently employable.
- The median age of India's workforce is 28, and aligning education with skills training is key to leveraging this demographic.
- NEP 2020 aims to achieve foundational literacy and numeracy by third grade, but addressing COVID-induced learning losses is urgent.
- Skilling should be seen as relevant for all, not just dropouts or low achievers, to improve employability.
- Reports show a widening gap between class standards and learning levels since COVID, with significant drops in student performance.
- For example, Class 10 scores fell by 13.4% in math, 18.6% in science, and 9.1% in social science, while Class 3 scores dropped by around 4% in various subjects.
- In 2023-24, education expenditure was ₹60,000 crore lower than budget estimates, with rural development and education suffering the most.

- Central government expenditure has been around 2.8% of GDP, with a slight decrease last year.
- As of July 2024, 2,037 higher education institutions have adopted the Academic Bank of Credits (ABC), and 30.13 crore Automated Permanent Academic Account Registry (APAAR) IDs have been created to improve mobility across institutions.

3.3. Regulating Gig Workers:

A case for regulating gig-based work

Karnataka's draft Bill introduces provisions that mandate fair contracts and income security for platform workers. These provisions strengthen the position of workers who are at the same time not considered employees, nor do they enjoy the freedom and flexibility of being independent contractors

GS Paper III: Employment

ECONOMIC NOTES

Rakshita Swamy
Biju Mathew

The Karnataka government's intent to introduce a legislation for the welfare of gig workers is a welcome and necessary step.

It squarely addresses the three big myths propagated by the gig and platform industry. The first myth that aggregators sell to promote platform work is that they would have "no boss" and would be "partners" and "captains" – anything but workers. This drew in many people, particularly the young, to join platform-based gigs. However, it soon became clear that this was not the case. There was a big boss – the algorithm and a network of team managers deployed at the local level to enforce the algorithm.

Algorithms dictate the number of hours the worker needs to put in on weekends, the orders to be delivered, cancellations and rating scores that ought to be maintained in order for tasks to be continually allocated to the worker, and finally when a worker is deactivated or fired. Shaikh Salauddin from the Indian Federation of App-based Transport Workers put it succinctly when he said that "Gig workers spend hours trying to guess what the algorithm is doing and it feels like they are a rat in a maze". This is totally opposite to the idea of being one's own boss. A plain reading of the digitally generated terms and conditions that the worker has to invariably agree on to commence work dispels any notion of being an independent contractor. Every aspect of the work is monitored and dictated, with workers facing the consequences if they do not comply.

The Karnataka Bill recognises the pervasive role played by such algorithms and makes the aggregator responsible for sharing the parameters that are used by the algorithm to determine allocation of work, grounds for denial of work, the categorisation of workers and how



ISTOCKPHOTO

personal data of workers is being used to determine their ability to work and earn through the aggregator. The Bill breaks the algorithmic control the companies have and allows workers to take back control for at least some part of their work lives.

The myth of flexibility

The second myth that is perpetuated is that persons engaged in platform work enjoy flexible work arrangements. This assertion has enabled platforms to keep gig-based workers away from protections under labour laws. Multiple studies have shown how the term flexibility is abused in the industry. All flexibility in truth rests only with the employer and none with the worker. The payment structure consisting of a number of incentive schemes which enable workers to earn the minimum

surplus required to cover costs, in effect, leaves no flexibility with the workers. For instance, workers have to comply with mandatory login hours to be eligible for incentives. If they log in after gaps of being 'inactive', they have to make peace with disadvantaged rate cards and incentive schemes. Karnataka's draft Bill introduces provisions that mandate fair contracts, income security and the right of platform workers to refuse work without being slapped with sanctions. The above provisions strengthen the position of these workers who are at the same time not considered employees, nor do they enjoy the freedom and flexibility of being independent contractors.

The third myth is that these are 'part time' workers, who engage in platform-based gig work for additional income. According to a study of the

platform economy in India by PAIGHAM and the University of Pennsylvania, 96% of the cab drivers surveyed, secured 100% of their daily income from gigs. The corresponding figure for delivery workers was 90.7%. Average daily work hours for taxi drivers was in excess of 11 hours, and 10 hours for delivery workers. By making social security a mandatory requirement, the Karnataka Law takes a necessary step towards acknowledging this fact and makes room for an umbrella of schemes that can assist workers through events such as old age, death, health shocks etc.

India's stand

Even though the Government of India endorsed a progressive statement on the rights of platform workers at the G-20 last year, it's Code on Social Security, which is the only legislation that makes a passing reference to gig workers, has been detrimental as it delinks workers from minimum labour protections of wages, occupational safety and health. Significantly, it is the State Governments that are showing the way forward. Rajasthan is the first State to pass a legislation on the issue, closely followed by Karnataka, Jharkhand, Tamil Nadu, Haryana, Telangana are following suit.

In the political context of guarantees funded purely by the state exchequer, this law is an important development. It shows how social security for workers ought to also be financed from the market and that private actors should no longer be abdicated from their primary economic accountability towards workers. There are many things that could be improved in the Bill. These include the Bill's silence on critical issues such as minimum wage, occupational safety and health, working hours, and rights on collective bargaining. However, it is also true that this law allows workers to mobilise and assert for more.

Rakshita Swamy is Director, Social Accountability Forum for Action and Research and Biju Mathew is President, International Alliance of App Based Transport Workers.

THE GIST

The first myth that aggregators sell to entice people towards platform work is that they would have "no boss" and would be "partners" and "captains" – anything but workers.

The second myth that is perpetuated is that persons engaged in platform work enjoy flexible work arrangements. This assertion has enabled platforms to keep gig-based workers away from protections under labour laws.

The third myth is that these are 'part time' workers, who engage in platform-based gig work for additional income.

Text & Context

Text & Context pages will not be available on July 24, 2024

4. Agriculture and Food Processing:

4.1. Choosing the right track to cut post-harvest losses

- India is the second-largest agricultural producer globally but only eighth in agricultural exports, with a 2.4% share.
- Issues affecting exports include low productivity, poor quality standards, and supply chain inefficiencies.
- India's annual post-harvest losses are around ₹1,52,790 crore.
- Meeting the growing food and nutrition demand is challenging; reducing post-harvest losses is crucial.
- Perishable commodities like eggs, fish, meat (22%), fruits (19%), and vegetables (18%) suffer the most losses.
- About 19% of perishables are lost during export, especially at the import-country stage.
- Effective storage, transportation, and marketing are essential to reduce losses.

- Strengthening agri-logistics is a priority according to the Committee on Doubling Farmer's Income (DFI).
- The supply chain includes first-mile transport (farmgate to mandi), long-haul transport, and last-mile transport to consumers.
- Perishables face time constraints once harvested.
- 86% of Indian farmers are small and marginal (SMF), struggling with small production scales and market connectivity, leading to post-harvest losses and income losses.
- Food price volatility in India is partly due to supply constraints of perishable produce.
- Indian Railways' revenue mainly comes from freight transport, including agricultural produce, which accounts for 75% of its earnings.
- The Food Corporation of India relies on Indian Railways to move about 90% of its food grains.
- Approximately 97% of fruits and vegetables are transported by road.

Initiatives by the Railways

- The Indian Railways has improved freight operations for perishables with the truck-on-train service, carrying loaded trucks on railway wagons.
- During COVID-19, parcel special trains were introduced to transport perishables and seeds between markets and producers.
- The Kisan Rail connects regions with surplus perishables (milk, meat, fish) to consumption regions, reducing post-harvest losses and increasing farmer incomes.
- Grape growers in Nashik, Maharashtra, earned ₹5,000 per quintal by using Kisan Rail.
- Railways initiatives have shown promising results in agriculture but need to increase farmer awareness and accessibility to Railway schemes.
- Friends of Champions 12.3 India identified challenges with multiple touch points during rail transport of perishables.
- Investment is needed in specialized wagons for temperature-controlled transport and rail-side facilities for safe cargo handling.
- Enhancing food safety by minimizing spoilage and contamination risks supports both domestic and export markets.
- The DFI committee recommends streamlining loading/unloading processes and addressing staffing shortages.
- Prioritizing railways over roadways for fruit and vegetable transportation promises efficient transport.
- Indian Railways generate up to 80% less carbon dioxide for freight traffic than road transport.
- A systems-based approach, integrating different transport modes and geographies, is needed.
- The private sector can enhance operational efficiency and strengthen rail infrastructure through public-private partnerships.
- The 2024 agriculture budget aims to bridge the farm-to-market gap with modern infrastructure and value-addition support.
- Railway initiatives complement these efforts by supporting efficient transportation of perishables and minimizing post-harvest losses.

4.2. Vegetable Protein:

Running on vegetable protein

Foxnuts are in demand as a 'super snack', with its prices soaring in domestic and international markets since 2019. In Bihar's Mithila region, which produces most of the country's crop, **A.M. Jigeesh** finds that farmers receive very little of the money earned from this health food pie, despite the intensive labour involved

Shravan Kumar Roy went from Bihar's Darbhanga to Tamil Nadu's Thanjavur to study food technology. Despite their seeming differences, the two places are tied together by water – Darbhanga has wetlands and numerous rivers and ponds; Thanjavur is on the banks of the Cauvery. Both are known for rich cultivation, a lot of it being rice.

At the National Institute of Food Technology, Entrepreneurship and Management, where Roy did a BTech between 2009 and 2013, he was nicknamed 'Makhana Man'. "I introduced my teachers and batchmates to this 'wonder food'. Except for the four north Indian students on my campus, no one had heard about makhana. Everyone else only spoke about the cashew trees on campus," he recalls. Foxnuts were then eaten only in north India during Hindu fasts, along with sabudana (sago) and kuttu ka atta (buckwheat flour).

Today, Roy owns a business that retails from Darbhanga and online, producing 22 items from makhana, from the traditional kheer to the innovative dosa and idli powder, to cater to customers down south, and even a 100% makhana cookie for the urban health food market.



The Indian Council of Agricultural Research (ICAR) estimates that Bihar produces 10,000 tonnes of makhana per annum, about 90% of the country's total. India contributes to 80% of the world's demand. The prickly water lily, from which the seed is harvested, is spread across more than 15,000 hectares in Bihar, and traditionally grows wild.

About five lakh families, mostly from the Mallah community, are involved in its processing. Nine districts in the Mithila region now grow it for production: Darbhanga, Madhubani, Purnea, Katihar, Saharsa, Supaul, Araria, Kishanganj, and Sitamarhi.

Makhana, sold in the international wholesale market at about ₹8,000 per kg, up from ₹1,000 about 10 years ago, is in high demand as a source of vegetarian protein in a world burdened by 'meat guilt' from animal cruelty and methane-related temperature rises. Indian wholesale markets sold makhana at ₹250 per kg a decade ago, with prices now at ₹1,400. However, rates are cyclical, with price increases during festivals, when demand goes up.

Mukhiya, the master of makhana

The people who harvest the seeds though – traditionally boatmen and fisherfolk – say the government offers them little support, and they now want a minimum support price (MSP) to ensure that the crop is sustainable for cultivation.

The Bihar government runs the Makhana Development Scheme that gives a 75% subsidy on the Suvarna Vaidehi variety of seeds, calculated at ₹97,000 per hectare.

Also, makhana is a product approved under the Union government's One District One Product scheme, under which subsidies are provided



Workers who don't approach the plant carefully get wounded. It needs training to transplant and harvest, especially in big ponds. We have been doing this from childhood

VINOD MUKHIYA
Makhana farmer

ed to food processors for branding, marketing, and developing infrastructure.

Vinod Mukhiya, 42, is a landless farmer belonging to the Mallah community. He cultivates makhana across the five acres he has leased and partners with landowning farmers in about 20 acres. He also works as a farmhand, something he has done for the last 25 years.

When raised for cultivation, sowing is done in December and January, transplantation in February and March, and harvest between July and October. The wild variety too is harvested at the same time. "The seeds fall into water. We collect them from the bottom of ponds, grade them, and dry them in the shade. Women in our homes roast the seed and break the shell off. They take out the lava (the white food commonly seen) and sell it. Now, makhana has a market," he says.

Tall and lean, Mukhiya does not find it hard to handle the *Euryale ferox*, the lily's scientific term, named after the Greek goddess, Euryale, born of a sea goddess and god, with hair of snakes, protruding teeth, and tongue hanging out. The plant, with dark pink flowers, has thorns all over. Only trained workers like Mukhiya are able to approach it. Workers use countrymade boats to navigate the large leaves.

'Makhane ke patte se mooh pochke aao (Go wipe your face with makhana leaves)' is an old saying of the Mithila region used on someone to check their ego or loose talk. "Workers who don't approach the plant carefully get wounded. It needs training to transplant and harvest, especially in big ponds. We have been doing this from childhood," Mukhiya adds.

The Mallahs of Mithila are considered the original inhabitants of this region. Kamala, a Mallah woman, sells makhana at the Darbhanga market. She pops it at home and brings it here. "I have been doing this since childhood," she says. Women play an important role in increasing the earnings of a family. Farmers sell unprocessed, ungraded makhana seeds at ₹50-₹200 per kg. The moment the shell is removed, the price climbs to ₹400-₹800. For first-grade makhana lava, farmers can demand up to ₹1,100-₹1,250.

"We do not get enough support from the government," Mukhiya says, adding that cooperative societies, formed to help Mallahs cultivate



Deft hands: A worker separates makhana into different grades at a unit; (top left) FT-MBA MakhanaWala founder Sravan Kumar Roy. A.M. JIGEESH

4.3. Impact of PDS on Household Expenditure:

- The Public Distribution System (PDS) aims to ensure food security in India, targeting 75% of the rural and 50% of the urban population under the National Food Security Act (NFSA), 2013.
- Subsidised foodgrains from PDS can free up household resources for other nutrient-rich food items.
- The Household Consumption Expenditure Survey (HCES): 2022-23 will provide data to study the impact of PDS on expenditure on non-foodgrain items.
- HCES:2022-23 collects data on food and non-food items received for free through social welfare programmes.
- Survey estimates of programme coverage are often lower than administrative data due to inclusion and exclusion errors.
- Survey data can help examine the characteristics of households benefiting from these programmes.
- Detailed information on health and education expenses is collected separately by the NSSO.
- NSSO has imputed the value of selected free items to compute Monthly Per Capita Consumption Expenditure (MPCE) and 'MPCE with imputation'.
- Both metrics are published in the NSSO report for analysts and researchers.

Imputation of values

- NSSO has suggested two sets of values for imputation of free items: modal unit price and 25th percentile unit price.
- Imputation is done for free items, not subsidised ones; no imputation for PDS purchases at nominal prices.
- Foodgrains from PDS are the main free items; 94% in rural and 95% in urban areas' imputed value is from food items.
- Average imputed value for food: ₹82 in rural and ₹59 in urban areas.
- MPCE among the bottom 5%: ₹1,373 in rural and ₹2,001 in urban areas.
- 20% of the bottom 5% in rural areas move to the next higher fractile class with imputation.
- Upward movement observed in urban areas too; patterns vary across states.
- Researchers can use the modal value for PDS purchases to increase average MPCE with imputation.
- In-kind social transfers increase the value of consumption for poorer households.
- Discussion needed on whether to base poverty estimates on expenditure or total consumption value including free items.
- In-kind social transfers impact the well-being of households at the bottom of the consumption or income distribution.

5. Fiscal Policy:

5.1.A budget that drives growth with Stability:

- The final Budget for 2024-25 will be presented on July 23 by the new government.
- It is an opportunity to outline medium-term growth, employment perspectives, and policy priorities.
- Due to the global economic slowdown, India must rely on domestic growth drivers.
- Short-term objective: Ensure a minimum 7% growth.
- Medium-term objective: Sustain real GDP growth between 7%-7.5%.
- Aim to reduce fiscal deficit relative to GDP from current levels to 3% in the next 3-4 years, consistent with FRBM.

- Emphasize more on labor-intensive sectors to achieve the employment objective alongside growth.

Investment and savings prospects

- To sustain 7%+ growth, a real investment rate of 35% is needed.
- For 2022-23, the real investment rate (GFCF) was 33.3% of GDP, and for 2023-24, it was 33.5%.
- Gross capital formation (GCF) is slightly higher.
- GFCF needs to be around 35% to sustain 7%+ growth, assuming an incremental capital output ratio of 5.
- Savings to GDP ratio for 2022-23 was 30.2% (nominal) and 32.8% (real).
- Slight increases in savings and investment rates are needed to reach a 35% GFCF.
- Household financial savings fell to 5.2% of Gross National Disposable Income in 2022-23, affecting investible surplus.
- Increasing household financial savings is critical to ensure reasonable rates for private sector investment.
- Net exports' contribution to GDP growth has been negative or low recently: 0.5% in 2022-23 and (-)2.0% in 2023-24.
- Service exports are doing better than goods exports, which contracted in 2023-24.
- Until export demand and private investment increase, government investment demand must support growth.

Budgetary options

- The Centre's revenue position is expected to improve due to higher tax and non-tax revenues.
- Gross Tax Revenues (GTR) for 2023-24 were ₹34.65 lakh crore, higher than revised estimates by ₹27,581 crore.
- Expected nominal GDP growth for 2024-25 is 11%, with 7% real growth and 3.8% inflation.
- With a tax buoyancy of 1.1 and a GTR growth of 12.1%, GTR is expected to be ₹38.8 lakh crore.
- Net tax revenue for the Centre is expected to be ₹26.4 lakh crore.
- Non-tax revenues are expected to exceed ₹5 lakh crore due to higher RBI dividends of ₹2.11 lakh crore.
- RBI transfers are expansionary and have implications for monetary policy.
- The improved revenue situation helps meet the fiscal consolidation target of a 5.1% fiscal deficit to GDP ratio.
- Total expenditure that can be financed is ₹49 lakh crore.
- Revenue expenditure growth for 2024-25 is 4.6% over 2023-24 actuals but may need to increase for higher subsidies, health expenditures, and MGNREGA allocations.
- A normal monsoon is expected to improve rural incomes.
- Revenue expenditure growth could be enhanced to 8%, providing an additional ₹3 lakh crore over 2023-24 actuals.
- Fiscal space remains for capital expenditure growth of 19.2% in 2024-25 to support investment and infrastructure expansion.
- Possible tax rationalization measures without significant revenue loss and expansion of the PLI scheme to support employment generation may be considered.

Commit to FRBM Targets

- The Budget should aim to combine growth with stability, including price and fiscal stability.

- Commitment to FRBM targets is important in the short to medium term.
- Reducing the fiscal deficit to GDP ratio to 5.1% in 2024-25 may take 3-4 years to bring it down to 3% of GDP.
- Lower fiscal deficit and nominal GDP growth of 11%-11.5% will reduce the debt to GDP ratio and interest payment to revenue receipts ratio.
- This creates a virtuous cycle facilitating further reduction in the fiscal deficit.

5.2. Customs duty reduced on mobile phones, chargers, and electronic components

- Basic customs duty on mobile phones, chargers, and some components slashed.
- Duties on oxygen-free copper for resistors eliminated (previously 5%).
- Duties on mobile phones, chargers, and PCBAs reduced from 20% to 15%.
- Inputs for connectors used in transistors exempted from duties.
- Duties on rare earth metals, lithium, copper, and cobalt eliminated or reduced.
- Duties on PCBAs for telecom equipment raised from 15% to 20% to promote domestic manufacturing.
- Pankaj Mohindroo welcomed the changes and mentioned that tariff slab rationalisation will be addressed in the next six months.

Angel Tax

- The angel tax taxes the difference between the fair market value (estimated value) of a start up and the price at which it issues shares to investors.
- This can be a significant burden for start ups, especially in their initial stages when their fair market value might be lower than the investment they receive.

5.3. Model Skill Loan Scheme:

- Skill Development Minister Jayant Chaudhary launched the revamped Model Skill Loan Scheme.
- Finance Minister Nirmala Sitharaman recently increased the loan limit for high-end skilling courses from ₹1.5 lakh to ₹7.5 lakh.
- The previous **Credit Guarantee Fund Scheme** for Skill Development had low fund uptake, with ₹115.75 crore in loans extended to only 10,077 borrowers as of March 31.
- The low uptake was due to the small loan size (up to ₹1.5 lakh) which did not cover rising course costs, and restricted lending to Indian Banking Association (IBA) member institutions.
- The new scheme expands the lending network to include Non-Banking Financial Companies and small finance banks, offering access to more courses and higher loan limits.

6. Miscellaneous:

6.1. The Index of Industrial Production (IIP)

- It is an economic indicator that measures the growth rates in different sectors of the economy, primarily the **manufacturing, mining, and electricity sectors**.
- The Index of Industrial Production (IIP) is a composite indicator that measures changes in the volume of production in the industrial sector of an economy over a specified period of time.

Components

1. **Manufacturing Sector:** Includes the production of various goods such as textiles, chemicals, machinery, etc.
2. **Mining Sector:** Covers the extraction and processing of minerals, ores, and natural resources.
3. **Electricity Sector:** Measures the generation, transmission, and distribution of electricity.

Calculation Methodology

- **Weighted Index:** Each sector (manufacturing, mining, electricity) is assigned a weight based on its contribution to the overall industrial output.
- **Base Year:** The IIP is usually calculated with reference to a base year, which serves as a benchmark against which current production levels are compared.
- **Monthly Data:** It is released monthly by government agencies and reflects changes in production levels compared to the base year.

6.2. The Manufacturing Purchasing Managers' Index (PMI)

- It is an economic indicator that provides insights into the performance of the manufacturing sector within an economy.
- PMI data is compiled by surveying purchasing managers at manufacturing firms to gauge their perceptions of business conditions and activity levels in the sector.
- The PMI is based on various key components such as new orders, production levels, employment, supplier deliveries, and inventories.
- In India, the Manufacturing Purchasing Managers' Index (PMI) data is provided by IHS Markit, an international research firm specializing in economic analysis and data.

6.3. Gross Fixed Capital Formation (GFCF)

GFCF is the total value of a country's investments in physical assets, such as buildings, machinery, equipment, and infrastructure, that are used for more than one year in the production of goods and services.

Components:

- **Buildings and Structures:** Investment in residential and non-residential buildings, roads, bridges, and other infrastructure projects.
- **Machinery and Equipment:** Investment in industrial machinery, tools, transportation equipment, and other machinery.
- **Intellectual Property Products:** Includes expenditures on research and development, mineral exploration, software, and databases.

6.4. Gross Capital Formation (GCF)

- Gross Capital Formation (GCF) is an economic metric that measures the total investment in an economy over a specific period.
- It includes the creation of new fixed assets, investments in inventories, and acquisitions less disposals of valuables like precious metals, artworks, and antiques.
- GCF is a crucial indicator for understanding the level of investment in productive assets within an economy, which can drive future economic growth and development.

6.5. National Manufacturing Policy (NMP):

- Established in 2011 to boost India's manufacturing sector.
- **National Investment and Manufacturing Zones (NIMZs)** mandated to have a minimum area of 5000 hectares.
- Provides **income tax exemption to small and medium enterprises (SMEs)**.

- Environmental Impact Assessment guidelines are to be provided by the state governments for projects under this policy.

It focused on several key areas:

- **Improving the business environment:** This involved streamlining regulations, simplifying procedures, and developing industrial infrastructure.
- **Skill development:** The policy emphasized training programs to create a skilled workforce for the manufacturing sector.
- **Technological advancement:** The NMP encouraged investments in research and development to promote innovation in manufacturing processes.
- **Investment promotion:** The policy offered various incentives to attract domestic and foreign investments in the manufacturing sector.

Objectives:

- Increase manufacturing sector growth to 12-14% annually to make it a major economic driver.
- **Generate 100 million additional jobs in manufacturing by 2022.**
- Develop skills among rural migrants and urban poor for inclusive growth.
- Enhance domestic value addition and technological depth in manufacturing.
- Boost global competitiveness of Indian manufacturing through supportive policies.
- Ensure sustainable growth focusing on environment, energy efficiency, and resource utilization.

Key Features and Significance:

- Aim to raise **manufacturing's GDP contribution from 16% to 25% by 2022.**
- Encourages growth of Small and Medium Enterprises (SMEs) through incentives.
- Focus on industrial training and skill upgrading for youth.
- Simplification of business regulations to ease procedural compliance.
- Promotion of green technology and technology development mechanisms.
- Establishment of Special Purpose Vehicles (SPVs) by State Governments.
- Support for Public-Private Partnerships (PPPs) in infrastructure through capital grants.
- This policy aims to transform India's manufacturing sector, promote sustainable development, and enhance global competitiveness.

6.6. Employees' Provident Fund Organisation (EPFO)

- The Employees' Provident Fund Organisation (EPFO) is a statutory body of the Government of India responsible for administering the Employees' Provident Funds and Miscellaneous Provisions Act, 1952.
- It's a social security organization that provides various benefits to employees, including:
- **Provident Fund:** This is a retirement savings scheme where both the employer and employee contribute a certain percentage of their salary to a fund. The accumulated funds with interest are payable to the employee on retirement, death, or resignation.
- **Pension Scheme:** The EPF scheme also includes a pension scheme that provides a monthly pension to eligible employees after they retire.
- **Insurance Scheme:** The EPFO also provides a life insurance cover for employees in case of death during employment. This scheme offers a lump sum payment to the nominee.
- **Deposit-Linked Insurance Scheme:** This scheme provides insurance coverage for the employee's deposits in the Provident Fund account.
- **Other Benefits:** The EPFO also offers other benefits like housing loans, education loans, and medical assistance.

Key Features of EPFO:

- **Mandatory:** It's mandatory for all establishments employing 20 or more persons to register with EPFO.
- **Contribution:** Both the employer and employee contribute to the Provident Fund.
- **Tax Benefits:** Contributions made to the EPF are eligible for tax deductions under Section 80C of the Income Tax Act.
- **Government Regulation:** The EPFO is governed by the Ministry of Labour and Employment.
- **Transparent & Secure:** EPFO operates a transparent and secure system for managing employee funds.

Benefits of EPFO:

- **Retirement Security:** Provides a steady income stream during retirement.
- **Financial Security:** Offers financial protection in case of death or disability.
- **Tax Savings:** Contributions are eligible for tax deductions.
- **Social Security:** Helps in building a strong social security system for employees.

6.7. Differences between Organised and Unorganised Sectors:

Feature	Organised Sector	Unorganised Sector
Registration	Registered with government	Unregistered
Labor Laws	Comply with labor laws	Do not comply with labor laws
Employment	Formal, with contracts and defined roles	Informal, often temporary and insecure
Working Hours	Fixed and structured	Irregular and unpredictable
Productivity	Higher, due to mechanization and skilled workforce	Lower, due to lack of resources and training
Taxation	Subject to income tax and other taxes	Often operate outside the tax net
Social Security	Employees have access to social security benefits (like health insurance, pensions, etc.)	Workers have limited or no access to social security benefits
Stability	More stable, with less susceptibility to economic fluctuations	Highly vulnerable to economic downturns and seasonal fluctuations

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Science and Technology

1. Space Technology:

1.1. Scientists piece Neutrino and Universe Together:

- Neutrinos are subatomic particles that have no electric charge, very small mass, and spin in a direction opposite to their motion.
- They are extremely abundant, second only to photons, and are the most common particles in matter.
- Neutrinos are produced when leptons, like muons, electrons, and tauons, interact with matter. Each type of lepton produces a specific type of neutrino (muon-neutrino, electron-neutrino, tau-neutrino).
- Neutrinos rarely interact with matter, making them difficult to study. For instance, a muon-neutrino might only interact with an atom's nucleus once in a million attempts.
- To detect neutrinos, scientists use large detectors with precise tracking capabilities to maximize the chance of interaction.
- The NOvA experiment in Minnesota creates a neutrino beam and directs it towards a large detector 800 km away.
- The latest results from NOvA, presented in Italy on June 17, show that the collaboration has doubled the amount of data compared to the previous four-year run, offering more precise results.
- NOvA aims to understand the mass of different types of neutrinos, which may differ from the mass mechanisms of other particles.
- On July 11, the Large Hadron Collider in Europe reported detecting electron-neutrinos for the first time, contributing to this research.

The Surprise of Mass

- In 1987, physicists detected extraterrestrial neutrinos from a supernova explosion 150,000 light years away, marking the beginning of neutrino astronomy.
- Before this, neutrinos were believed to be massless, similar to photons. According to the special theory of relativity, massive particles can't travel at the speed of light, so if neutrinos were massless, they should be right-handed when their spin aligns with their motion.
- However, right-handed neutrinos were never detected, leading to the belief that neutrinos were massless.
- In the late 1990s, scientists in Japan and Canada discovered that neutrinos have mass. They found that neutrinos can change types as they travel, a property massless particles don't have.
- The Standard Model of particle physics, which describes particle behavior, didn't predict massive neutrinos. Incorporating them requires significant changes to the model.
- Physicists study neutrino oscillation, where neutrinos change their type as they travel long distances. For example, neutrinos from the Sun are primarily electron-neutrinos but are detected as muon-neutrinos on Earth.
- Theoretical models propose two solutions for the neutrino mass hierarchy problem: normal and inverted orders. In normal order, one type of neutrino is much heavier, and the other two are lighter. In inverted order, one type is lighter, and the other two are heavier.
- New data from NOvA supports the normal order, but the evidence is not yet conclusive.

- Understanding neutrino mass hierarchy helps us learn about the universe's evolution. Neutrinos are key carriers of information from cosmic events like supernovae, which release 99% of their energy as neutrinos in a brief burst.
- Studying these neutrinos helps us understand how light or radio waves from such explosions diffuse over distance.

The Best Information Carriers

- Neutrinos can pass through most matter without interacting, making them useful for transmitting information across vast distances.
- Electromagnetic waves are commonly used for communication but are less effective in some situations, like underwater where certain frequencies can't penetrate seawater.
- Neutrinos can travel through extremely dense materials, such as 1,000 light years of lead, meaning they can pass through oceans easily.
- If scientists can figure out how to transmit and detect neutrinos, they might replace electromagnetic waves with neutrino beams for communication in the future.
- Many countries are investing in neutrino research to explore their potential. Notable experiments include:
 - Super-K III in Japan
 - Sudbury Neutrino Observatory (SNO+) in Canada
 - MiniBOONE, MicroBOONE, and NOvA in the U.S.
 - Double CHOOZ in France
 - Jiangmen Underground Neutrino Observatory in China
 - OPERA experiment in Switzerland
 - IceCube Neutrino Observatory in Antarctica
- India's India-based Neutrino Observatory, planned for Tamil Nadu, faces delays and political issues.

1.2. Dyson sphere: an energy devourer

- As an astronomer, you spot a star emitting unusual infrared radiation.
- Zooming in, you see solar panels surrounding the star, collecting solar energy—a Dyson sphere.
- Named after physicist Freeman Dyson, who theorized its existence.
- Dyson proposed that advanced civilizations might build such spheres to capture all the energy from a star.
- These spheres would emit excess heat as infrared radiation, which could be detected by astronomers as a sign of advanced life.
- Not all unusual infrared emissions are Dyson spheres.
- In May, scientists searched for Dyson spheres by scanning **5 million stars within 1,000 light years**.
- They found seven stars with unexplained infrared radiation.
- There is no conclusive evidence yet, but one of these stars might have a Dyson sphere.



Freeman Dyson said that technologically advanced civilisations will harness the entire radiative power of a star.

1.3. ISRO' Problem:

ISRO has a problem: many rockets, but too few satellites to launch

The Indian space programme used to follow a supply-driven model: ISRO would launch satellites and then look for customers for services provided by the satellites. This changed to a demand-driven model in 2019-2020, in which a satellite is built and launched only if there is already demand for it

GS Paper III: Science and Technology

In June, S. Somanath, Chairman of the Indian Space Research Organisation (ISRO) and Secretary of the Department of Space, said ISRO's launch vehicle capability was three-times the demand. Many experts in the spaceflight sector and beyond interpreted this to mean the space launch market was grim. Mr. Somanath also suggested strong demand was needed for launch vehicles from the domestic Indian market.

India currently has four launch vehicles: the Small Satellite Launch Vehicle (SSLV), the Polar Satellite Launch Vehicle (PSLV), the Geosynchronous Satellite Launch Vehicle (GSLV), and the Launch Vehicle Mark-III (LVM-3). These rockets can launch satellites weighing up to four tonnes to the geosynchronous orbit. India also relies on foreign launch vehicles, like Europe's Ariane V and SpaceX's Falcon 9, when a satellite weighs more than four tonnes.

At present, the country operates a fleet of satellites with applications in communications, remote sensing, positioning, navigation and timing (PNT), meteorology, disaster management, space-based internet, scientific missions, and experimental missions. It also needs launch vehicles for space missions like Chandrayaan 3 and Aditya L1.

All this makes it look like there are more applications and satellites than there are launch vehicles – which is the opposite of what Mr. Somanath mentioned. Where then is the issue?

Demand-driven model

The Indian space programme used to follow a supply-driven model: ISRO would build and launch satellites and then look for customers who needed the services provided by the satellites. When the Indian government reformed the space sector in 2019-2020, it changed this to a demand-driven model. Here, a satellite needs to be built and launched only if there is already demand for it. This may have led to the situation Mr. Somanath mentioned.

There is now a chicken and egg problem. The customer of the services provided by the satellite needs to be educated about the need for the service. The customer will then create a demand for a service that will need a satellite to be launched. This will provide the demand Mr. Somanath is asking for.

Consider the example of the internet. There needs to be a demand for space-based internet in a country already filled with affordable fibre and mobile-based internet services, so a company will launch a constellation of satellites into orbit to provide that service.

The question arises: Who will educate the customer, ISRO or the industry?

Without such educated customers, demand at the scale ISRO expects will not be created. The customers here are not only consumers of space-based internet. These are other companies, government institutions, defence enterprises, and ordinary people including farmers, bankers, etc. So the 'amount' of education required is very great.

The other area from which demand is likely to arise is human spaceflight. This includes human-rated launch vehicles that carry humans and supplies into orbit and to destinations like an orbiting space



An LVM-3 launch vehicle lifts off from ISRO's Sriharikota spaceport carrying the Chandrayaan-3 mission to orbit. ISRO

station or the moon. There could in future be demand for space tourism as well.

Launch capability limitations

India's launch vehicles are also not powerful enough to undertake certain missions, like Chandrayaan 4. China used its Long March 5 launch vehicle to launch its Chang'e 4 and Chang'e 5 missions in a single launch. India's LVM-3 has less than one-third of Long March 5's capability (28% to be more precise) and will need two LVM-3 launches to launch all the components of Chandrayaan 4.

ISRO will be upgrading the LVM-3 with a semi-cryogenic engine to boost its payload capacity to six tonnes to the geostationary transfer orbit (GTO). The organisation will also need a new launch vehicle – already dubbed the Next Generation Launch Vehicle (NGLV), a.k.a. Project Soorya – to carry 10 tonnes to GTO. But it has only submitted a funding proposal thus far for this project. Other variants of this launch vehicle are expected to raise this vehicle's lift capacity.

India will also need one more successful flight of the SSLV to be confident about its ability to launch smaller satellites. Smaller satellites are usually experimental and university-built. More success in this domain will encourage space companies to build larger satellites, eventually leading to a demand for launch vehicles.

Launch vehicle economics

All these launch vehicles will need satellites to launch. The heavier vehicles can fulfil some national goals like lunar exploration and a space station while



There is now a chicken and egg problem. The customer of the services provided by the satellite needs to be educated. The customer will then create a demand for a service that will need a satellite to be launched

ISRO can use the smaller satellites for technology and capability demonstration. However, the latter will constitute only a small number of launches.

Satellites have a defined mission life. As they get old, they will need to be replaced with newer satellites. This will also create a demand for launch vehicles. However, mission operators like their satellites to live longer and have been improving their lifetimes with software and hardware upgrades. This complicates estimates of the number and frequency of launch vehicles that will be needed.

Launch vehicles are improving as well. In a single launch, the PSLV can deliver multiple satellites in multiple orbits. Rocket stages are becoming reusable, which reduces the cost of building the rocket and increases profitability. ISRO has been building its Reusable Launch Vehicle and vertical landing technologies to make reusable landing stages. It is also making an effort to replace toxic fuels for rocket engines with green alternatives.

Private sector vs government

Mr. Somanath himself provided a solution for the problem he highlighted. He suggested we need an ecosystem that creates demand for various services, leading to a demand for data, leading to

more sources of data (like satellites), culminating in a demand for launch vehicles. The richer the ecosystem, the greater the demand.

The Indian government wants the private sector to create demand among customers and to build and launch satellites. It wants them to look for services to offer customers in India and abroad. It also wants revenue by providing launch services of its own. Finally, the government wants to upskill workers and give them jobs.

However, private companies don't want the government to be in the launch business. Instead, they want the government to be their customer and to provide rule of law and reliable regulations.

This is because private players desire a reliable source of revenue, which the Indian government can be over a long period of time. There is thus talk of the government being an 'anchor customer' helping companies in their early days.

The roadmap here is for the government to exit the launch vehicle business at some point, leaving the companies with sufficient demand for launch vehicles. This is similar to the situation in the U.S., where arms of the U.S. government award contracts to SpaceX, Blue Origin, etc. to execute launches with their payloads.

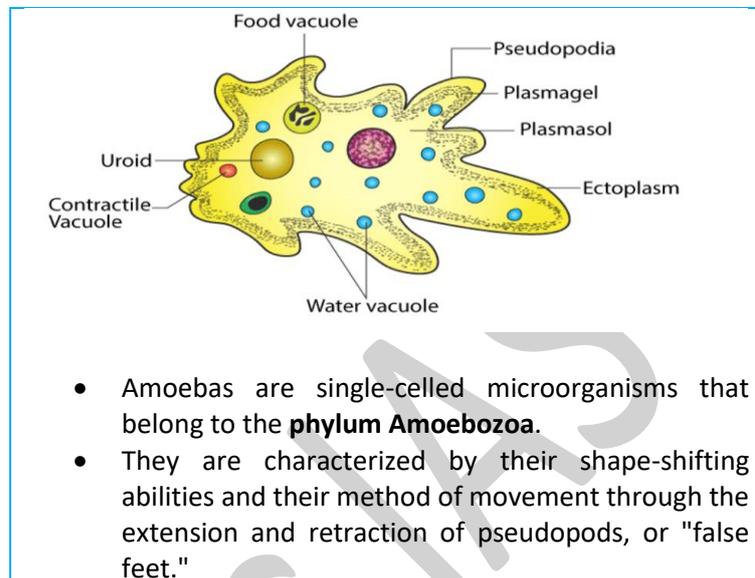
Thus, the Indian government will absorb the cost of the transition from supply-driven to demand-driven building of satellites and launch vehicles. But it isn't yet educating its own Ministries and creating some of the anchor demand for satellites and launch vehicles.

(Pradeep Mohandas is a technical writer and space enthusiast in Pune.)

2. Diseases and Viruses:

2.1. Amoebic Meningoencephalitis

- Primary amoebic meningoencephalitis (PAM) is a rare but severe brain infection caused by *Naegleria fowleri*, a free-living amoeba found in warm freshwater environments such as lakes, rivers, hot springs, and poorly maintained swimming pools.
- When contaminated water enters the body through the nose, usually during activities like swimming or diving, the amoeba can travel to the brain and cause inflammation and destruction of brain tissue.
- Symptoms of amoebic meningoencephalitis typically begin within a few days to a week after exposure and may include severe headache, fever, nausea, vomiting, stiff neck, confusion, seizures, and hallucinations.
- The infection progresses rapidly and can lead to serious complications, including coma and death, within a short period.



- Amoebas are single-celled microorganisms that belong to the **phylum Amoebozoa**.
- They are characterized by their shape-shifting abilities and their method of movement through the extension and retraction of pseudopods, or "false feet."

2.2. Zika virus: the need to improve surveillance and vector control:

- Zika virus has resurfaced with 15 cases in Pune, Maharashtra, including eight pregnant women, and a fatal case in Karnataka.
- In Karnataka, a 74-year-old patient with Zika has died; health officials attribute the death to other factors, and another suspected case is under investigation.
- Pune Municipal Corporation and Karnataka Health Department have increased surveillance and issued guidelines to prevent mosquito breeding at homes.
- The Union Health Ministry has issued advisories to states to intensify surveillance, especially screening pregnant women and enhancing vector-control activities.
- Indian Council of Medical Research (ICMR) has advised states to increase Zika testing, especially for patients with symptoms similar to chikungunya and dengue.
- Mosquito-control measures need to be heightened during the monsoon, as ideal breeding conditions increase the risk of Zika and dengue transmission.
- Zika virus is mosquito-borne, primarily transmitted by *Aedes* mosquitoes, which also spread dengue and chikungunya, mainly biting during the day.
- Zika can also spread through sexual transmission, from mother to fetus, and through blood transfusions.
- Symptoms of Zika infection are typically mild or absent in most infected people, including rash, fever, conjunctivitis, muscle and joint pain, and headache lasting 2-7 days.

How is it diagnosed?

- Zika virus is suspected based on symptoms or travel to affected areas; diagnosis requires a laboratory test.

- India faces challenges in Zika diagnosis due to the lack of approved diagnostic tests until March 2023, causing delays in test results from labs like the National Institute of Virology (NIV).
- Zika virus during pregnancy can lead to microcephaly and other congenital malformations, preterm births, and miscarriage, affecting 5-15% of infants born to infected mothers, according to WHO.
- Zika infection is also linked to **Guillain-Barré syndrome**, neuropathy, and myelitis in adults and children.
- Currently, no vaccine exists for Zika virus prevention or treatment; research for a vaccine is ongoing worldwide, including in India with promising studies by Bharat Biotech and Indian Immunologicals Limited.

2.3. Dengue cases on the rise worldwide:

Are urbanisation and climate change fuelling dengue spread in the world?

- Dengue cases in India have surged, especially in Karnataka, Kerala, and Tamil Nadu.
- As of April 30, India recorded 19,447 cases and 16 deaths, with Kerala and Tamil Nadu leading.
- Karnataka reported an increase from 2,503 to 7,840 cases and seven deaths by July 10, with 293 new cases on that day alone.
- Globally, over 7.6 million dengue cases were reported in 2024, including 3.4 million confirmed cases, over 16,000 severe cases, and over 3,000 deaths.
- WHO reported active dengue transmission in 90 countries, noting that the monsoon season aids mosquito breeding and survival.
- Urbanization and population movements contribute to the increasing dengue burden.
- Dengue is endemic in over 100 countries, with the Americas, South-East Asia, and Western Pacific regions most affected, accounting for around 70% of the global burden.
- Dengue is spreading to new areas in Europe, the Eastern Mediterranean, and South America.
- Dengue spreads through the bite of infected *Aedes* mosquitoes, primarily *Aedes aegypti*.
- Symptoms include headache, retro-orbital pain, myalgia, arthralgia, rash, and hemorrhagic manifestations.
- Severe dengue can cause shock, severe bleeding, or organ impairment.
- Treatment is symptomatic and supportive for those without warning signs or complications.

What are the emerging patterns in dengue?

- Researchers and public health experts monitor emerging dengue patterns.
- WHO cites factors increasing dengue risk: changing *Aedes aegypti* distribution, urbanization, human activities, and climate change.
- The first dengue-like illness epidemic was recorded in Madras in 1780.
- Dengue virus was isolated in India in 1945; first evidence in Vellore district in 1956.
- Dengue spread due to urbanization, travel, and climate changes.
- Tamil Nadu has had dengue outbreaks every five years, with the last in 2017.
- Seasonal variation every five years is likely due to building susceptible populations.
- Tamil Nadu expects more cases in the coming months.
- Surveillance, immediate response, community empowerment, and education are essential.

2.4. Chandipura virus: four children die in Gujarat:

- Four children died and two are being treated for suspected Chandipura virus infection in Sabarkantha district, Gujarat.
- The two children are receiving treatment at the district's civil hospital.
- Samples from the children under treatment have been sent to the National Institute of Virology for confirmation.
- Chandipura virus is rare and potentially deadly, causing fever, flu-like symptoms, and acute encephalitis (brain inflammation).

2.5. Nipah Virus:

- Nipah virus (NiV) is a zoonotic virus (it is transmitted from animals to humans) and can also be transmitted through contaminated food or directly between people.
- Nipah virus infection in humans causes a range of clinical presentations, from asymptomatic infection (subclinical) to acute respiratory infection and fatal encephalitis.
- The case fatality rate is estimated at 40% to 75%. This rate can vary by outbreak depending on local capabilities for epidemiological surveillance and clinical management.
- Nipah virus can be transmitted to humans from animals (such as bats or pigs), or contaminated foods and can also be transmitted directly from human-to-human.
- Fruit bats of the Pteropodidae family are the natural host of Nipah virus.
- There is **no treatment or vaccine available** for either people or animals. The primary treatment for humans is supportive care.
- The 2018 annual review of the WHO R&D Blueprint list of priority diseases indicates that there is an urgent need for accelerated research and development for the Nipah virus.

Chandipura virus: four children die in Gujarat

GS Paper III: Basic science

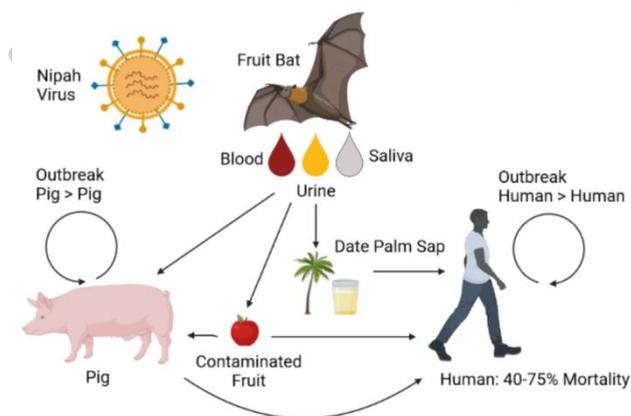
AHMEDABAD

Four children died and two are under treatment for suspected infection by Chandipura virus, which causes encephalitis, in Sabarkantha district of Gujarat. The two children are being treated at the civil hospital in the district.

The authorities have sent the samples of the children who are undergoing the treatment, to the National Institute of Virology for confirmation. Chandipura virus is a rare and potentially deadly pathogen that causes fever, flu-like symptoms, and acute encephalitis (inflammation of the brain).

Overview:

Nipah Virus Transmission and Mortality



causes severe disease and death in people, making it a public health concern.

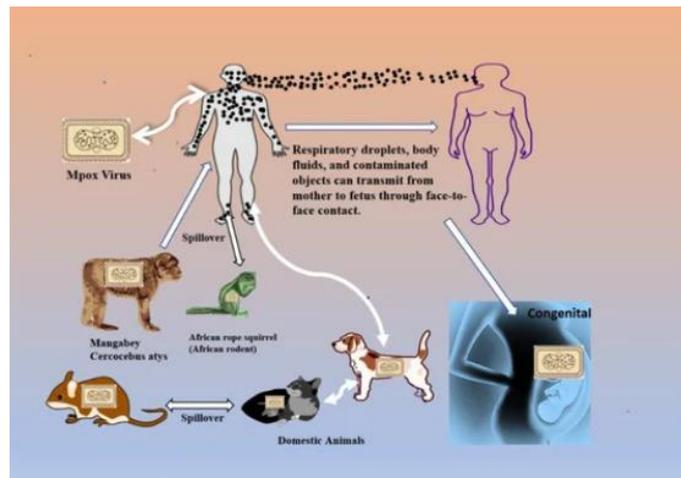
- In infected people, it causes a range of illnesses from asymptomatic (subclinical) infection to acute respiratory illness and fatal encephalitis.

- The virus can also cause severe disease in animals such as pigs, resulting in significant economic losses for farmers.

- Although Nipah virus has caused only a few known outbreaks in Asia, it infects a wide range of animals and

2.6. Children at risk as mpox variant hits Congo camps for displaced

- 7-year-old Grace Kabuo has visible scars from mpox pustules but has recovered from the virus.
- Grace's mother is unsure how she contracted the infection, which is caused by a new, more transmissible variant of mpox.
- Local doctors report 130 suspected mpox cases in children and adolescents in the past four weeks at a facility near Goma, Congo.
- Half of these cases are in children under five years old.
- Mpox spreads through close contact and usually causes mild symptoms but can be severe or fatal.
- The current outbreak in Congo has seen around 27,000 cases and over 1,100 deaths since early 2023, primarily among children.
- The outbreak began with Clade I and is now being driven by the more easily spread Clade Ib.
- Clade IIb, another mpox variant, caused a global health emergency in 2022, spreading mainly through sexual contact.
- Congo lacks vaccines and specific treatments for mpox outside of clinical trials. The situation is complicated by stigma, regulatory issues, and other outbreaks like measles and cholera.
- Congo has approved two mpox vaccines, but funding and regulatory hurdles remain significant challenges.



3. Miscellaneous:

3.1. Three cancer drugs exempted from customs duty (24 July)

- Customs duty has been exempted on three cancer treatment drugs: **Trastuzumab Deruxtecan, Osimertinib, and Durvalumab.**
- Changes in customs duty on X-ray tubes and flat panel detectors for medical X-ray machines have been proposed.
- The total health sector budget is ₹89,287 crore, up from ₹79,221 crore in the 2023-24 Revised Estimates, but still below the 2% mark from FY18 to FY22.
- The Health Ministry's allocation is ₹90,958.63 crore, up from ₹80,517.62 crore in the previous year.
- The Ayush Ministry's allocation increased from ₹3,000 crore to ₹3,712.49 crore.
- The **Anusandhan National Research Fund** will be operationalized with ₹1 lakh crore for research and innovation.
- Healthcare sector members noted that demands for increasing GDP spend on healthcare to 2.5%, prioritizing healthcare, promoting medical value travel, addressing indirect taxation, and rationalizing GST remain unmet

3.2. Could Pythons be a protein alternative?

Thousands of pythons in central Thailand are bred for their skins, used in high-end fashion items like belts and handbags.

- Some experts believe python meat could be more valuable than their skins due to global meat demand and environmental considerations.
- Pythons are resilient to high temperatures and drought, reproduce quickly, and grow fast with minimal food consumption.
- Research suggests python farming could offer a sustainable response to global food insecurity.
- Studies show pythons can survive for long periods without food or water without losing condition.
- Python meat has a texture similar to chicken, low in saturated fats, but it has not gained widespread international popularity.
- Meat from grazing animals, like beef, has a significant environmental impact according to the UN.
- Despite advocacy for plant-based diets, global meat demand is projected to increase.
- Protein-energy malnutrition remains a significant global health concern, prompting exploration into alternative protein sources like insects and lab-grown meat.



A python at Closed Cycle Breeding International, a snake breeding farm in Nam Phi, in Thailand's northern Uttaradit province. The farm provides snake skins for the fashion market. AFP

3.3. How the Same Ear Senses Murmurs and Withstands Deafening Music

At the heart of our auditory system are intricate hair cells nestled within the cochlea. Each cochlea houses around 16,000 of these sensory cells, each with a cluster of hair-like projections called stereocilia. These stereocilia, arranged like a staircase from the shortest to the tallest, are key to hearing

- The human auditory system is remarkably versatile, capable of detecting faint whispers and enduring loud noises.
- Recent research reveals that our ears adapt to different sound environments, similar to how pupils adjust to light.
- Hair cells within the cochlea are central to our hearing, with around 16,000 sensory cells equipped with stereocilia.
- Stereocilia are hair-like projections connected by tip links, which play a crucial role in converting sound waves into electrical signals.
- Sound waves cause vibrations in the inner ear fluid, bending stereocilia and stretching tip links, opening ion channels that generate electrical signals.
- Nerve cells transmit these signals to the brain, where they are interpreted as sound, resembling a microphone's function.

A mechanical circuit breaker

- Humans perceive sound between 20 Hz to 20 kHz in frequency and 5-120 decibels (dB) in intensity.
- Sound waves exert a force of 10–100 piconewtons (pN) on tip links in the auditory system.
- Tip links consist of proteins cadherin-23 (CDH23) and protocadherin-15 (PCDH15), crucial for sound transmission.
- Loud noises can break these tip links, a protective mechanism to prevent hair cell damage.
- Unlike hair cells, tip links can regenerate, preserving hearing function.
- Tip links naturally dissociate and re-join, with an average lifetime of about 31.8 seconds.
- Temporary hearing loss after exposure to loud sounds occurs due to multiple tip link complexes breaking simultaneously.
- The lifetime of tip links decreases with increasing sound intensity and frequency.
- Researchers at Indian Institute of Science Education and Research studied mechanisms ensuring tip links withstand varying sound forces, safeguarding hearing.



Testing Tip Links

- Researchers used an atomic force microscope (AFM) to study tip link complexes.
- Tip links show three distinct responses to different levels of force applied.
- Lower forces result in longer tip link lifespans, while higher forces decrease their lifespan.
- Mid-range forces between 36 pN and 70 pN surprisingly do not significantly affect tip link lifespan.
- Strong forces above 80 pN cause tip links to disconnect, protecting the auditory system from intense sounds.
- Tip links act as force sensors, interrupting sound transmission to safeguard hair cells from damage.
- Tip-links in the ear act as sensitive detectors of mechanical signals from sounds.
- They convert these signals into electrical signals, enabling us to perceive faint sounds.
- In response to loud sounds, tip-links function as force filters, transmitting low forces to activate ion channels and blocking intermediate forces.
- At extremely high forces, tip-links disconnect to prevent damage to the auditory system.
- Mutations in the PCDH15 protein, part of the tip-link complex, can cause inherited deafness by altering its response to different force levels.
- Normal tip-links exhibit three responses across force ranges, including a mid-range behaviour crucial for hearing.
- Understanding tip-links could lead to innovative strategies for protecting against hearing loss from loud noises, potentially improving quality of life for many affected individuals.
- The research involved a team of scientists and was published in Nature Communications.

3.4. Mineral Security Partnership

- The MSP is a collaboration of 14 countries and the EU to catalyze public and private investment in responsible critical minerals supply chains globally.

- As of September 2023 the MSP included Australia, Canada, Estonia, Finland, France, Germany, India, Japan, South Korea, Sweden, Norway, the United Kingdom, the United States, and the European Union.
- India joined the MSP in June 2023 during PM Modi's visit to the US.

3.5. India's Hunt for Critical Minerals:

How is India's hunt for critical minerals going?

Why are lithium, copper, cobalt, graphite and others essential for the economy's green transition? In which States have reserves been found? Why have there been hiccups in the auction process? What lies ahead? Which country dominates global supplies?

GS Paper III:
Resources

The story so far:

In late June, the Centre declared the winning bidders for mining rights in six blocks of critical minerals, including graphite, phosphorite and lithium, for which India largely relies on imports. These are the first private players awarded such rights under the revamped Mines and Minerals law.

Why are critical minerals important?

Minerals such as copper, lithium, nickel, cobalt are known as critical minerals, as they along with some rare earth elements, are essential for the world's ongoing efforts to switch to greener and cleaner energy. As per the International Energy Agency (IEA), lithium demand rose by 30% in 2023, followed by nickel, cobalt, graphite and rare earth elements which saw an 8% to 15% growth, with the aggregate value of such minerals pegged at \$325 billion. In its Global Critical Minerals Outlook 2024 report, the agency has flagged that the world's goal to limit global warming to 1.5 degrees Celsius in the net zero emissions scenario, would translate into very rapid growth in demand for these minerals. By 2040, the demand for copper is expected to rise 50%, double for nickel, cobalt and rare earth elements, quadruple for graphite and

India has natural reserves of some of these minerals, but they haven't been explored or tapped fully

eightfold for lithium, which is crucial for batteries. The development of sustainable supply chains for such minerals is, therefore, an unavoidable task. In India, the lack of ready reserves of critical minerals has resulted in 100% import dependence for minerals like lithium, cobalt, and nickel. Late last month, Union Mines Minister G. Kishan Reddy highlighted that 95% of India's copper requirements are met through imports. China is a key supplier or processor of many of these items.

What is being done to spur production?

While India has natural reserves of some of these minerals, they haven't been explored or tapped fully. For instance, India holds 11% of the world's deposits of ilmenite, the main source of titanium dioxide used in many applications, but still imports a billion dollars of titanium dioxide a year, former Mines Secretary Vivek Bharadwaj once pointed out. Then there is the "lucky" discovery of lithium reserves in the Union Territory of Jammu and Kashmir (J&K) while the Geological Survey of India (GSI) was exploring the State's terrain for limestone, which triggered hope of some self-sufficiency in the mineral. Announced as the first discovery of lithium in the country last February, these reserves were pegged at 5.9 million tonnes, enthralling the government to expedite its tapping.

Acknowledging that reliance on a few nations for the ores and processing of these minerals could pose significant vulnerabilities for Indian supply chains, the central government amended the Mines and Minerals (Development and Regulation) Act, 1957 in August 2023 to enable it to grant mining concessions for 24 critical and strategic minerals. By November, the first auctions of 20 critical mineral blocks, with the lithium block identified in J&K's Reasi district on the list, were launched, followed by two more tranches with 18 more blocks offered this February and March. However, investor interest has been tepid – the auction of most of the first 20 blocks was scrapped for lack of adequate bidders. After a delayed process, the Mines Ministry on June 24, announced six winners from the maiden auction tranche for three blocks in Odisha, and one each in Tamil Nadu,

U.P. and Chhattisgarh. The outcomes of the second and third round of auctions are still awaited, while the Ministry has initiated a fourth tranche, which includes 10 blocks that are being offered for the second time.

Why are some blocks not finding takers?

Among the first attempt blocks offered in the latest auction, two phosphorite blocks along with a glauconite block are in Chhattisgarh, while two blocks each are up for grabs in U.P. (phosphorite and rare earth elements), Karnataka (phosphate and nickel), and Rajasthan (potash and halite). A graphite block is being auctioned in Jharkhand and Arunachal Pradesh, with five additional blocks of graphite, tungsten and vanadium offered in the northeastern State for the second time. The 'second attempt' blocks also include a tungsten reserve in Tamil Nadu's Madurai district, a cobalt and manganese block in Karnataka's Shimoga, and a chromium and nickel block in Sindhudurg, Maharashtra.

As per industry experts, the reasons for low interest among miners for some of these blocks include the lack of adequate data on the potential reserves buried within them. Technology challenges also affect outcomes. For instance, the lithium block in J&K has clay deposits, and the technology for the mineral's extraction from clay remains untested globally, pointed out Girishkumar Kadam, senior vice-president and group head for corporate sector ratings at ICRA.

When is domestic production likely to begin?

Given the preliminary stage of exploration for most of the domestic blocks being auctioned, their commercialisation and associated benefits are unlikely to fully accrue in the current decade ending 2030, ICRA said. "India's manufacturing is thus likely to remain exposed to potential future supply shocks of these minerals till then," it concluded. Apart from spurring exploration and attracting more miners, the Centre is looking to acquire overseas assets from key resource-rich regions as a parallel measure to bolster mineral security. The first such mine, for lithium brine, was acquired in Argentina this year by Khanij Bidesh India Limited, a joint venture of NALCO, Hindustan Copper, and Mineral Exploration Company. While it scouts for more assets, India has also joined the U.S.-led Mineral Security Partnership, a block consisting of large buyers and sellers of critical minerals.



Big discovery: The lithium stones found in Reasi, Jammu in 2023. PTI

3.6. Recombinant DNA (rDNA) Technology:

- Recombinant DNA (rDNA) technology is a method used to bring together genetic material from multiple sources, creating sequences that would not otherwise be found in the genome.
- This technique involves combining DNA from different organisms and is a cornerstone of genetic engineering.

Steps in rDNA Technology

- **Isolation of Genetic Material (DNA):** The process begins with the extraction of DNA from a donor organism.
- **Cutting DNA at Specific Sites:** Restriction enzymes, also known as molecular scissors, are used to cut DNA at specific sequences.

- **Ligation of DNA Fragments:** DNA fragments from the donor and vector (a DNA molecule used to carry foreign genetic material into another cell) are ligated or glued together using DNA ligase enzyme.
- **Insertion into a Host Organism:** The recombinant DNA is then introduced into a host cell. Common hosts include bacteria, yeast, and mammalian cells.
- **Selection and Screening:** Host cells that have successfully incorporated the recombinant DNA are selected using markers such as antibiotic resistance.
- **Expression of the Gene:** The host cells express the gene, leading to the production of the desired protein or trait.

3.7. Graphene A Simple Wonder:

Graphene: a simple wonder

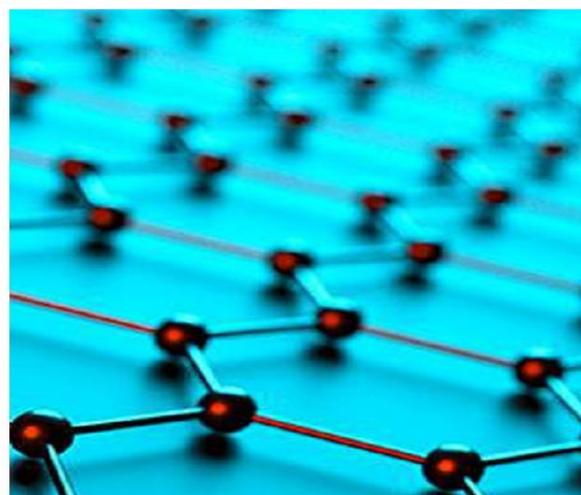
GS Paper III: S&T
Karthik Vinod

When the same element is able to exist in different forms, the forms are called allotropes. Graphene, thus, is an allotrope of carbon, along with diamond and graphite. It consists of a single layer of carbon atoms that are linked to each other in a honeycomb pattern.

Graphene is among the most versatile materials known to humankind. As a nanomaterial, it is stronger than diamond, more conductive than silver, more elastic than rubber, and lighter than aluminium. Many people called it a "wonder material".

It is simple to make graphene: use scotch tape to peel away the lead of a pencil for a while. Under a microscope, you should be able to see graphene residue left on the tape.

However, scientists use more sophisticated techniques in laboratories, like chemical vapour deposition, to deposit graphene in order to make stronger car tires or when making chips to replace those made of silicon in smartphones. When graphene is mixed with concrete, the latter becomes 25% stronger and less carbon-intensive. Graphene also develops some unusual properties in a twisted bilayer form. In 2019, for example, physicists found that when one



Graphene is among the most versatile materials known to humankind. As a nanomaterial, it is stronger than diamond, more conductive than silver, more elastic than rubber, and lighter than aluminium. GETTY IMAGES/ISTOCKPHOTO

sheet of graphene is placed above another and rotated by 1.1 degrees relative to the bottom layer, the stack becomes a superconductor at low temperature.

(Karthik Vinod is interning with The Hindu.)

For feedback and suggestions
for 'Science', please write to
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with the subject 'Daily page'

3.8. Regenerative Breaking:

In an electric vehicle, what is regenerative braking?

Regenerative braking is a system designed to convert the kinetic energy of the wheels to a form that can be stored and used for other purposes. Here the motor operates as a generator, turning mechanical energy back to electrical energy

GS Paper III: S&T
Vasudevan Mukunth

The impulse to be sustainable – driven by the incessant pressure to lower our emissions – often manifests as lowering consumption and increasing reuse alongside reforms like tweaking consumer behaviour. **Electric vehicles** are the site of many of these changes, aided by state-led incentives and subsidies. **Regenerative braking is an important mechanism in these vehicles that increases their energy use efficiency.**

What is braking?

Braking is the mechanism by which an automotive vehicle in motion slows down. A vehicle moving faster has more kinetic energy than a vehicle moving slower, so the process of braking removes (mostly) kinetic energy from the vehicle. **The law of energy conservation means this removed energy has to go somewhere.**

For example, the disc brake is one type of mechanical brake: it works by pressing brake pads against a disc attached to spinning wheels, and uses friction to convert some of the wheels' kinetic energy into heat. This is why the discs of disc brakes have holes cut into them, to dissipate heat better.

Another type is the induction brake, often used in trains: a magnet induces circular electric currents in a spinning wheel (made of a conducting material, like metal). These currents produce their own magnetic field, which opposes that of the external magnet. The opposition acts like a drag on the wheel and forces it to slow down. In terms of energy: the metal resists the flow of the circular currents and dissipates heat.

What is regenerative braking?

Regenerative braking is a brake system designed to convert the kinetic energy of the wheels to a form that can be stored and used for other purposes. As such, it creates a process in which at least part of the energy delivered to the vehicle's wheels can be recovered in a situation when the vehicle doesn't need it.

Regenerative braking is one type of dynamic braking. In an electric vehicle, of the types becoming common on Indian roads, a battery onboard the vehicle draws electric power from the grid and stores it. When the vehicle moves, the battery powers an electric motor that

propels the vehicle, converting electrical to mechanical energy. This motor is called the traction motor.

During regenerative braking, the motor operates as a generator, turning mechanical energy back to electrical energy. In the vehicle, this means an electric current will be produced as the vehicle brakes, which is stored separately in a battery. In some other vehicles, especially trains, the current is fed back into the traction motor. The other type of dynamic braking is rheostatic braking, where the current is sent to an array of resistors that dissipate the electrical energy as heat. It is often necessary for a vehicle to have both regenerative and rheostatic braking in case the electrical energy recovered can't be stored or used right away.

How does motor become a generator?

A motor has two essential parts: a rotor (the thing that rotates) and a stator (the thing that's stationary). **In a rudimentary design, the stator consists of permanent magnets or electromagnets while the rotor consists of current-carrying wires coiled around in loops.** The stator surrounds the rotor.

When a charged particle, like an electron, moves inside a magnetic field, the field exerts a force on the particle called the Lorentz force. Whether the force will push or pull the wire in which the electron is moving depends on the direction of the electric current.

This is when the coiling helps. The current at the coil's two ends moves in opposite directions, so the magnetic fields imposed by the stator will push on one end of the coil and pull on the other. And these opposing forces will continue to act on the two sides of the rotor until the voltage across the wire is constant. **Thus, a motor converts electrical energy to rotary motion.**

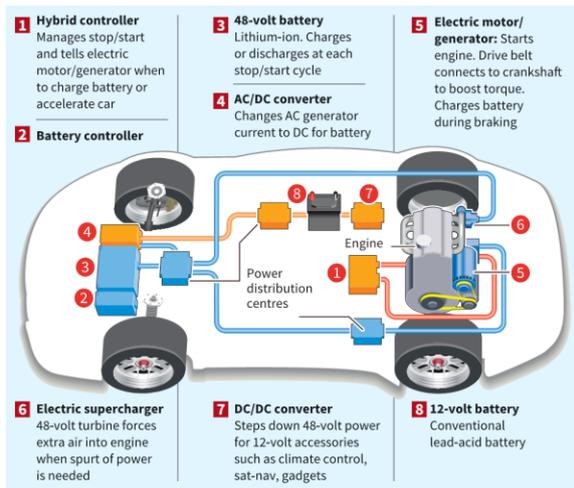
In a generator, mechanical energy from an external source can be fed to the rotor to induce a current in the stator. Simply speaking, by switching the traction motor between these two configurations, an electric (or hybrid) vehicle can implement regenerative braking.

Does regenerative braking have downsides?

While it is a simple energy recovery mechanism, regenerative braking has some downsides. For example, it alone

The mechanics of brake energy generation

Regenerative braking is a type of dynamic braking. Here the motor operates as a generator, turning mechanical energy back to electrical energy. In the vehicle, this means an electric current will be produced as the vehicle brakes, which is stored in a battery



Sources: Delphi Automotive, Ricardo, European Commission

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often doesn't suffice to bring an electric vehicle to a halt.

It has to be used together with a conventional system that dissipates some of the kinetic energy as heat.

Such a system is also required to prevent vehicles from backsliding downhill, which many regenerative brakes won't prevent.

Another example is that the amount of energy a regenerative brake can recover drops as the vehicle's velocity drops as well. This said, a regenerative brake can be beneficial for an electric vehicle's energy-use efficiency in stop-start traffic.

Are there other ways to recover energy?

The design of a regenerative brake depends on the energy form to which the mechanical energy from the wheels is to be converted. An electric vehicle funnels

it into a generator and obtains a current, which is stored in a battery or a supercapacitor. Similarly, **the mechanical energy can be used to increase the angular momentum of a rotating flywheel.** Flywheels are especially useful because they can receive energy much faster than other such systems.

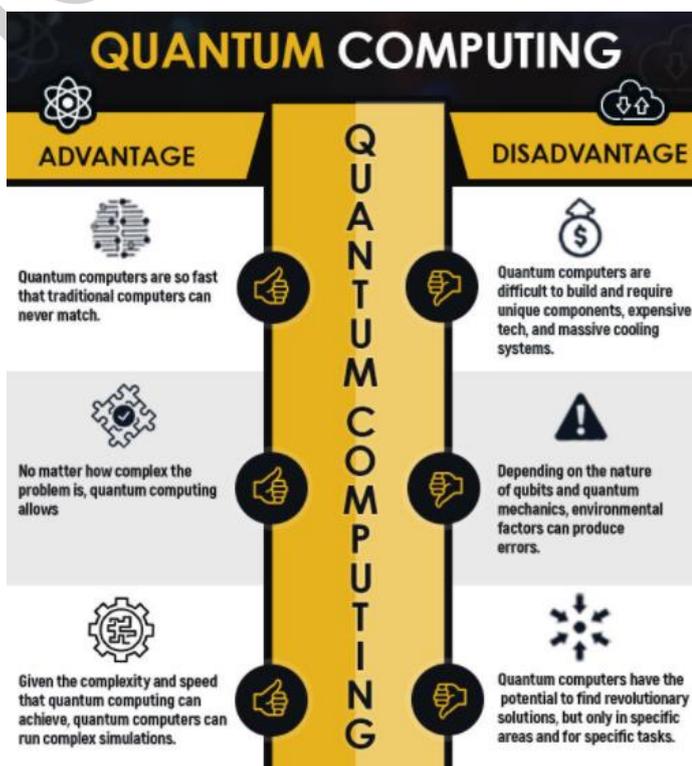
For every unit increase in speed, they also store exponentially more energy. Engineers have been able to build flywheels with carbon-composites that, in a vacuum, can spin at up to 50,000 rpm. The flywheel can be linked to a reciprocating engine to manage or augment its output, like in Formula One racing, or to a gyroscope to help submarines and satellites navigate.

Recovered kinetic energy can also be fed to a pump that compresses air, which can be useful to start internal combustion engines.

3.9. National Quantum Mission (NQM):

- The Union Cabinet approved the National Quantum Mission (NQM) on 19th April 2023.
- **Total cost:** Rs.6003.65 crore from 2023-24 to 2030-31.
- Implemented by the Department of Science & Technology (DST) under the Ministry of Science & Technology.
- Aims for 2023-2031 to foster scientific and industrial R&D in Quantum Technology (QT).
- India becomes the seventh country with a dedicated quantum mission after the US, Austria, Finland, France, Canada, and China.
- **Objective:**
 - Develop intermediate-scale quantum computers with **50-1000 physical qubits in 8 years** on platforms like superconducting and photonic technology.

- Satellite-based secure quantum communications between ground stations over a range of 2000 km within India.
- Long-distance secure quantum communications with other countries.
- Inter-city quantum key distribution over 2000 km.
- Multi-node Quantum networks with quantum memories.
- Develop magnetometers with high sensitivity in atomic systems and Atomic Clocks for precision timing, communications, and navigation.
- Support the design and synthesis of quantum materials like superconductors, novel semiconductor structures, and topological materials for quantum devices.
- Develop single photon sources/detectors and entangled photon sources for quantum communications, sensing, and metrological applications.
- **Mission Implementation:**
Set up four Thematic Hubs (T-Hubs) in top academic and National R&D institutes:
 - Quantum Computing
 - Quantum Communication
 - Quantum Sensing & Metrology
 - Quantum Materials & Devices
- **Focus:** Generation of new knowledge through basic and applied research and promote R&D in their mandated areas.
- **Quantum Technology:**
 - Field dealing with the principles of **quantum mechanics, which studies matter and energy at the atomic and subatomic level.**
- **Advantages:**
 - **Increased computing power:** Quantum computers are much faster than current computers.
 - **Improved security:** Quantum encryption is more secure than traditional methods.
 - **Faster communication:** Quantum networks can transmit information faster and more securely.
 - **Enhanced AI:** Quantum machine learning can enable more efficient AI training.
 - **Better sensing and measurement:** Quantum sensors can detect extremely small environmental changes.
- **Disadvantages:**
 - **Expensive:** Requires specialized equipment and materials.
 - **Limited applications:** Currently useful for specific areas like cryptography, computing, and communication.
 - **Sensitivity to environment:** Highly sensitive to



interference like temperature changes and magnetic fields.

- **Limited control:** Difficult to control and manipulate quantum systems; quantum AI could have unintended consequences.

Do you Know?

Invertebrate and vertebrate species represent two major divisions within the animal kingdom based on the presence or absence of a backbone or vertebral column.

Invertebrates:

- **Definition:** Invertebrates are animals that do not possess a backbone or vertebral column. They make up the vast majority of animal species, constituting about 97% of all known animal species.
- **Examples:** Invertebrates include diverse groups such as insects, arachnids, mollusks, echinoderms, annelids, cnidarians, and more.

Vertebrates:

- **Definition:** Vertebrates are animals that possess a backbone or vertebral column composed of individual vertebrae.

Examples: Vertebrates include fish, amphibians, reptiles, birds, and mammals.

3.10. Rural Mobile Connectivity:

Even though cellular networks seem omnipresent, their deployment and use vary significantly between urban and rural areas. According to the latest Telecom Subscription Data, urban tele-density in the country is 127% while rural tele-density is 58%

- Mobile devices are integral to daily life for communication, financial transactions, and Internet access.
- Connectivity for these devices is provided by cellular (mobile) wireless networks.
- Cellular networks, such as 5G, consist of network equipment connected by communication links.
- These networks facilitate data movement between devices and other networks like the Internet.
- A cellular network is divided into two sub-networks: the Access Network (AN) and the Core Network (CN).

What are access and core networks?

Access Network (AN):

- Consists of base stations providing wireless connectivity within a limited coverage area.
- Base stations are installed across regions, often seen as towers with antennae on top.

Core Network (CN):

- Includes equipment facilitating connectivity to other networks, like the Internet.
- Operates centrally and is not colocated with base stations.
- Connected to base stations via optical fiber links known as backhaul.

Data Flow:

- Data from mobile devices passes through both base stations and the CN to reach its destination.
- Even nearby users connected to the same base station require data to pass through the central CN.

Mobility Support:

- CN is crucial for supporting user mobility within cellular networks.

What impedes rural connectivity?

- Urban areas in India have high tele-density (127%) compared to rural areas (58%), indicating a digital divide.
- Rural areas face challenges like affordability of mobile services, low population density, and geographic remoteness.
- Extending fiber infrastructure to rural locations is expensive and difficult, such as reaching villages in remote regions like the Himalayas.
- Current cellular networks, like 5G, are designed primarily for urban settings in developed countries, focusing on high data rates and low latency.
- There is a need for research and development to adapt cellular networks to efficiently cover large rural areas and address these challenges effectively.

What is the IEEE 2061-2024 standard?

- Research at IIT Bombay, led by Prof. Abhay Karandikar, focuses on affordable rural connectivity.
- Their work contributed to the IEEE-2061 standard, approved on June 6 by IEEE, defining a wireless network architecture for rural broadband access.
- The IEEE-2061 network includes both Core Network (CN) and Access Network (AN) components similar to cellular networks.
- Unlike 5G networks, IEEE-2061's AN is heterogeneous, combining macro-BS for large coverage and Wi-Fi for small coverage areas within villages.
- Devices in IEEE-2061 can seamlessly switch between Wi-Fi and macro-BS connectivity without service disruption, facilitated by integrated AN control functionality.
- The network supports coexistence of various technologies like 4G, 5G, 6G, Wi-Fi, and legacy networks, aiming to prevent issues such as call drops with its integrated control features.

What is a middle-mile network?

- IEEE-2061 standard proposes a multi-hop wireless middle-mile network for extending connectivity where optical fiber links are unavailable.
- This middle-mile network is cost-effective over long distances, using technologies like satellites or long-range Wi-Fi.
- Unlike 4G/5G networks where Internet connectivity relies on the Core Network (CN), IEEE-2061 allows for direct and alternate paths to the Internet from the Access Network (AN).
- AN in IEEE-2061 can handle communication between nearby users directly within the network, bypassing the CN, which is advantageous especially in rural areas.
- Developed at IIT Bombay under Prof. Karandikar's leadership, IEEE-2061 is the second standard following IEEE 1930.1-2022, aiming to provide affordable rural connectivity and innovate mobile network scalability.

Environment

1. National Parks and Wildlife Sanctuaries

1.1. Periyar National Park and Wildlife Sanctuary (PNP)

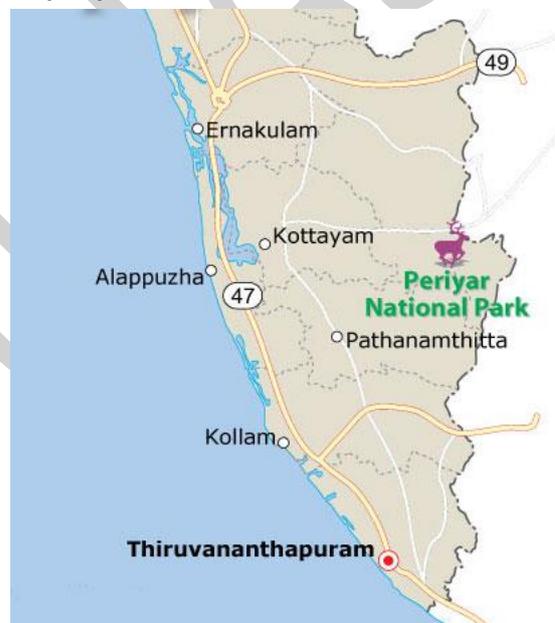
- Location: Districts: Pathanamthitta and Idukki, Kerala, India
- Type: Protected area, Elephant and Tiger reserve
- Area: 925 km² (357 sq mi), with 305 km² (118 sq mi) declared as Periyar National Park in 1982
- Major Watershed: Periyar and Pamba Rivers

Geography:

- Location: Cardamom Hills and Pandalam Hills of the south Western Ghats, near the Tamil Nadu border.
- Elevation: Ranges from 100 m to over 2,000 m (Kottamala Peak, 2,019 m).
- Reservoir: Periyar Lake (31 km²), formed by **Mullaperiyar Dam (1895)**

Vegetation:

- Forest Types: Tropical evergreen, semi-evergreen, moist deciduous, montane grasslands, savannas, eucalyptus stands, wetlands, lake, and river ecosystems
- Plant Diversity: Grasses: 171 species and Orchids: 140 species
- **Notable Flora:** Teak, rosewoods, terminalia, sandalwoods, mangoes, jamun, tamarind, banyans, sacred fig, kino tree, bamboos, Diospyros bourdillonii, Hopea parviflora, Dipterocarpus indicus, Semecarpus travancoricus, Nageia wallichiana (South Indian conifer)
- **Endemic Flora:** Habenaria periyarensis, Syzygium periyarensis
- **Medicinal Plant:** Gloriosa lily
- Surrounding Areas: Tea, cardamom, and coffee plantations



Fauna:

- **Key Species:** Bengal tigers (40 counted in 2017), Asian elephants, white tigers, gaur, sambar, wild pig, Indian giant squirrel, Travancore flying squirrel, jungle cat, Dhole, sloth bear, Nilgiri tahr, lion-tailed macaque, Nilgiri langur, Salim Ali's fruit bat, stripe-necked mongoose, Nilgiri marten
- **Endemic Birds:** Malabar grey hornbill, Nilgiri wood pigeon, blue-winged parakeet, Nilgiri flycatcher, crimson-backed sunbird, white-bellied redstart, black-necked stork
- **Newly Recorded Species (2016):** Eurasian woodcock, steppe gull, grey-necked bunting, paddyfield warbler
- **Reptiles:** 45 species
- **Snakes:** 30 species (including king cobra, Malabar pit viper, striped coral snake)
- **Lizards:** 13 species

1.2. Kaziranga National Park and Tiger Reserve

- It was established as a National Park in 1974 and was declared a Tiger Reserve in 2006.

Significance:

- **UNESCO World Heritage Site:** Kaziranga was declared a UNESCO World Heritage Site in 1985 for its unique natural environment and biodiversity.
- **Biodiversity Hotspot:** It is renowned for its rich biodiversity, particularly its population of the Indian one-horned rhinoceros.



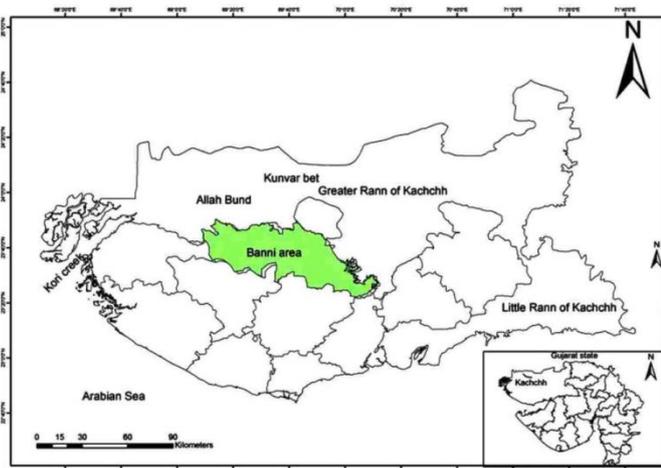
Flora and Fauna:

- **Indian One-Horned Rhinoceros:** Kaziranga is home to the largest population of the Indian one-horned rhinoceros in the world.
- **Tigers:** It has a significant population of Bengal tigers, and its designation as a Tiger Reserve highlights its importance for tiger conservation.
- **Elephants:** The park has a large number of elephants.
- **Other Mammals:** Other notable mammals include the Indian wild buffalo, swamp deer, and various species of deer and primates.
- **Birds:** Kaziranga is a birdwatcher's paradise, with a large number of resident and migratory birds, including the great Indian hornbill and various species of eagles, storks, and herons.

1.3. Banni Grasslands:

While the Gandhi Sagar sanctuary in Madhya Pradesh is the preferred location for the next lot of imports, Banni in Gujarat is also getting readied to house some of the big cats to land in India.

- Some of the next batch of cheetahs from Africa may be sent to a new cheetah-breeding and conservation center in **Banni, Gujarat, as part of Project Cheetah.**
- Gandhi Sagar sanctuary in Madhya Pradesh is currently the preferred location for the next cheetah batch.
- The Gujarat government is working to set up suitable enclosures in Banni, which could be ready in six months.
- **Banni, a vast grassland in Kutch,** has ample space but lacks sufficient prey for cheetahs.
- Chital, the main prey for cheetahs in India, may need to be introduced to Banni for a viable population.
- The **Madhya Pradesh Forest Department manages cheetahs at Kuno**, where 13 of the 20 cheetahs brought since September 2022 are alive, along with 13 cubs.
- **Kuno's** capacity is limited to 21 adult cheetahs due to prey constraints.
- India plans to import 10 to 12 adult cheetahs annually for the next five years to establish a sustainable breeding population.



- Banni is attractive due to the absence of leopards, which could help sustain a larger cheetah population long-term.
- All cheetahs in Kuno are expected to be released into the wild in October, and preparations for the next batch from South Africa and Namibia will follow.

2. Climate Change and Sustainable Development:

2.1. Emission Targets for Industries:

Emission targets likely to be set for polluting industries soon

Jacob Koshy
NEW DELHI

Finance Minister Nirmala Sitharaman's Budget speech has, for the first time, signalled that polluting industries such as iron, steel, and aluminium will have to conform to emission targets.

"A road map for moving the 'hard to abate' industries from 'energy efficiency' targets to 'emission targets' will be formulated. Appropriate regulations



To be held accountable: Smoke rises from a coal-powered steel plant at Hehal village near Ranchi in Jharkhand. FILE PHOTO

for transition of these industries from the current 'Perform, Achieve, and Trade' mode to 'Indian

Carbon Market' mode will be put in place," Ms. Sitharaman said in her address. While emission norms

have usually applied to large industries, the Budget suggests a tightening of norms for even small and micro-scale industries. "An investment-grade

energy audit of traditional micro and small industries in 60 clusters, including brass and ceramic, will be facilitated. Financial support will be provided for shifting them to cleaner forms of energy and implementation of energy effi-

ciency measures. The scheme will be replicated in another 100 clusters in the next phase," Ms. Sitharaman said.

These directives come in the backdrop of the proposed India Carbon Market that has been in the works for a few years. A carbon market or an emission trading scheme works as a trading platform where carbon credits, created as

a consequence of preventing carbon emissions, can be bought and sold on negotiated prices on a portal. The system only works if an industry is required to curb annual emissions, failing which they may be fined. Currently, industry in India has no curbs on emissions in lieu of carbon credits but are incentivised to achieve energy efficiency targets via a scheme called Perform, Achieve, Trade that has been operational since 2015.



2.2. Sustainable solutions by Rajasthan tribes make a mark at UN forum

- Indigenous tribal communities in Rajasthan presented their solutions to global challenges at the UN High-Level Political Forum (HLPF) in New York.
- The forum, hosted by the UN Economic and Social Council (ECOSOC), focused on achieving the 2030 Sustainable Development Goals (SDGs) and addressing poverty amidst multiple crises.
- Experts highlighted the importance of recognizing indigenous communities for their contributions to biodiversity and sustainable practices.
- Indigenous solutions offer valuable insights into sustainable development and should be included in global strategy discussions.
- Vaagdhara, a group working on tribal livelihood issues in southern Rajasthan, organized over 90 events to promote the **preservation of indigenous seed varieties**.
- Tribal farmers pledged at these events to save and use indigenous seeds in their farming practices.
- These traditional practices helped tribal **communities rely less on the market and endure difficult times**, including the COVID-19 pandemic.
- These practices aim to meet the tribal communities' needs while also addressing poverty, inequality, and vulnerability.
- The approach is based on the principle of "swaraj" (sovereignty), which fosters self-sufficiency and aligns with broader Sustainable Development Goals (SDGs).

2.3. CPCB plans to check violations in plastic waste trading regime

- The Central Pollution Control Board (CPCB) has launched a national audit of about 800 plastic-waste recyclers after discovering that four firms in Karnataka, Maharashtra, and Gujarat issued nearly 600,000 fake certificates under the Extended Producer Responsibility (EPR) programme.

- The EPR scheme requires businesses to recycle a certain percentage of plastic used in packaging over the previous two years.
- CPCB has also filed a complaint with the Delhi Police about stolen EPR credits from its online portal, leading to an ongoing investigation.
- An official from CPCB explained that the issue of fake certificates was due to early challenges with the new scheme and lack of clarity among recyclers.
- The CPCB is closely monitoring EPR filings and will impose heavy fines on companies involved in fraudulent activities.
- The investigation, which began in October, is also focusing on enhancing the security features of the EPR-trading platform.

Do you Know?

The Central Pollution Control Board (CPCB) is a statutory organization under the Ministry of Environment, Forest and Climate Change (MoEFCC). It was established in 1974 under the Water (Prevention and Control of Pollution) Act, 1974

2.4. What are the laws preventing tree felling in Delhi?

- According to the 'India State of Forest Report 2021' (ISFR), Delhi has the largest forest cover among major megacities, with 195 sq. km, followed by Mumbai (110.77 sq. km) and Bengaluru (89.02 sq. km). Delhi's forest cover is 13.15% of its area, and tree cover is 147 sq. km (9.91%).
- Despite urban development, Delhi's overall green cover (forest and tree cover) has increased from 151 sq. km (10.2%) in 2001 to 342 sq. km (23.6%) in 2021.
- The Delhi Preservation of Trees Act (DPTA), 1994, protects trees in Delhi from actions that harm their growth. Section 8 of the Act prohibits the removal of any tree or forest produce without permission from the 'Tree Officer'. Violating this can lead to imprisonment for up to one year, a fine of up to ₹1,000, or both.
- The Act also establishes a 'Tree Authority' responsible for tree censuses, managing nurseries, and reviewing construction proposals.
- Delhi's Tree Transplantation Policy, 2020, mandates that 80% of trees slated for felling must be transplanted. However, an affidavit revealed that only 33.33% of transplanted trees have survived.
- The Supreme Court is hearing a contempt petition against DDA's Vice Chairman for the illegal felling of about 1,100 trees for road expansion in an eco-sensitive zone. The DDA started cutting trees before seeking the court's permission and misled the court by applying for permission afterward.
- The court has halted DDA's work and directed the Forest Survey of India (FSI) to assess the environmental damage.
- Amid an extreme heatwave, rampant tree felling in Delhi will worsen hardships. Urban forests are essential for reducing emissions, filtering pollutants, and lowering temperatures through shading and evapotranspiration.
- There is a suggestion to increase the penalty under the DPTA from ₹1,000 to ₹5,000 to reflect current realities

2.5. The shape of a five-year climate agenda for India (05 July)

- The new government's climate action will impact every ministry and sector.

- Decisions made will influence India's sustainable economic path and position in global climate discussions.
- Over the last decade, India has shown significant climate progress and leadership.
- India has established global institutions like the International Solar Alliance and the Coalition for Disaster Resilient Infrastructure.
- India set ambitious targets like the 2070 net-zero goal and enhanced Nationally Determined Contributions (NDC).
- The net-zero goal emphasizes the importance of absolute emission reductions.
- Domestic economic policies are increasingly focused on sustainability.
- The Indian emissions carbon trading scheme is an example of long-term climate action.
- The government needs to accelerate sustainable development and align climate leadership with economic growth.
- India's approach should be 'go higher, go wider, go deeper' in its climate initiatives.

A plan sheet for India

- 'Go higher' relates to India's global climate leadership.
- India could host important international climate summits, like the UN Conference of Parties in 2028.
- Preparation for hosting such events requires early planning and consensus building on key issues.
- India should aim for major commitments on reducing oil and gas investments and securing adaptation finance for developing countries.
- Promoting equity in international forums and securing climate finance leadership is crucial.
- 'Go wider' means adopting and communicating sectoral emission reduction targets beyond the power sector.
- Significant progress in the power sector should continue, but targets should extend to sectors like private mobility.
- Setting clear targets for zero-carbon vehicles can boost mobility in rural areas, create jobs in clean energy, and promote economic growth.
- Credible policy goals drive action in relevant industries and stakeholders.
- The NDC for 2035, due next year, can expand India's energy transition targets.

State-level plans are important

- 'Going deeper' emphasizes sub-national climate action and resilience.
- The Council on Energy, Environment and Water (CEEW) supports states in net-zero plans.
- CEEW collaborated with Tamil Nadu and Bihar for their net-zero transition plans.
- The government should create a Centre-State coordination group for climate actions.
- Incentivize state-level climate actions through the Sixteenth Finance Commission.
- Promote the integration of scientific modelling in policymaking.
- Facilitate unified data measurement, reporting, and verification (MRV) at the state level.
- Coordination should enhance, not centralize, state-level actions.
- The Centre should act as an active facilitator for state-level climate responses.
- The new government should aim to elevate India's global climate leadership.
- Plan for the next four to five years, not just annually.
- India has a seat at international tables and must now demonstrate climate leadership.

2.6. Issue of Tree Planting Scheme in Delhi:

The issue with tree planting schemes

GS Paper III: Environment

The exploitation of forest resources due to uncontrolled and unsustainable practices has degraded forest landscapes. The World Bank estimates that the world has lost about 10 million square kilometres of forests since the start of the 20th century. The emphasis on forest restoration approaches to bring such degraded ecosystems back to their earlier state was the main purpose of declaring the decade of 2021-2030 as a Decade of Ecosystem Restoration by the United Nations. This targeted the restoration of 350 million hectares of degraded land to generate \$9 trillion in ecosystem services and sequester an additional 13 gigatons-26 gigatons of greenhouse gases from the atmosphere.

As one of the proven methods to support and sustain biodiversity, tree planting is an undisputed, most appealing and popular approach, and with spectacular potential, to address climate-related crises and other environmental challenges. This includes biological carbon sequestration as a mechanism to store and remove carbon dioxide from the atmosphere. This is one reason to consider a mass-scale drive of tree planting as a silver bullet to tackle the challenges of climate change globally, by governmental and non-governmental organisations including individuals. Keeping this indispensable role of trees in maintaining the ecological balance, the then Indian Agriculture Minister, K.M. Munshi, launched the Van Mahotsava ('festival of trees') programme in July 1950. Since then, India has been religiously celebrating this programme of tree planting, annually, in the first week of July. To some extent, these efforts have been successful not only in motivating people but also in bringing tangible results that include improving the forest area.

Fancy drives, catchy slogans

In recent years there has been a spurt in tree planting in the name of special drives by various agencies, including governments, which is a welcome sign for environmental conservation.



Mohan Chandra Pargaen

a former Indian Forest Service officer, Hyderabad, Telangana

In tackling the many problems, adequate finances, active community participation and technical considerations need to be prioritised

With catchy slogans, glamorous drives and headline-grabbing campaigns, these programmes of tree planting, both globally and at a national level, have attracted huge media attention and the involvement of people including various organisations to fulfil their objectives. Be it a single day of a planting drive in various Indian States, the "One Trillion Project" of the World Economic Forum, the "Great Green Wall of China", the "10 Billion Tree Tsunami" of Pakistan or the "Bonn Challenge" to restore 150 million hectares of degraded and deforested landscapes by 2020 and 350 million hectares by 2030, many of these drives may seem welcome. But they have been criticised for limited community participation, a lack of adequate post-planting measures and for promoting monoculture, thereby proving less effective for carbon sequestration and biodiversity development.

The problem with such drives

The neglect of ecology and locality with little involvement of people in various tree planting programmes has been a major concern of environmentalists and scientists in recent years. In a study led by Joseph Veldman it was found that except for deforested areas, tree planting in certain locations such as grasslands and animal habitat destroys plant and animal habitats and can damage ecosystems, increase wildfire intensity and exacerbate global warming. Similarly, William Bond and colleagues, in their study, expressed scepticism in considering grasslands as deforested and degraded lands for selecting them for tree planting by rehabilitation; these lands are highly productive and biodiverse, supporting many livestock and people.

Planting saplings alone does not fulfil the multifarious expectations unless we have provision for adequate post-planting measures and monitoring of tree growth – which we hardly find in the majority of tree-planting drives, more specifically in those programmes which are not supported by the government. Contrary to popular belief, tree planting only is not a

cost-effective climate solution when compared to another more rewarding approach of restoration and other alternative low-cost approach such as tree islands which involves planting in small patches or islands.

India's challenges

In 2023, in a joint address with United States President Joe Biden, the Prime Minister, Narendra Modi, said at the White House that 'India is the only G20 country that has fulfilled its commitments under the Paris Agreement'. And in a written reply in the Rajya Sabha, in February 2024, the Union Minister of State for Environment, Forest and Climate Change, Ashwini Kumar Choubey, said that 'India has achieved an additional carbon sink of 1.97 billion tonnes of CO₂ equivalent'. In India, nearly 10 million hectares of its forests are under encroachment, nearly 27.5 crore of people are dependent on forests for subsistence and nearly 5.7 million hectares of forest land have been lost for non-forestry purposes since Independence. These are challenges that pose problems for India's initiatives to restore 26 million hectares of degraded forests by 2030 and to improve forest cover using steps that include tree planting.

India's remarkable policy changes, in recent times, to tackle the challenges of forestry and restoration approaches are also being affected by these inherent problems. In the background of the criticism of mass planting drives, we need to introspect these strategies, giving much required space to adequate finances, active community participation and technical considerations. These have not been given priority. Along with public awareness campaigns, social media, and incentivised community participation, such reoriented interventions and strategies can help to bring changes in the ecological systems of our forests, and with increasing numbers, also help to create resilient forests that have diverse capacities and capabilities.

The views expressed are personal

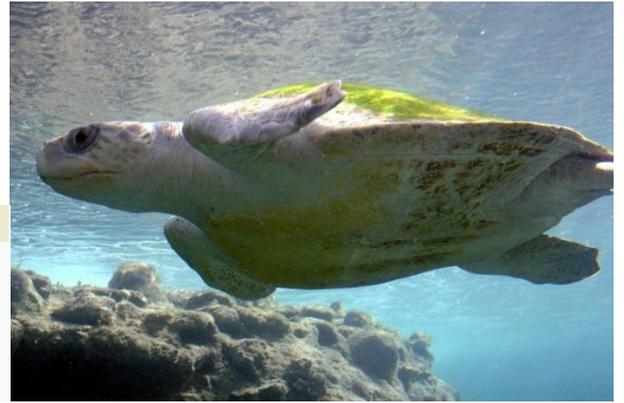
3. Species in News:

3.1. World's rarest whale may have washed up on beach in New Zealand :

- Spade-toothed whales are incredibly rare, with no live sightings recorded and little known about their population, diet, or habitat.
- Recently, a beached whale on Otago Beach in New Zealand is believed to be a spade-toothed whale, identified by its physical characteristics.
- This discovery could provide scientists with the first opportunity to dissect and study a spade-toothed whale specimen, potentially revealing new insights about its biology and habitat.
- Previously found specimens in New Zealand were buried before DNA testing, hindering detailed study.
- The whale has been stored in cold storage for examination, with plans to involve local Maori tribes in the research.
- New Zealand's Indigenous people consider whales as taonga, or sacred treasures.
- The southern Pacific Ocean is their suspected habitat, but exact locations are elusive due to their deep-diving behavior.
- Genetic testing to confirm the whale's identity may take several months.
- Researchers emphasize the difficulty in studying these elusive mammals due to their rarity and deep-sea habits.

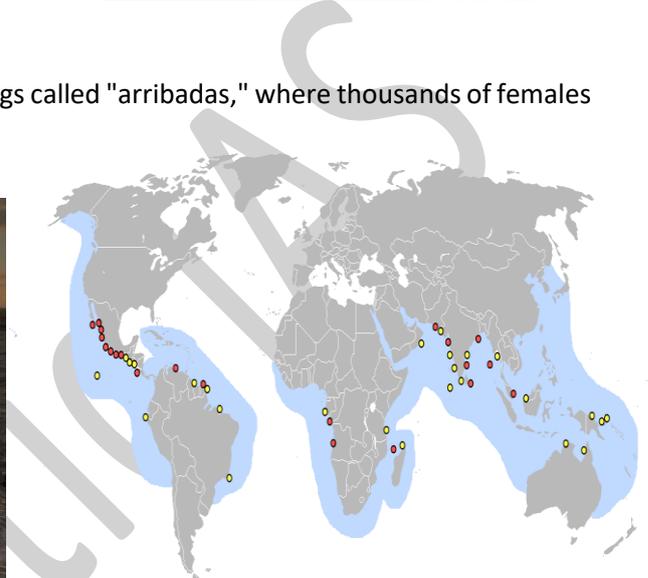
3.2. Olive Ridley Sea Turtle

- The olive ridley sea turtle (*Lepidochelys olivacea*) is also known as the Pacific ridley sea turtle.
- It belongs to the Cheloniidae family.
- It is the **second-smallest and most abundant sea turtle species** in the world.
- Found in warm and tropical waters, mainly in the Pacific and Indian Oceans, and also in the Atlantic Ocean.
- Known for unique synchronized mass nestings called "arribadas," where thousands of females gather on the same beach to lay eggs.



Conservation status

Extinct	Threatened				Least Concern	
EX	EW	CR	EN	VU	NT	LC
Vulnerable (IUCN 3.1) ^[1]						
CITES Appendix I (CITES) ^[2]						



3.3. Dogfish Shark:

GS Paper III: Environment



New species of dogfish shark discovered in Kerala harbour

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 *Centropristis* are **often exploited for their liver oil** which is in **high demand in pharmaceutical industry**, Dr. Bineesh said.

3.4. Gharials:

Some of the key locations where gharials are found in India include:

- Chambal River (Rajasthan, Madhya Pradesh, Uttar Pradesh)
- National Chambal Sanctuary (Uttar Pradesh, Madhya Pradesh)
- Katarniaghat Wildlife Sanctuary (Uttar Pradesh)
- Son River (Madhya Pradesh)
- Gandak River (Bihar, Uttar Pradesh)

Gharial (*Gavialis gangeticus*): International Union for Conservation of Nature (IUCN)- Critically Endangered.

Mugger crocodile (*Crocodylus palustris*): IUCN- Vulnerable.

Saltwater crocodile (*Crocodylus porosus*): IUCN- Least Concern

4. Climate Change and Conservation Organizations/Institutes:

4.1. The Zoological Survey of India (ZSI)

The Zoological Survey of India (ZSI) is a premier organization in India that focuses on the exploration, research, and study of the fauna in the country. Established on July 1, 1916, the ZSI functions under the Ministry of Environment, Forest, and Climate Change. Its headquarters is located in Kolkata, West Bengal.

Key Objectives of ZSI:

1. **Survey and Exploration:** Conducting surveys and studies of various animal groups across different regions in India.
2. **Research and Documentation:** Documenting the species and disseminating information through research publications.
3. **Conservation:** Assisting in the conservation of endangered species and their habitats.
4. **Identification and Advisory:** Offering identification services for fauna and providing advisory support to other departments, organizations, and researchers.
5. **Collections and Museum:** Maintaining zoological collections and museums with detailed documentation of the Indian fauna.
6. **Training and Capacity Building:** Providing training to personnel in taxonomy and faunal classification.

Divisions

The ZSI comprises several divisions and regional centers spread across the country, such as:

- Entomology Division
- Marine Biology Division
- Freshwater Biology Division
- Mammal and Ornithology Division
- Wildlife Section

Each of these divisions handles specific aspects of zoological research and wildlife conservation.

Publications and Contributions

- ZSI has a rich collection of publications, monographs, and books on various aspects of zoology.
- These include the "Records of the Zoological Survey of India" and "Memoirs of the Zoological Survey of India," among others.

4.2. International Solar Alliance:

The International Solar Alliance (ISA) is a coalition of solar-rich countries situated between the Tropic of Cancer and the Tropic of Capricorn.

- **Formation and Purpose:**

1. The ISA was launched on **November 30, 2015, by Indian Prime Minister Narendra Modi** and former French President François Hollande during the 21st session of the United Nations Climate Change Conference (COP-21) in Paris.
2. Its primary objective is to address key challenges related to global energy access, climate change, and sustainable development by promoting solar energy deployment.

- **Membership and Structure:**

1. Membership in the ISA is open to countries located fully or partially between the Tropic of Cancer and the Tropic of Capricorn (the "Sunshine Countries").
2. As of [2024], the ISA has 121 member countries and 85 signatories to the ISA Framework Agreement.

- **Goals and Objectives:**

1. Facilitate cooperation among solar-rich countries to reduce dependence on fossil fuels and promote sustainable development.

2. Mobilize more than USD 1 trillion in investment by 2030 for the deployment of solar energy technologies.
3. Provide technical and financial support to promote solar projects, capacity building, and research and development in solar energy technologies.

4.3. Coalition for Disaster Resilient Infrastructure (CDRI):

Coalition for Disaster Resilient Infrastructure (CDRI) is an international partnership that focuses on enhancing the resilience of infrastructure systems to climate change and disaster risks.

- **Formation and Purpose:**
 - The CDRI was launched by Indian Prime Minister Narendra Modi at the UN Climate Action Summit in September 2019 (United Nations Headquarters in New York City, USA).
 - Its primary goal is to support countries in making their infrastructure more resilient to climate change and disaster risks through knowledge sharing, capacity building, and collaborative initiatives.
- **Membership and Structure:**
 - The CDRI is a voluntary international coalition open to all countries and stakeholders interested in promoting disaster-resilient infrastructure.
 - It operates as a platform for governments, UN agencies, multilateral development banks, private sector entities, and academia to collaborate on resilience-building efforts.

4.4. Green Development Pact:

- The Green Development Pact was a key initiative championed by India during its G20 presidency in 2023. It aimed to bridge the gap between developed and developing nations on the path towards sustainable development.
- **Resource Efficiency and Sustainable Consumption:** The pact emphasizes promoting lifestyles that minimize resource use and advocating for the "High-level Principles on Lifestyles for Sustainable Development."
- **Clean Energy Transition:** A core aspect is achieving a clean, affordable, and inclusive shift towards renewable energy sources. This transition should prioritize people's needs and ensure infrastructure development aligns with sustainability goals.
- **Disaster Resilience:** The pact acknowledges the importance of building infrastructure that can withstand natural disasters. This focus area aligns with India's efforts to establish a Disaster Risk Reduction Working Group within the G20.

4.5. Global Biofuel Alliance:

- Global Biofuels Alliance (GBA). Launched by India in 2023 during its G20 presidency, this alliance is a collaborative effort to accelerate biofuel adoption worldwide.
- **Expediting Biofuel Uptake:** The GBA's primary aim is to boost the global acceptance and use of biofuels, with a strong emphasis on sustainable biofuels. This aligns with reducing reliance on fossil fuels and mitigating climate change.
- **Supporting National Biofuel Programs:** The alliance recognizes that different countries have varying levels of biofuel development. The GBA offers technical support to member nations, aiding them in establishing or strengthening their biofuel programs.

- **Knowledge Sharing Platform:** The alliance serves as a central hub for information exchange on biofuels. It facilitates the sharing of best practices, policy frameworks, and advancements in biofuel technology among member countries.
- **Standardization and Regulations:** The GBA recognizes the importance of clear and consistent standards for biofuels. This includes working towards internationally recognized regulations for biofuel production, trade, and sustainability practices. This promotes responsible biofuel development and fosters global trade.
- **Collaboration, not Duplication:** The alliance strives to collaborate with existing initiatives in the clean energy and bioenergy sectors. This ensures efforts are streamlined and avoids duplication of work.

4.6. Two stealth frigates being built in Russia set to be delivered soon

- Two stealth frigates for the Indian Navy, named **Tushil and Tamal**, are set to be delivered soon from Russia.
- Delays in construction and delivery were caused by COVID-19, the war in Ukraine, and Western sanctions.
- **Tushil is ready for acceptance and scheduled for delivery by September**, with the commissioning crew already in Russia.
- The second frigate, Tamal, is expected to be delivered by February 2025.
- India and Russia signed agreements in 2016 for four stealth frigates, with two imported directly and two to be built by Goa Shipyard Ltd. (GSL).
- A \$1-billion deal was signed for the two frigates directly imported from Russia.
- GSL signed a \$500-million deal with Rosoboronexport for material, design, and specialist assistance to locally manufacture the other two frigates.
- All frigates are powered by engines from Zorya-Mashproekt of Ukraine.
- GSL is scheduled to deliver the first locally manufactured frigate in 2026 and the second six months later.
- Construction progress at GSL is ongoing, with the launch of the first ship expected in the next few months.
- The Indian Navy currently operates six similar frigates, each weighing around 4,000 tonnes.

Stealth Frigate

- A stealth frigate is a type of naval warship equipped with advanced stealth technology to minimize its detectability by enemy radar and other detection systems.
- This stealth technology allows the frigate to operate with a reduced chance of being detected, tracked, targeted, and engaged by adversaries.

Key Features:

1. **Radar Cross-Section Reduction:**
 - The hull and superstructure are designed to deflect and absorb radar waves, significantly reducing the ship's radar cross-section.
 - This minimizes radar signal reflections, making the vessel less visible on enemy radar screens.
2. **Reduced Emission and Signature Management:**
 - Equipped with technologies to manage electromagnetic emissions (e.g., radar, radio, communication systems).
 - Emissions are carefully controlled to reduce detectability by enemy sensors.
3. **Low Infrared and Thermal Signatures:**

- Design and materials reduce the ship's infrared and thermal signatures, making it less visible to infrared and heat-seeking sensors.

4. **Acoustic Signature Reduction:**

- Utilizes sound-absorbing materials and techniques to minimize noise from machinery and propulsion systems.
- Reduces detectability by enemy sonar systems underwater.

Uses:

- **Anti-Submarine Warfare**
- **Anti-Air Warfare**
- **Maritime Patrol**
- **Surveillance**
- **Escort Missions**

Stealth features enhance the frigate's survivability and effectiveness in modern naval warfare by reducing detection and engagement ranges.

Project 17A

- Project 17 Alpha (P-17A) is an initiative by the Indian Navy to construct a series of stealth guided-missile frigates with enhanced stealth features, advanced weapons, sensors, and platform management systems.

1. **Origins and Purpose:**

- Launched by the Indian Navy in 2019 as a follow-on to the Project 17 (Shivalik Class) Frigates.
- Aimed at building a series of advanced stealth frigates for the Indian Navy.

2. **Construction:**

- Frigates are being constructed by Mazagon Dock Shipbuilders (MDL) and Garden Reach Shipbuilders & Engineers (GRSE).
- Four ships are under construction by MDL and three by GRSE.

3. **Timeline:**

- The first five ships were launched between 2019-2022.
- The first ship, **INS Nilgiri**, was launched in 2019.
- The second ship, **INS Udaygiri**, was launched in May 2022.

4. **Design and Indigenous Involvement:**

- Designed in-house by the Indian Navy's Warship Design Bureau (WDB).

Approximately 75% of the orders for equipment and systems are from indigenous firms, including Micro, Small, and Medium Enterprises (MSMEs), in alignment with India's Aatma Nirbhar Bharat (self-reliant India) initiative.

4.7. **INS Teg (F45):**

- INS Teg (F45) is the fourth **Talwar-class frigate** constructed for the Indian Navy.
- Built by the Yantar shipyard in Kaliningrad, Russia.
- Commissioned to Navy service on 27 April 2012.
- Belongs to the Talwar class of frigates, which are modified Krivak III-class frigates built by Russia.
- Uses stealth technologies and a special hull design to ensure a reduced radar cross section.
- Much of the equipment on the ship is Russian-made, but a significant number of systems of Indian origin have also been incorporated.
- Main differences between Teg and the earlier Talwar-class ships:
 - Use of BrahMos missiles in place of the Klub-N missiles.
 - Use of AK-630 instead of Kashtan in the earlier ships.

- First of the three frigates built in Russia as a follow-up order to the first batch of Talwar-class frigates.

4.8. DRDO unveils country's indigenous light tank Zorawar

- The prototype of India's **indigenous light tank, Zorawar**, is ready for extensive trials.
- The tank was unveiled on Saturday and developed by DRDO with Larsen & Toubro as the lead integrator.
- Currently, it is **powered by a Cummins engine**, but DRDO is working on developing a new domestic engine.
- Developed rapidly from scratch, it is designed to operate in extreme weather and high-altitude areas along the northern border with minimal logistical support.
- The first prototype has passed factory acceptance and will undergo internal field trials before being handed over to users for further testing.
- Over the next six months, the tank will be tested in various conditions, including summer, winter, and high altitude.
- It is expected to be handed over to the Army for user trials by August 2025.
- Initially, a German engine was considered best for the tank, but delays in export clearances led to the use of a Cummins engine, which will be assembled in India.
- DRDO is also developing a new 1,400-HP engine for **the Arjun Mk1A** main battle tank.
- In April 2021, the Army issued a Request For Information for the procurement of 350 light tanks weighing less than 25 tonnes, with additional requirements for logistics, technology, engineering support, maintenance, and training

4.9. India ready to host its first multinational air exercise 'Tarang Shakti' in August

- The Indian Air Force (IAF) will host its first multinational air exercise, Tarang Shakti-2024, in August.
- 10 countries are expected to participate, with a few others observing.
- The IAF aims to leverage its experience from the Red Flag exercise hosted by the U.S. Air Force.
- Friendly foreign countries with regular interactions and interoperability with the IAF will be invited.
- Tarang Shakti was initially planned for the end of 2023 but was postponed.
- The exercise will now be conducted in two phases.
- Tarang Shakti-2024 will have **two phases**:
 - **First phase**: Southern India in the first two weeks of August.
 - **Second phase**: Western sector from the end of August to mid-September.
- Some countries will participate in both phases, while others will join only one.
- Participating countries include Australia, France, Germany, Japan, Spain, the UAE, the UK, and the US.
- Germany will deploy fighter jets and an A-400M transport aircraft.
- The A-400M will be showcased as it is a contender for the IAF's open tender for medium transport aircraft.

U.S. Event

- The Red Flag exercise, hosted by the U.S. Air Force (USAF), took place from June 4 to 14 at Eielson Air Force Base, Alaska.
- This was the second edition of Red Flag in 2024; the exercise is hosted four times a year by the USAF.

- Participants in this edition included the air forces of India, Singapore, the U.K., the Netherlands, and Germany.
- The Indian Air Force (IAF) deployed eight Rafale fighters for the first time at Red Flag.
- The IAF was supported by IL-78 mid-air refuellers for the transatlantic ferry and C-17 Globemaster aircraft.

दिल्ली से भी बेहतर आपके शहर गोरखपुर में

Patriotic IAS

IAS/PCSwali Pathshala

पैडलेगंज, गोरखपुर Mob. 9971932488



Team Led by:
Amit Kumar
(More than 4 Years of Teaching Experience
In Vision IAS Delhi & Qualified 4
Times For The IAS Mains).



Piyush Gambhir Sir
(More than 5 years of teaching experience
in Vision IAS Delhi & qualified 3 times for
the IAS mains & 2 times IAS Interview)



Sonal Choudhary Ma'am
More than two years of experience
in Vision IAS and qualified
3 Times for IAS mains.



Tanya Sehgal Ma'am
More than four years of
experience in Vision IAS and
qualified 2 times for IAS mains.



Manohar Pandey Sir
(More than 5 years of experience
in Vision IAS Delhi & qualified
3 times for the IAS mains &
2 times for PCS Interview).



Piyush Kannaujia Sir
(More than 4 years of teaching
experience in Vision IAS Delhi &
qualified 6 times for the
IAS Mains & 2 IAS Interview)



Abhishek A. Singh Sir
(More than 3 years of experience
in Vision IAS Delhi & qualified
2 times for the IAS Mains).



Divyansh Srivastava sir
More than 3 years Working
experience with Vision IAS Delhi
and Qualified 2 times for IAS mains and
2 times for CAPF Interview.

FREE OPEN TEST (IAS/PCS)

10th August 2024: Ancient History (Time: 02:30 PM to 04:30 PM)

17th August 2024: Current Affairs (June + July 2024) (Time: 02:30 PM to 04:30 PM)

Venue: Patriotic IAS, 3rdFloor KV Tower, Paidleyganj Road, Gorakhpur, 273009

Contact Number: 9971932488

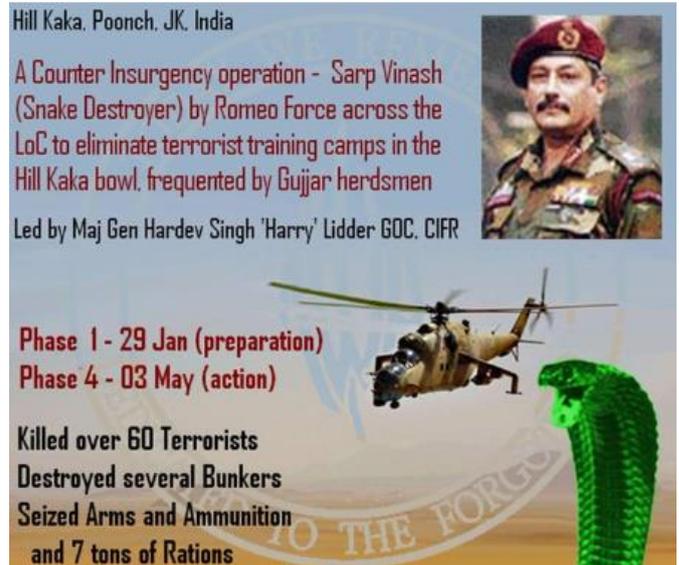
MONTHLY CURRENT AFFAIRS

JULY 2024

Internal Security

1. Operation Sarp Vinash (Snake Destroyer)

- It was a large-scale military operation conducted by the Indian Army in 2003 to flush out militants from hideouts in the Poonch-Surankot area of the Pir Panjal Range in Jammu and Kashmir.
- **Operation Name:** Sarp Vinash (Snake Destroyer)
- **Location:** Hilkaka Poonch-Surankot area of the Pir Panjal range, Jammu and Kashmir
- **Duration:** April–May 2003
- **Forces Involved:** Indian Army, including special forces like the Parachute Regiment
- **Objective:** Flush out terrorists from their bases in the region
- **Outcome:** 64 terrorists from groups like LeT, Harkat-ul-Jihad-e-Islami, al-Badr, and JeM were killed.
- **Significance:** Discovered the largest system of hideouts used by terrorists in the history of insurgency in Jammu and Kashmir, spanning 150 square kilometers in the Pir Panjal region.



2. Inner Line Permit (ILP) System

- The Inner Line Permit (ILP) is an official travel document issued by the Indian government to allow inward travel of an Indian citizen into a protected area for a limited period.
- It's mandatory for Indian citizens from outside these states to obtain a permit for entering the protected state.

Purpose:

- To regulate movement into and within certain areas along India's borders.
- To protect the unique culture, traditions, and environment of these areas.
- To prevent illegal immigration and activities that could threaten the security of the region.

Constitutional Context:

- Indian citizens are free to live and work in any state, but some states require special permission for entry.
- An ILP grants entry to areas between the international boundary and the "Inner Line" of the country.
- There are concerns that ILP violates fundamental rights (Articles 14, 15, 19, 21) and may affect national integrity.

States Requiring ILP:

- **Arunachal Pradesh:**
 - Issued by the secretary (political) of the Government of Arunachal Pradesh.
 - Required at interstate borders with Assam or Nagaland.
 - Temporary ILP valid for 15 days (extendable); employment ILP valid for a year.
 - Planning to implement permit-on-arrival.
- **Mizoram:**
 - Issued by the Government of Mizoram.
 - Required at interstate borders.

- Temporary ILP valid for 15 days (extendable to 30 days); Regular ILP valid for 6 months (renewable twice).
- Can be obtained on arrival at Lengpui Airport in Aizawl.
- **Nagaland:**
 - Issued by the Government of Nagaland.
 - Required for anyone who is not an indigenous inhabitant of Nagaland.
- **Manipur:**
 - Issued by the Government of Manipur.
 - ILP regime extended on 11 December 2019.
 - Fourth state to implement ILP after Arunachal Pradesh, Nagaland, and Mizoram.
- **Lakshadweep:**
 - Issued by the government of Lakshadweep.
 - Mandatory for entering the island territory.
 - Difficult to obtain due to strict rules and regulations.

Key Features:

- ILP is issued by the state government concerned.
- It grants permission for a limited period, typically **15 to 30 days**, which can be extended.
- The ILP system is designed to balance the need for regulated access with the rights of residents.

3. Prevention of Money Laundering Act (PMLA) in 2002

- India used FATF recommendations to formulate its own legislation, resulting in the **Prevention of Money Laundering Act (PMLA) in 2002**.
- The PMLA primarily targeted the laundering of drug money, reflecting the focus of UN resolutions and FATF recommendations.
- The **Act contained offenses outlined in the Indian Penal Code (IPC) and the Narcotic Drugs and Psychotropic Substances Act, 1985**.
- The **PMLA evolved over time through amendments, deviating from its original focus on drug money laundering**.
- The Prevention of Money Laundering Act (PMLA) targets the laundering of "crime proceeds," which includes funds derived from criminal activities.
- Individuals involved directly in the crime, as well as those who participate in the laundering process later on, can be held accountable under this law.
- However, the **PMLA now includes a wide range of offenses in its schedule that go beyond its original purpose, extending to crimes unrelated to drug money laundering**.
- Despite its expanded scope, the fundamental objective of the PMLA remains rooted in addressing the significant threat posed by the laundering of illicit funds from the international drug trade, which has the potential to destabilize the global economy and compromise national sovereignty.

The PMLA's enactment

- The **Prevention of Money Laundering Act (PMLA) was enacted by India's Parliament under Article 253, which allows laws to implement international conventions**.
- **Article 253 restricts such laws to the subject matter of the international decision, as specified in Item 13 of the Union list of the Constitution**.
- Originally, the PMLA focused on combating money laundering related to drug trafficking, as per the UN resolution.

- However, amendments to the PMLA expanded its scope, including offenses beyond drug-related crimes, such as those listed in the Indian Penal Code (IPC) or covered by special laws.
- For example, the **Prevention of Corruption Act, 1988, aimed at addressing corruption among public servants, was added to the PMLA's schedule in 2009.**
- **Under the PMLA, accused individuals are presumed guilty until proven innocent, contrary to the fundamental principle of Anglo-Saxon jurisprudence.**
- **Bail provisions in the PMLA make it difficult for accused individuals to obtain bail, as judges can only grant bail if they are convinced of the accused's innocence, leading to prolonged detention without trial.**

The Bail Provision

- The bail provision of the Prevention of Money Laundering Act (PMLA) Act, Section 45, has significant political implications in present-day India.
- **It was initially deemed unconstitutional by a two-judge Bench of the Supreme Court in Nikesht Tarachand Shah vs Union of India (2018) for violating Article 14 and Article 21.**
- **However, Parliament swiftly reinstated this provision with amendments, which was later upheld by a three-judge Bench led by Justice A.M. Khanwilkar in Vijay Madanlal Choudhary vs Union of India (2022).**
- The Supreme Court ruled that this provision is reasonable and aligns with the objectives of the PMLA Act, which aims to combat money laundering and safeguard the economy from destabilization.
- Despite the Act's original purpose, it includes less serious offenses in its schedule, a decision considered within the legislative policy domain.
- The current judicial approach to bail in PMLA cases is seen as technical, with a departure from the perspective laid out **by Justice V.R. Krishna Iyer in 1978.**
- Justice Iyer emphasized the importance of personal liberty under Article 21 of the Constitution and urged a cautious and judicial exercise of curial power concerning bail decisions.
- The evolution of the Supreme Court's stance on bail from Justice Iyer to Justice Khanwilkar reflects a significant journey.

4. The Crime and Criminal Tracking Network and Systems (CCTNS)

The primary objective of CCTNS is to facilitate the collection, storage, retrieval, analysis, transfer, and sharing of data and information at the police station and between the police station and other organizations, including police stations, district and state police headquarters, courts, and prisons.

Components:

- **National Database:** A central repository of crime and criminal data that can be accessed by law enforcement agencies across the country.
- **State Database:** Databases maintained at the state level, integrated with the national database.
- **Police Station Systems:** Digital systems implemented at police stations to record and track crime and criminal data.

5. India needs the anchor of a National Security Strategy:

- The new National Democratic Alliance (NDA) government is facing longstanding national security challenges.
- Key decisions ahead include whether to build another aircraft carrier, implementing theaterisation, and managing relations with the US and competition with China.

- The government has a choice: either make these decisions or continue postponing them.
- A holistic approach to national security is recommended, starting from fundamental principles rather than addressing issues piecemeal.
- A National Security Strategy (NSS) is proposed to guide decision-making cohesively.
- Unlike many powerful nations, India currently lacks a formal national security strategy.
- Without an NSS, decisions on military capabilities and priorities are often contentious and lack systematic re-evaluation.
- Strategic vision is typically concentrated among a few top leaders, which may hinder transparency and comprehensive planning.

Many strategic risks

- India faces numerous strategic risks that require proactive, coordinated policy efforts.
- Global challenges like climate change and pandemics demand long-term planning and action.
- China poses multifaceted challenges including naval expansion, economic influence in South Asia, and global supply chain leverage.
- International conflicts like those in Ukraine and Gaza introduce new technologies and warfare tactics that could affect India's security.
- India needs a systematic process to assess these risks, understand their implications, and plan effectively to mitigate them.

A blueprint for expanding power

- India faces multiple strategic challenges, including from China's naval expansion and global security trends.
- Currently lacks a National Security Strategy (NSS) for comprehensive assessment and planning.
- An NSS would force a thorough review of threats, opportunities, and global trends.
- It would provide a coherent framework for long-term planning and resource allocation.
- Without an NSS, there's a risk of neglecting long-term threats until they become urgent crises.
- Helps prioritize investments in military capabilities and international partnerships effectively.
- An NSS would clarify India's strategic intentions to both allies and adversaries, such as its commitment to security roles in the Indian Ocean.
- It would define India's policies for international partners, outlining shared interests and setting expectations for cooperation.
- Provides a mechanism for coordinating efforts across government departments, including defence, external affairs, home affairs, and intelligence agencies.
- Enhances alignment within the military to better integrate operations among the Army, Air Force, and Navy under an overarching strategic mandate.

Issue of accountability

- An NSS would serve as an accountability tool ensuring bureaucracy follows political leadership's intentions.
- It aims to make government policies transparent to Parliament and the public regarding national security planning.
- A well-crafted NSS should be a public document endorsed by the Prime Minister to synchronize government efforts and signal political intentions domestically and internationally.
- While not resolving all government conflicts, an NSS should highlight trade-offs and opportunity costs, aiding rational decision-making for long-term national growth.

- It provides essential intellectual framework for India's aspirations to be a global leader in national security and international affairs.

6. Will the Agnipath scheme be revamped?

- Recruitment of soldiers under the Agnipath scheme has become a significant issue post the recent general election.
- NDA allies, Janata Dal (United) and Lok Janshakti Party, raised concerns about the Agnipath scheme.
- They have called for discussions and are seeking changes.
- The government is open to discussing and potentially revising the Agnipath scheme based on ongoing discussions.

What is the Agnipath scheme?

- **Agnipath Scheme Overview:**
 - Announced on June 14, 2022, to replace permanent recruitment in the armed forces.
 - Recruits soldiers, sailors, and airmen as Agniveers for four years initially.
 - Up to 25% of Agniveers can transition to regular ranks after completion.
- **Recruitment Details:**
 - Age bracket for recruits: 17.5 to 21 years.
 - Total intake capped at 1.75 lakh until 2026.
 - Army: 40,000 Agniveers annually.
 - Navy and Air Force: 3,000 Agniveers each annually.
- **Benefits for Agniveers:**
 - Opportunity to obtain Class 12 certificates or a Bachelor's degree.
 - Eligible for other skill certifications during their tenure.
 - Receive a lump sum amount upon completing four years but are not eligible for pension.
- **Objectives and Impacts:**
 - Defense Minister Rajnath Singh views it as a transformative initiative.
 - Aims to lower the average age of the armed forces to 26 years, aligning with global standards.
 - Emphasizes that Agniveers will contribute to nation-building upon their return to civilian life.

What are the concerns?

- The armed forces, especially the Army, are facing a significant shortage of personnel in non-officer ranks.
- No recruitment occurred during the COVID-19 pandemic, creating a backlog in personnel.
- Each year, around 60,000 soldiers retire from the Army, while only 40,000 new recruits are being enlisted, exacerbating the shortage.
- The Agnipath scheme aims to recruit Agniveers for a four-year term, with up to 25% transitioning to regular soldier status.
- The scheme has faced political and public backlash, leading to protests and demands for its revision or scrapping.
- There are concerns about the scheme's short duration and its impact on training schedules.
- Discussions within the NDA alliance are ongoing regarding potential modifications to address these concerns.

What is the current status?

- The Department of Military Affairs (DMA) under the Defence Ministry, led by the Chief of Defence Staff (CDS), is reviewing the Agnipath scheme after two years of implementation.

- Feedback has been sought from the armed forces to assess the scheme's effectiveness and identify necessary adjustments.
- Recommendations include increasing the intake numbers and potentially raising the permanent recruitment from 25% to 50%.
- There is a proposal to raise the age limit for entry through the technical route from 21 to 23 years to attract more technically qualified individuals.
- The Navy and Air Force have compiled their feedback and submitted it to the DMA, while the Army is still in the process of compiling its feedback.
- Once all feedback is compiled, the DMA will consolidate the recommendations and forward them to the Defence Ministry for consideration.

Do You Know?

The Indo-Tibetan Border Police (ITBP) is a specialized force entrusted with guarding the India-China border.

Formation and Role:

- **Established:** October 24, 1962
- **Ministry:** Ministry of Home Affairs
- **Primary Role:** Patrolling and guarding the 3,488 km long India-China border, stretching from Ladakh to Arunachal Pradesh.

Additional Roles:

- **Internal Security:** ITBP also contributes to internal security duties, deployed for:
 - Counter-insurgency operations in naxal-affected areas.
 - Responding to natural disasters and calamities in the Himalayas.
 - Providing security for VIPs and important installations.
- **Specialized Skills:** ITBP personnel are trained in mountaineering, skiing, jungle warfare, and border management techniques to operate effectively in the challenging Himalayan terrain.

Commissioned Ranks

General	Admiral	Air Chief Marshal
Lieutenant General	Vice Admiral	Air Marshal
Major General	Rear Admiral	Air Vice Marshal
Brigadier	Commodore	Air Commodore
Colonel	Captain	Group Captain
Lieutenant Colonel	Commander	Wing Commander
Major	Lieutenant Commander	Squadron Leader
Captain	Lieutenant	Flight Lieutenant
Lieutenant	Sub Lieutenant	Flying Officer

7. Maoists In Chhattisgarh:

In 2024, Maoists suffer severe setbacks in Chhattisgarh

GS Paper III: Internal Security

The insurgency is at its peak in districts with poor development indicators

DATA POINT

Nitika Francis

As of July 9, 162 Maoist deaths were reported in India in 2024. Of these, 141 deaths were reported from Chhattisgarh alone. This is among the highest number of casualties suffered by the extremists in the largely tribal State since the formation of the Communist Party of India (Maoist) in 2004.

The Maoist deaths in 2024 are the highest since 2009, when 154 insurgents were killed. That was also the year when the Indian government banned the group and launched a military offensive code-named 'Operation Green Hunt', involving the Central Reserve Police Force's CoBRA force and the Chhattisgarh police in 'search and comb' operations. Notably, the current spike in the number of deaths of left-wing extremists has taken place after the Bharatiya Janata Party returned to power in the State in December 2023.

Chart 1 shows year-wise deaths of left-wing extremists in Chhattisgarh. Apart from 2009 and 2024, the Maoists also suffered high death tolls in 2016 and 2018.

While the Maoists have suffered more casualties in recent years, the deaths of security force personnel have come down. Chart 2 shows the number of deaths of civilians, security forces, and Maoists over the years. In 2024, 14 security force personnel died in the insurgency. The highest death toll of security forces (198) was reported in 2007. Of them, 55 were police personnel who were killed in a massive offensive launched by the Maoists on a police base camp in Bastar.

The number of civilian deaths during the insurgency has also been at its lowest since 2014, when 23 people were killed in Maoist attacks. The highest number of civilian deaths (184) were reported in 2006, largely in landmine attacks

on vehicles or when they were caught in the crossfire between the Maoists and security forces.

The highest number of clashes between the Maoists and security forces this year took place in Bijapur district, south Chhattisgarh, resulting in 74 Maoist deaths.

Bijapur and neighbouring Sukma district are home to 20 camps set up by the Border Security Force (BSF). Due to the intensity of operations in this district, 33 Maoists surrendered in May.

The BSF and the District Reserve Guard of Kanker district led a joint operation in April which resulted in the deaths of 29 Maoists, including that of their top commander, Shankar Rao. This year, 35 Maoist deaths have been recorded in Kanker.

In Dantewada, where pitched battles between the insurgents and security forces over the years led to an average 52 deaths of Maoists between 2005 and 2008, 15 Maoists were killed in 2024. This is despite the fact that more than 15 villages in the district were declared 'Maoist-free' in 2021.

Table 3 shows the district-wise average of Maoist deaths every four years from 2001 to 2024.

A district-wise look at development and welfare indicators in Chhattisgarh (Table 4) and a comparison with Table 3 shows that the intensity of the insurgency is highest in districts which were relatively lacking in areas such as sanitation and literacy. This could either mean that the Maoists chose to move in these districts, seeking to tap into the discontent with the Indian state, or that these districts lag in development indicators because of the insurgency.

Districts such as Dantewada, Bijapur, Sukma, Bastar, and Kanker are also the most forested areas in the State, which makes security operations difficult. Notwithstanding the setbacks in recent months, the Maoists retain their ability to mount surprise attacks on security forces, which suggests that the insurgency is not over in the State.

Left-wing extremism in retreat

The charts are based on data sourced from the South Asia Terrorism Portal

Chart 1: The chart shows the number of Maoist deaths in Chhattisgarh

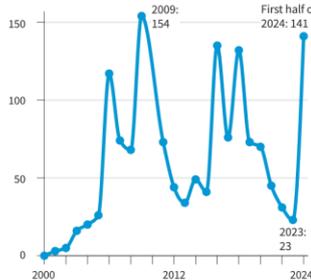


Table 3: The district-wise average number of deaths in incidents related to LWE every four years. Based on this table, Dantewada, Bijapur, Sukma, Bastar, Narayanpur, Kanker, Rajnandangaon and Surguja can be identified as districts that were recently or historically affected by LWE

Districts in Chhattisgarh	2001-04	2005-08	2009-12	2013-16	2017-20	2021-24
Dantewada	31	52	40	11	12	17
Bijapur	5	22	26	28	23	30
Sukma	0	0	4	35	36	20
Bastar	37	8	4	8	4	1
Narayanpur	0	4	6	8	8	14
Kanker	1	7	7	5	7	12
Rajnandangaon	3	1	6	2	7	2
Surguja	16	4	0	0	0	0
Kondagaon	0	0	1	3	1	2
Balarampur	4	1	0	0	0	0
Raipur	3	0	2	0	0	0
Dhantari	0	0	2	0	2	1
Gariyaband	0	0	2	0	0	1
Mohalampur	0	0	0	0	0	1
Raigarh	0	0	0	0	0	0
Durg	0	0	0	0	0	0
Kabirdham	0	0	0	0	0	0
Jashpur	0	0	0	0	0	0
Bilaspur	0	0	0	0	0	0
Balod	0	0	0	0	0	0
Janjgir-Champa	0	0	0	0	0	0
Korba	0	0	0	0	0	0
Mahasamund	0	0	0	0	0	0

The district names in table 3 and table 4 may differ as the sources and reference years are different

Chart 2: The chart shows the number of deaths of civilians, security forces, and Maoists over the years

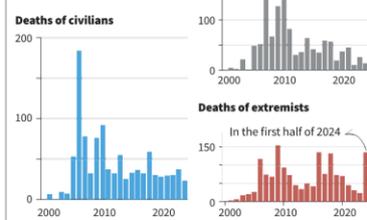


Table 4: A district-wise look at development and welfare indicators in Chhattisgarh. A comparison with Table 3 reveals that the intensity of the insurgency is the highest among districts which were relatively lacking in areas such as sanitation, literacy, and which recorded stunting

Districts in Chhattisgarh	Affected/Limited (td.) to LWE	Population using an improved sanitation facility (%)	Women with >9 years of schooling (%)	Children under 5 years who are stunted (%)
Bijapur	Affected	30.6	24.2	53.8
Bastar	Affected	61	25.3	48.1
Dantewada	Affected	60.5	24.2	45.6
Narayanpur	Affected	52.8	26.5	43.7
Sukma	Affected	35.5	15.9	41.3
Baloda Bazar	Ltd. impact	78.9	38.7	40.9
Raigarh	Ltd. impact	66.3	38.3	39.1
Durg	Ltd. impact	89.5	52.7	38.9
Bemetara	Ltd. impact	80.5	33	38.4
Kabeerdham	Ltd. impact	80.3	32.6	37.9
Kondagaon	Affected	79.5	24.7	37.6
Mahasamund	Ltd. impact	84.2	31.2	36.8
Jashpur	Ltd. impact	72.8	34.9	35.8
Balarampur	Ltd. impact	57.3	32.2	35.1
Korba	Ltd. impact	73.3	37.1	34.7
Balod	Ltd. impact	83.8	46.3	33.6
Janjgir-Champa	Ltd. impact	78.8	37.3	32.5
Raipur	Ltd. impact	84	40.1	32.2
Koriya	Affected	73.3	37	32.1
Dhantari	Ltd. impact	89.8	40.9	30.5
Mungeli	Ltd. impact	80.7	32.2	30.1
Surguja	Affected	75.8	37.7	29.4
Gariyaband	Ltd. impact	81	27.8	28.9
Rajnandangaon	Affected	79.2	38.9	27.6
Surajpur	Affected	75.4	30.7	27.6
Bilaspur	Ltd. impact	80.5	37.4	25.7
Kanker	Affected	80.5	40.3	24.8

In all the three indicators, the districts with the lowest scores are highlighted. Affected districts fare poorly across all three indicators

8. Why is Militancy on the Rise in Jammu?

Are acts of terrorism in Jammu & Kashmir shifting to the Rajouri-Poonch-Kathua sector after being quiet for two decades? What are the reasons for the new trend? What are the challenges of monitoring this sector? Are more troops needed? What is the situation on the ground?

- On July 8, five Army soldiers were killed and five injured in an ambush by militants in Kathua district, Jammu and Kashmir.
- This incident is part of a series of attacks; since June 9, there have been five terror strikes in the Jammu division, resulting in eight security personnel and 10 civilian deaths.
- A pattern suggests efforts to revive militancy in the Jammu region, including Chenab Valley (Doda, Kishtwar, Ramban, Kathua, Udampur, Reasi) and south of Pir Panjal (Rajouri, Poonch).
- The Jammu belt has been largely free of such incidents for two decades but was a hotspot of militancy in the late 1990s and early 2000s.
- Since 2021, Jammu has seen 31 terror incidents, with 47 security forces, 19 civilians, and 48 terrorists killed.
- In the same period, the Kashmir Valley reported 263 terror incidents, with 68 security forces, 75 civilians, and 417 alleged terrorists killed.

- Despite fewer incidents in Jammu compared to the Valley, the increasing frequency and nature of attacks on pilgrims and security forces are concerning.

What could be the possible reasons?

- After the 2020 Galwan clashes, many Army personnel were redeployed from Jammu to the China border, thinning the security grid and increasing vulnerability.
- Security experts suggest that adversaries want to engage India on both the western (Pakistan) and northern (China) borders.
- Increased security in the Kashmir Valley has led to more terror attacks in the relatively less guarded Jammu region.
- Post-Article 370 revocation in August 2019, the government claimed success in Kashmir with zero stone-throwing events, no strikes, and a tourism boom. Terrorism in Jammu disrupts this narrative.
- Estimates suggest around 20-25 militants have infiltrated from Pakistan, with activity observed 40-50 km from the border.
- Two militant groups are likely active: one in the Poonch-Rajouri axis and another in the Kathua-Doda-Basantgarh belt.
- Difficult terrain, forested tracts, poor roads, and patchy mobile connectivity pose challenges.
- Infiltration may be happening through tough terrain and forested areas along the Line of Control (LoC) and vulnerable patches along the International Border (IB).
- The July 8 ambush in Kathua occurred on an old infiltration route used by militants two decades ago, which appears to have been revived.

What about local support to terrorists?

- On June 19, J&K Police arrested Hakam Din for allegedly harboring terrorists involved in the June 9 attack on a bus carrying pilgrims in Reasi, where 10 pilgrims died.
- Evidence of larger support for the terrorists is inconclusive.
- There is a generational gap in trust between security forces and locals, making it harder to gather information on suspicious activities.
- Village Defence Guards/Committees (VDGs) are being revived since December 2022 after the January 2023 attack in Dangri where seven Hindus were killed.
- About 30,000 weapons are estimated to be with civilians in Poonch, Rajouri, Samba, Doda, and Kishtwar districts, distributed since 1995.
- VDGs were discontinued due to allegations of crimes committed by members.
- In 2003, Operation Sarp Vinaash by the Army killed over 60 terrorists in Poonch sector.
- No significant progress has been made in apprehending terrorists involved in recent attacks.
- The December 21, 2023, attack on Army vehicles in Poonch-Rajouri, claimed by the People's Anti-Fascist Front (PAFF), remains unresolved.
- The PAFF also claimed the October 2021 attack that killed nine soldiers.
- Additional security forces are being deployed, and security loopholes are being addressed.

Ethics

1. Deep state and Wikileaks:

WikiLeaks: the enemy of the deep state

WikiLeaks' fortunes have been inextricably tied with the travails of its co-founder Julian Assange, who after a decade-long legal battle with the U.S., has finally been let free

GS Paper IV: International Ethics
Srinivasan Kamani

Julian Assange is free," WikiLeaks announced in a statement on X. "He left Belmarsh maximum security prison [in the U.K.] on the morning of 24 June, after having spent 1901 days there", it further read. The co-founder of the whistleblowing website, WikiLeaks, has agreed to plead guilty to one count of conspiracy to obtain and disclose classified U.S. national defence documents, thus ending his long battle against extradition to the U.S. He was flown out of the U.K. to attend the court hearing at Saipan, a U.S. Pacific territory, after which he will return to Australia.

Mr. Assange is wanted in the U.S. for criminal charges, including breaking the Espionage Act for WikiLeaks' actions of leaking thousands of secret U.S. files in 2010. He was looking at a punishment ranging up to 175 years in prison for violations of the Espionage Act.

Mr. Assange's journey to freedom wasn't easy, and he had come dangerously close to extradition. On June 17, 2022, then U.K. Home Secretary Priti Patel had signed an extradition order for Mr. Assange to the U.S. (which he was able to later appeal). On the same day, the Assange Defense Committee, a U.S.-based coalition of media rights and human rights groups, released a statement through its co-chairs, which include the renowned linguist and public intellectual Noam Chomsky and former U.S. military analyst and whistleblower Daniel Ellsberg, that said the decision "was a sad day for western democracy". It added: "U.S. government argues that its venerated Constitution does not protect journalism the government dislikes and that publishing truthful information in public interest is a subversive, criminal act. This argument is a threat not only to journalism, but to democracy itself."

These were strong words in favour of a man who has been held in the U.K.'s Belmarsh prison ever since the Ecuador Embassy revoked his asylum and citizenship after he stayed for seven years on its premises in London. Mr. Assange initially underwent imprisonment for bail violations during his stay in the Ecuador Embassy and got a reprieve from a U.K. district judge, Vanessa Baraitser, in January 2021, when she ruled that he could not be extradited to the U.S. because of concerns about his mental health and the possibility of suicide in a U.S. prison with strict incarceration conditions.

U.S. prosecutors later filed an appeal, and the British High Court, this time in December 2021, ruled in favour of the U.S. following the Joe Biden administration's assurances on the terms of Mr. Assange's possible incarceration – that it would not hold him at the highest security prison facility (ADX Florence in Colorado, which houses terrorists, drug traffickers, and high-profile criminals) and that if he were convicted, he could serve his sentence in his native Australia if he requested it. Mr. Assange moved the British Supreme Court against the verdict, but on March 14, the Court refused permission to appeal.

Mr. Assange's travails have mirrored those of the WikiLeaks organisation itself.



Freedom at last: Julian Assange at Bangkok Don Mueang International Airport, on June 25. REUTERS

In February 2022, on WikiLeaks' website, the submission system for files (by whistleblowers, 'hacktivists', etc.) and its email server went completely offline, months after the organisation's secure chat services had stopped working in October 2021. This was no surprise.

The organisation has been inevitably linked to its co-founder, who still remains a director. Ever since his incarceration, the release of whistleblower documents have only been few and far between and much less in consequence compared to what the organisation managed to achieve between 2010 and 2019.

Origins and impact

WikiLeaks' journey began in 2006 when the website was first established and its domain name registered by Mr. Assange. While initially the website began as a disclosure portal on the lines of the Wikipedia model, with anonymous submissions being put up and edited by volunteers, it soon became a repository of anonymously sourced material. News and classified information could be uploaded on it using the anonymity software Tor, which protects the uploader's identity from being eavesdropped on any network and even by WikiLeaks itself.

Internal dissension and wrangling between WikiLeaks employees had resulted in problems with the submission system, which resulted in its suspension in 2010, but WikiLeaks relaunched the site in 2015.

One of the earliest revelations by WikiLeaks was on how the U.S. government had been deploying practices at the Guantanamo Bay facility holding terror suspects, that were in violation of the Geneva Convention protocols.

Some of the most consequential leaks during the period when the site's

anonymised submission system still remained active included the millions of classified files from the U.S. Defence Department on the Iraq and the Afghan invasions, besides lakhs of State Department communiques – both were released by former U.S. soldier Chelsea (then Bradley) Manning. These leaks began with a 39-minute video released on April 5, 2010 that showed gun-sight footage of two U.S. AH-64 Apache helicopters in action during the Iraqi insurgency against the U.S. occupation in 2007. The video showed the helicopter crew firing indiscriminately and killing civilians and two Reuters war correspondents. For nearly three years, Reuters had sought access to this video via the U.S. Freedom of Information Act, but had failed.

WikiLeaks promptly released the war logs, which were published by a host of media organisations and exposed human rights abuses by occupation forces, besides the increased fatality counts in Iraq. The war logs' release was followed by the publication of several news stories, including by *The Hindu*, based on thousands of leaked diplomatic cables that were also released by Ms. Manning, leading to significant public exposure of the ways, lifestyles and attitudes of the elite in various countries.

The WikiLeaks model – using cryptographic tools to protect sources and allowing for anonymous "leaks" of sensitive information (that could also be in public interest) to be published – suddenly brought forth a new model of extensive investigative journalism into areas that were relatively shielded from the public eye, such as the functioning of the deep state in democratic societies and the operation of power agencies in autocracies.

While initially the cables were released to five newspapers that undertook the exercise of redacting sensitive information before reporting on them and published them over a year from late 2010 to 2011, the leak of the encryption key of the full cache of files (of what was then termed "Cablegate"), resulted in the release of unredacted material, an action that was condemned by many media outlets.

The lack of an anonymised submission system between 2010 and 2015 did not deter it from publishing other files that were obtained from other hackers such as the Stratfor email leaks. Later, WikiLeaks also published then presidential candidate (and former Secretary of State) Hillary Clinton's aide John Podesta's emails before the 2016 presidential elections. This action invited severe critique of WikiLeaks from activists and media personnel, who likened these leaks to an effort to intervene in the 2016 elections with Mr. Assange having been quoted as saying he wanted to "harm" Hillary Clinton's chances of winning the presidency and accusing WikiLeaks of obtaining this information from Russian intelligence agency hackers, something WikiLeaks denied.

Later, it emerged that someone from WikiLeaks had conversed with Clinton's presidential opponent, Donald Trump's son, Donald Trump Jr., asking to promote the leaks and even seeking favours for Mr. Assange in Twitter DM conversations.

Probe in the U.S.

WikiLeaks' releases, meanwhile, resulted in reprisals from the U.S. government. The Barack Obama administration began investigation of the Manning leaks, and Ms. Manning was convicted by court martial in July 2013 for violating the Espionage Act and underwent rigorous imprisonment before her sentence was commuted in January 2017 by the President. However, the administration concluded that it would not pursue criminal charges against Mr. Assange and WikiLeaks. The U.S. Justice Department under former President Donald Trump, however, charged Mr. Assange with collaborating in a conspiracy with Ms. Manning to crack a password on a Defense Department network to publish classified documents and communications on WikiLeaks in a sealed indictment in April 2017. These charges were unsealed in 2019.

Later, the Trump administration further charged Mr. Assange with violating the Espionage Act of 1917 – he was indicted on 17 new charges related to the Act at the U.S. District Court for the Eastern District of Virginia. In June 2020, the charges were further expanded for conspiracy with hacker groups. The Biden administration had made no attempt to reverse these charges. Until now.

In April, Mr. Biden said that he was considering a request from Australia to drop its prosecution of Mr. Assange, indicating a change in policy. And now the U.S. with the plea deal has agreed to drop all other charges, except one, against the whistleblower.

Mr. Assange's legal case sets a precedent for the future of investigative journalism of the kind that WikiLeaks represents and also serves as a litmus test for free expression laws that allow for unhindered journalism in countries like the U.S. While the organisation is now a shell of what it was a decade ago, its ability to harness the act of whistleblowing to shine a light on the inner workings of those in power transformed investigative journalism, even as its decisions to intervene in the U.S. polity complicated its legacy.

The copy, published on June 19, 2022, has been updated.

2. Notable Example: Learning from the Life of Christopher Thomas Kurien:

- **Christopher Thomas Kurien (CTK)**, a renowned South Indian economics teacher, was inspired by Jawaharlal Nehru's vision of **ending poverty and inequality**.
- CTK pursued economics to understand and address poverty, starting his journey after high school.
- In the 1950s, while a lecturer at Madras Christian College, he felt a disconnect between economic theory and real-life issues.
- He enrolled in a Ph.D. program at Stanford University in 1958 to bridge this gap.
- At Stanford, CTK challenged neoclassical economics and developed an alternative understanding of India's economy by focusing on the distribution of non-labour resources.
- He returned to teach at Madras Christian College, where he created a course on Indian Economic Problems.
- CTK's course taught students to apply economic theory to analyze various sectors of the Indian economy, helping them build a comprehensive understanding of economic issues.
- From 1968 to 1978, CTK was active in both teaching and research at Madras Christian College.
- During this time, he published influential works such as *Indian Economic Crisis* (1968), *A Theoretical Approach to the Indian Economy* (1969), and *Poverty, Planning and Social Transformation* (1978).
- In 1974, CTK proposed a rural employment guarantee scheme, making him an early advocate of such policies.
- In 1978, CTK left Madras Christian College to become the founder Director of the Madras Institute of Development Studies (MIDS).
- Under his leadership, MIDS became a leading center for studying the Tamil Nadu economy.
- He authored books like *Dynamics of Rural Transformation* (1979) and *Economic Change in Tamil Nadu* (with Josef James, 1979).
- After retiring from MIDS, CTK served as a National Professor and a National Fellow, writing books such as *On Markets in Economic Theory and Policy* (1993) and *Rethinking Economics: Reflections Based on a Study of the Indian Economy* (1996).
- In his later years, he published *Wealth and Illfare: An Expedition into Real Life Economics* (2012) and *Economics of Real-Life: A New Exposition* (2018), and wrote book reviews for *Frontline* magazine.
- CTK was deeply committed to understanding and addressing poverty and inspired efforts towards a just society.

Do you Know?

Deep state:

- A deep state refers to clandestine networks within a government that operate independently of elected leaders, pursuing their own agenda. It is associated with negative connotations.
- Usage in the United States: During Donald Trump's presidency, "deep state" primarily referred to entrenched bureaucrats and civil servants perceived as acting against the administration's policies, following institutional mandates and congressional statutes.
- Origin: The term "deep state" originates from the Turkish "derin devlet," describing a secret network in Turkey comprising military officers and civilian allies, historically aiming to preserve secular governance since the Atatürk era.
- Historical Context: In Turkey, the deep state was allegedly linked to the Cold War-era Gladio

Organization, influencing Turkish politics to align with NATO and oppose Soviet communism.

- Conspiracy Theory: Despite its widespread use, the concept lacks concrete evidence and an official definition. It posits that unelected officials, bureaucrats, and military leaders wield significant power independently of elected governments.

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PCS Special

1. Mysuru's Capt. Supreetha 1st woman officer at Siachen

- Captain Supreetha C.T. from Mysuru is the first woman officer from the Corps of Army Air Defence to be deployed at Siachen Glacier.
- She was celebrated on social media by the Indian Army for her achievement, highlighting her strength and determination.
- Capt. Supreetha joined the Indian Army as a Lieutenant in 2021.
- After training in Chennai, she was posted to the Army Air Defence.

2. Kirti Chakra: India's Second Highest Peacetime Gallantry Award

- The Kirti Chakra is a prestigious Indian military decoration bestowed upon individuals who exhibit exemplary courage, self-sacrifice, or valor in situations not involving direct combat.
- It is the second-highest peacetime gallantry award, ranking below **the Ashoka Chakra and above the Shaurya Chakra**.
- **Origin and Establishment**
- The Kirti Chakra was originally established as "Ashoka Chakra, Class II" on January 4, 1952, by the then President of India Rajendra Prasad, with effect from August 15, 1947.
- It was later renamed "Kirti Chakra" on January 27, 1967.

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

- Captain Avhilash Rawat and his crew aboard the oil tanker 'Marlin Luanda' won the IMO 2024 Award for Exceptional Bravery at Sea.
- They were recognized for their courage during a rescue mission in the Red Sea, where their ship was struck by an anti-ship missile fired by Iranian-backed Houthi rebels.
- Despite significant damage and a fire hazard from ignited cargo, Captain Rawat coordinated firefighting efforts to ensure crew safety and maintain navigability.
- The crew used fixed foam monitors and portable hoses to combat the fire, eventually containing it with seawater after exhausting foam supplies.
- Captain Brijesh Nambiar and the crew of INS Visakhapatnam received a Letter of Commendation for their support during the distress situation.

4. Carrying 1,930 containers, San Fernando becomes first mothership to dock at Kerala's Vizhinjam port:

- The first mothership carrying cargo from Xiamen port in China arrived at Vizhinjam international seaport, India's first deep-water container transshipment port.
- The container ship San Fernando, flagged by Marshall Islands and owned by SFL Corporation Ltd., was chartered by Maersk (AP Moller Group) and managed by Bernhard Schulte Ship Management, Singapore.
- Adani Port pilots boarded the ship around 7:45 a.m. as it approached the berth at Vizhinjam.
- The ship was guided through the buoyed channel and into the breakwater area using four tugs.
- Tugs assisted in maneuvering the ship to the berth, aligning it using bow thrusters and the ship's main engine power.
- Operations to offload 1,930 containers were scheduled to commence around 2 p.m.

Water salute

- The ship received a water salute upon arrival at Vizhinjam port.

- It will depart for Colombo on Friday after an official reception hosted by the Kerala government.
- Chief Minister Pinarayi Vijayan, Union Shipping Minister Sarbananda Sonowal, and other officials will attend the reception.
- The Vizhinjam international seaport project, a ₹7,700-crore initiative under PPP with Adani Group, began on December 5, 2015.
- Originally scheduled for commissioning in 2019, the port faced delays and missed several deadlines.
- A trial run of the port is set to begin on July 12, with the revised commissioning now planned for December 2024.

5. Kerala-born Sojan Joseph wins British Parliament seat:

- Labour Party won a landslide victory in the U.K. general elections.
- Celebrations in Onamthuruth village, Kottayam, for Sojan Joseph's election to the British Parliament from Ashford.
- Sojan Joseph's victory is historic as Ashford has been Conservative-dominated for 139 years.
- He defeated six candidates in Ashford, which has an electorate of about 74,000 people.
- His family is celebrating at their ancestral home.
- Joseph Palaththinkal, his brother-in-law, expressed their excitement.
- Sojan Joseph, a nurse by profession, moved to the U.K. in 2001 and works at William Harvey Hospital in Ashford.

6. Chinese lunar probe returns to Earth with first samples from far side of the moon:

- **China's Chang'e 6** probe successfully returned to Earth with rock and soil samples from the far side of the moon.
- The probe landed in Inner Mongolia, northern China, marking a significant achievement in lunar exploration.
- Zhang Kejian, Director of the China National Space Administration, declared the mission a complete success during a news conference.
- Scientists anticipate the samples will include 2.5 billion-year-old volcanic rock and other materials from the moon's far side.
- The far side of the moon, which faces outer space, is distinct from the near side visible from Earth, featuring mountains and impact craters.
- The probe landed in the moon's South Pole-Aitken Basin, a large impact crater over 4 billion years old.
- Samples collected are expected to reveal insights into the moon's geological history, spanning different geological events and volcanic activity over time.

First of its kind

- The Chinese Chang'e 6 mission is the first to collect samples from the moon's far side, a significant milestone in lunar exploration.
- Previous missions by the U.S. and Soviet Union focused on collecting samples from the moon's near side.
- China's lunar program reflects increasing competition in space exploration, particularly with the U.S., Japan, India, and others.
- China has established its own space station and regularly sends crews there as part of its broader space ambitions.

- Chinese President Xi Jinping congratulated the Chang'e team, describing it as a landmark achievement in China's efforts to become a leading space and technological power.

7. Ilayaraaja's album Divya Pasurams released

- An album titled "Divya Pasurams" was launched at Krishna Gana Sabha.
- The album features pasurams from the Naalayira Divya Prabhandham set to music by Ilayaraaja.
- Mercuri Foundation organized the event.
- Naalayira Divya Prabhandham comprises 4,000 verses written by the 12 Alwars.
- Eight pasurams were selected for inclusion in the album.
- Ilayaraaja, the maestro, expressed that after Thiruvasagam, there was demand for him to compose music for Naalayira Divya Prabhandham.
- He mentioned that the timing for this project felt right.
- The event featured the performance of "Pallandu Pallandu."
- Ilayaraaja presented the first copy of the album to Sri Tridandi Srimannarayana Ramanuja Chinna Jeeyar Swamy.

8. Lt. Gen. Upendra Dwivedi to take over as Army chief

- Lieutenant-General Upendra Dwivedi has been appointed as the next Chief of the Army Staff.
- He currently serves as the Vice Chief of the Army Staff.
- General Manoj Pande, the current Chief of the Army Staff, will demit office on June 30, 2024.
- Lt. General Upendra Dwivedi will assume the role of Chief of the Army Staff from the afternoon of June 30, 2024.
- The announcement was made by the Union Defence Ministry in a late-evening statement.
- General Manoj Pande, originally set to retire on May 31, was granted a one-month extension.
- The extension led to speculation within the military community about potential supersession and deviation from the seniority principle in appointing Service chiefs.
- Lieutenant General Upendra Dwivedi, born on July 1, 1964, was commissioned into the Infantry (Jammu & Kashmir Rifles) on December 15, 1984.
- Lt. Gen. Dwivedi has held various command roles, including leading the 18 Jammu & Kashmir Rifles Regiment and the 26 Sector Assam Rifles Brigade.
- As a Lieutenant-General, he served as Director-General, Infantry, and later as General Officer Commanding-in-Chief, Northern Command, from 2022 to 2024.
- Lt. Gen. Dwivedi currently serves as the Vice Chief of the Army Staff and will assume the role of Chief of the Army Staff on June 30, 2024.

9. International Yoga Day: Celebrating the Power of Yoga

- International Yoga Day is celebrated annually on June 21st. It's a global event recognized by the United Nations to raise awareness about the benefits of practicing yoga.
- Established:** Proclaimed by the United Nations General Assembly in 2014
- Edition:** 10th
- Theme for 2024:** "Yoga for self and society."



- **Significance:** Aims to promote the physical, mental, and spiritual benefits of yoga practice across the world.

What is Yoga?

- Yoga is an ancient Indian physical, mental, and spiritual practice that originated thousands of years ago.

It combines:

- **Physical postures (asanas):** Designed to improve strength, flexibility, and balance.
- **Breathing exercises (pranayama):** Enhance lung capacity and control over the breath.
- **Meditation (dhyana):** Promotes relaxation, focus, and inner peace

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Team Led by:

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(More than 4 Years of Teaching Experience
In Vision IAS Delhi & Qualified 4
Times For The IAS Mains).

Piyush Gambhir Sir
(More than 5 years of teaching experience
in Vision IAS Delhi & qualified 3 times for
the IAS mains & 2 times IAS Interview)

Sonal Choudhary Ma'am
(More than two years of experience
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3 Times for IAS mains.

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17th August 2024: Current Affairs (June + July 2024) (Time: 02:30 PM to 04:30 PM)

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