

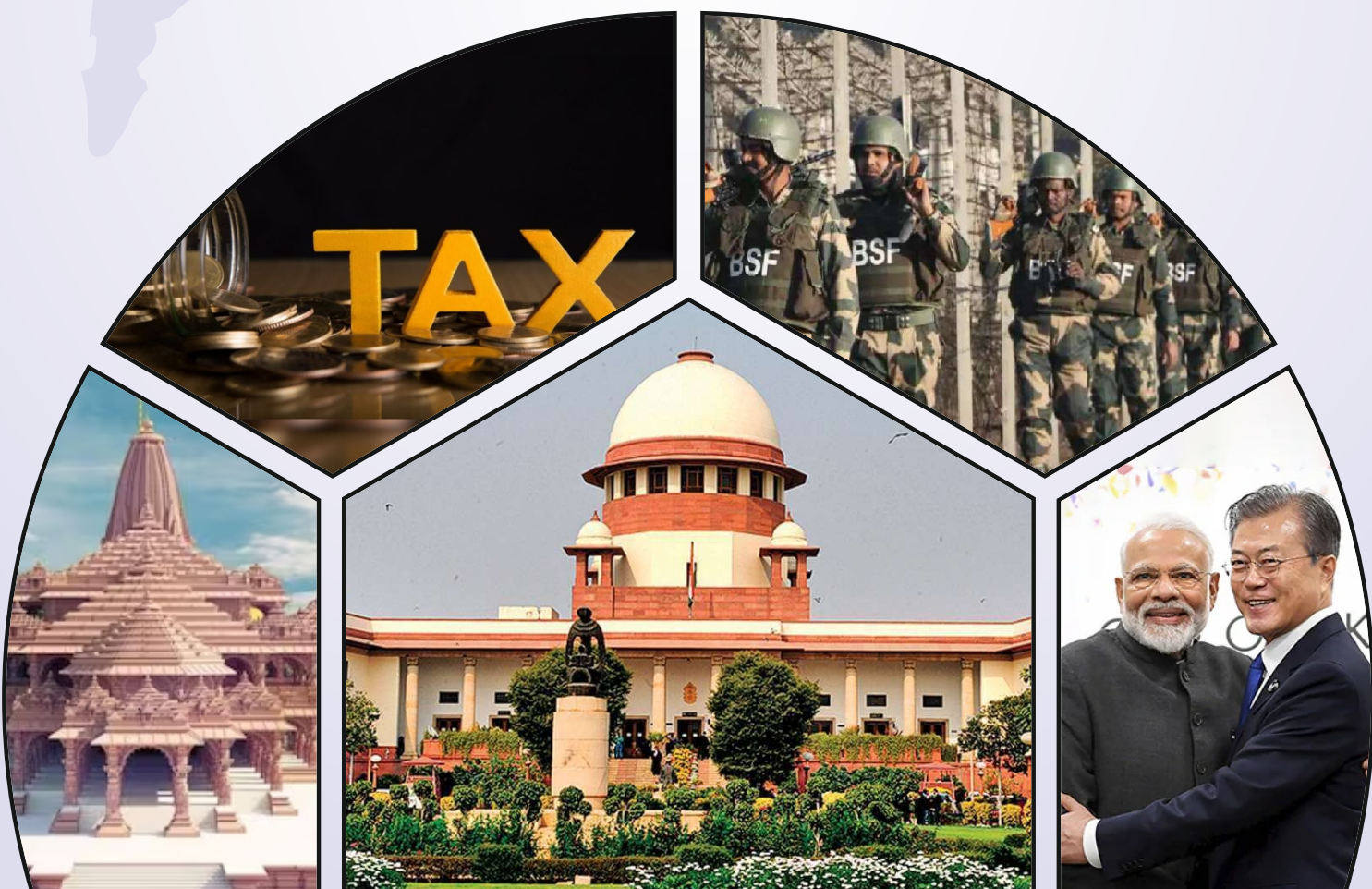


IQRA IAS

AN INSTITUTE FOR CIVIL SERVICES

CURRENT AFFAIRS

JANUARY 2024



Monthly Current Affairs – January 2024

Table of Contents

Art and Culture 3	Aadhaar-Linked Pay Made Mandatory for MGNREGS Workers..... 30
India's Oldest Living City Found In Vadnagar: Multi Institution Study..... 3	ULFA..... 31
Jallikattu..... 4	National Deep Tech Startup Policy (NDTSP) 33
Bangla for Classical Language, GangaSagar Mela for National Status 4	Viksit Bharat Sankalp Yatra..... 34
Batadrava Than..... 6	Rapid Rise In Web Blocking Orders, Shows RTI Reply..... 35
Karpoori Thakur named for Bharat Ratna honour . 7	Surat, Indore Cleanest Cities; Maharashtra Tops State List..... 36
Madhika Language on Brink of Extinction..... 7	Atal Setu Nhava Sheva Sea Link..... 37
Civilian and Gallantry awards..... 9	What Are The Complaints About Digi Yatra? 38
Geography 10	The Delusion Of Eliminating 'the Last Terrorist' 39
Tsunami..... 10	Concerns Related to Anganwadi Workers..... 40
Winter Storms in the US 11	Wetland 'nature tourism' gets a fillip..... 42
Polity 13	Pradhan Mantri Solar Rooftop Scheme (Suryodaya Yojana) 43
Unlawful Body Declaration: Tehreek-e-Hurriyat, Jammu and Kashmir (TeH)..... 13	Centre's Digi Yatra enrolment takes off..... 43
New Hit-and-Run Law..... 14	PRITHvi ViGyan (PRITHVI) Scheme..... 44
The Citizenship (Amendment) Act (CAA)..... 16	Mulya Pravah 2.0..... 46
Adani-Hindenburg row 16	Infrastructure Push in Kerala..... 47
Assisted Reproductive Technology (ART) Act, 2021..... 17	International Relations 49
Insolvency And Bankruptcy Code, 2016..... 19	Free Movement Regime to end at Myanmar border..... 49
Understanding the Tenth Schedule 20	Understanding The EU's Carbon Border Tax 50
Dispute Over Minority Status of AMU..... 21	Red Sea Crisis..... 51
Post Office Act, its unbridled powers of interception 22	U.S.-India Social Security Totalisation Agreement 52
Why was FCRA registration for several NGOs cancelled?..... 24	Why has South Africa dragged Israel to the ICJ? 53
Gender Equity in education..... 25	Denmark's Green Fuels Alliance To Boost Sustainable Energy Solutions Sector..... 54
BSF Jurisdiction..... 26	What are labour rules for workers abroad?..... 55
Registered unrecognised political parties (RUPPs) 27	Why are conflicts spreading in West Asia? 57
Structured Negotiation as a Boost for Disability Rights 28	India – Bangladesh Relationship 57
Sub-categorisation of SCs..... 30	Free movement Regime..... 59
Governance & Social Justice..... 30	Navy thwarts hijacking attempt in Arabian Sea .. 60
	Military Exercises, Defence & Security 61

Indian Air Force's Nighttime Landing of C-130J at Kargil Airport.....	61	83
Environment	62	The problem with India's science management ..	83
Pelagic Birds	62	Health.....	84
A Look At Project Tiger, 50 Years On	64	JN.1	84
Great Indian Bustard	65	Entrepreneurship: Turning The Tide Against Antimicrobial Resistance.....	86
Urbanisation in Bhubaneswar impacts winter temperatures.....	66	Leprosy	87
Mosquitofish, used to fight mosquitoes, has become invasive in India.....	66	Report & Index	88
Golden Tiger	67	Sanitation Challenges in Indian District Courts ..	88
Economy	68	Majority Of Cities Far From Clean Air Target....	89
GST Challenges	68	ILO Warns Of Rise In Unemployment, Decline In Real Wages	91
Direct Tax Collections Cross 80% Of 2023-24 Target	69	Global Risks Report 2024: WEF	92
Science & Technology	71	Global Surgery: Why Access To Essential Surgery Is Important?.....	93
Xposat: ISRO's X-Ray Eye In The Sky.....	71	Annual Status of Education Report 2023	95
World's Largest Radio Telescope Project.....	72	Multidimensional Poverty Index: NITI Ayog	96
Upcoming Space Missions.....	72	All India Survey on Higher Education	97
South Korea Superconductivity Claim Revived With New Data	73	Important Days	98
How A Super-Energetic Particle From Outer Space Could Help Physics?	75	Tableaux on the Republic Day	98
GM Mustard.....	76	Thiruvalluvar Day.....	99
Quantum Gates: Devices That Translate Quantum Effects To Computing Awesomeness	77	Other Important Days	100
THBCD	78	Important Editorials of the Month ..	103
NISAR Mission on track for a launch soon: NASA official	79	Bilkis Bano Case and Remission	103
How physicists are making sense of the mystery of pulsar glitches	80	Ram Mandir Architecture	108
Psychoanalysis	80	Floods and Preventive Measure.....	115
Aditya L1	81	India-Korea.....	122
Multiple Sclerosis	82	India Maldives	125
		India-U.K. Defence Ties.....	132
		The Red Sea Crisis	138
		Tourism Potential and Policy.....	146

Art and Culture

India's Oldest Living City Found In Vadnagar: Multi Institution Study

Context: A collaborative study by the Indian Institute of Technology (Kharagpur) and the Archaeological Survey of India (ASI) has unearthed evidence of cultural continuity in Vadnagar, Gujarat, following the collapse of the Harappan civilization. The findings challenge the prevalent notion of a "Dark Age" by demonstrating sustained cultural development in Vadnagar.

Key Highlights of the Excavation at Vadnagar

Age of Settlement

- Evidence reveals a human settlement in Vadnagar dating back to approximately 800 BCE, placing it in the late-Vedic/pre-Buddhist Mahajanapadas or oligarchic republics period.

Climate Influence

- Severe changes in climate, such as variations in rainfall or droughts, are proposed as factors influencing the rise and fall of kingdoms over a 3,000-year period.

Multicultural and Multireligious Settlement

- Vadnagar is characterized as a multicultural and multireligious settlement incorporating Buddhist, Hindu, Jain, and Islamic influences.
- Seven cultural stages, spanning Mauryan to Gaekwad-British colonial rule, were uncovered during excavation.

Archaeological Artifacts

- Various artifacts, including pottery, copper, gold, silver, and iron objects, were discovered.
- Notable findings include intricately designed bangles and coin molds from the Indo-Greek rule.

Buddhist Monastery

- A significant discovery includes one of the oldest Buddhist monasteries in Vadnagar, contributing to the historical and cultural richness of the settlement.

Radiocarbon Dates

- Unpublished radiocarbon dates suggest the settlement's age could be as old as 1400 BCE, challenging the concept of a Dark Age.
- The Dark Age refers to the period between the decline of the Indus Valley Civilization and the emergence of the Iron Age and cities like Gandhar, Koshal, and Avanti.

Archaeological Survey of India (ASI)

- ASI, under the Ministry of Culture, is the premier organization responsible for archaeological research and protection of the nation's cultural heritage.
- Its primary concerns include maintaining ancient monuments, archaeological sites, and remains of national importance.
- **ASI's Regulatory Role:** ASI regulates all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958, along with the Antiquities and Art Treasure Act, 1972.

- **Foundation and Director-General:** Established in 1861 by Alexander Cunningham, considered the "Father of Indian Archaeology."

Who conducted the study?

Leadership and Team Composition

- The excavation was led by the ASI and involved scientists from IIT Kharagpur, Physical Research Laboratory (PRL), Jawaharlal Nehru University (JNU), and Deccan College.
- Funding for the study was provided by the Directorate of Archaeology and Museums (Government of Gujarat).

Significance of the Study

- Fills historical knowledge gaps by providing insights into the period between 1,500 BC and 500 BC.
- Challenges the concept of a Dark Age, proposing cultural continuity over 5,500 years.
- Vadnagar is identified as the oldest living city within a single fortification in India.
- The rarity of archaeological records is highlighted, with Vadnagar potentially dating back to 1400 BCE, challenging previous assumptions.

Jallikattu

Context: Recently, in a jallikattu event, two individuals, including a minor boy, met a tragic end after being gored to death.

Jallikattu	
About	The term "Jallikattu" is a combination of 'Calli' (coins) and 'Kattu' (tie), symbolizing a bundle of coins tied to a bull's horns.
Ancient Tradition	<ul style="list-style-type: none">• Jallikattu, a competitive bull-taming sport in Tamil Nadu, has a history spanning 2,000 years.• Participants attempt to tame a bull for a prize, with failure leading to the bull owner claiming the reward.
Cattle Breeds for Jallikattu	<ul style="list-style-type: none">• Native cattle breeds like Kangayam, Pulikulam, Umbalachery, Bargur, and Malai Maadu are specifically raised for Jallikattu, showcasing diversity in participants.
Historical References	<ul style="list-style-type: none">• The origins of Jallikattu trace back to a Mohenjodaro seal from 2,500 BC to 1,800 BC, known as Eru Thazuval, meaning "embracing the bull."• Mentioned in Silappadikaram, a significant Tamil epic from the Sangam age.

Controversy over Jallikattu

- **HC Verdict:** In 2006, a Madras High Court ruling prohibited events like rekla race and jallikattu, citing safety concerns.
- **Tamil Nadu Regulation of Jallikattu Act (2009):** Enacted in 2009, this act aimed to introduce regulations and safety measures for conducting jallikattu.
- **Jallikattu and Mass Agitations in Tamil Nadu**
 - Supreme Court's ban on jallikattu and similar sports involving animals in Tamil Nadu led to mass agitations.
 - The ban was based on the Prevention of Cruelty to Animals (PCA) Act, 1960, highlighted in the Welfare Board of India vs A. Nagaraja (2014) case.

Bangla for Classical Language, GangaSagar Mela for National Status

Context: West Bengal's Chief Minister made headlines by advocating for classical language status for Bangla, the world's 7th most spoken language. The Chief Minister also sought national fair status for GangaSagar Mela, India's second-largest pilgrimage gathering, held annually during Makar Sankranti.

What is Gangasagar Mela?

- Takes place during mid-January at Sagar Island, confluence of the Ganges and Bay of Bengal.
- India's second-largest pilgrimage gathering after Kumbh Mela.
- Commemorates King Bhagirath's descent of the Ganges to Earth.
- Gangasagar Mela faces challenges due to rising sea levels and beach erosion, despite efforts to counter erosion.

Benefits of National Status

- Elevated status would attract increased central funding and infrastructure development.
- Potential boost to tourism and economic activity in West Bengal.

Other Major Melas in India

Kumbh Mela

- Celebrated every 12 years at four sacred rivers' sites (Allahabad, Haridwar, Ujjain, Nashik).
- Ardha Kumbh Mela held at Haridwar and Allahabad every six years.
- Maha Kumbh held every 144 years.

Pushkar Mela

- Annual five-day camel and livestock fair in Pushkar, Rajasthan.
- One of the world's largest cattle fairs.

Hemis Gompa Fair

- Annual fair in Ladakh commemorating Guru Padmasambhava's birth anniversary.

What are Classical Languages?

About	<ul style="list-style-type: none"> ○ Created in 2004 as a category of languages in India. ○ Criteria for classical language status laid down in 2006; six languages granted status so far.
Criteria	<ul style="list-style-type: none"> ○ High antiquity spanning 1,500–2,000 years. ○ Possession of valuable ancient literature. ○ Presence of an original literary tradition. ○ Distinctness from modern forms.
Benefits	<ul style="list-style-type: none"> ○ Financial assistance for establishing a center of excellence. ○ Opens avenues for awards and UGC to create chairs for scholars.

Conclusion

8th Schedule of Indian Constitution lists 22 official languages of India, including Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili, and Dogri.

Batadrava Than

Context: Rahul Gandhi prevented from visiting Batadrava Than.

What is the Batadrava Than?

Batadrava Than, also known as Bordowa Than, is a highly revered site for Assamese Vaishnavites, situated in the Nagaon district.

- It holds immense religious significance as it marks the birthplace of Srimanta Sankardeva (1449-1568), a prominent Vaishnavite reformer-saint.
- Srimanta Sankardeva founded the first-ever Kirtan Ghar at Bordowa in 1494 AD, advocating and disseminating the neo Vaishnavite faith during the fifteenth century in Assam.
- The place served as a hub for practicing and preaching the Ek Saran Naam Dharma.



What was Srimanta Sankardeva's philosophy?

Srimanta Sankardeva's philosophy, known as Ek Saran Naam Dharma, emphasized worship through bhakti (devotion) to Lord Krishna.

The focus was on singing and congregational listening of Lord Krishna's name and deeds.

Sankardeva advocated for a society based on equality and fraternity, devoid of caste differences, orthodox Brahmanical rituals, and sacrifices.

His teachings promoted prayer and chanting (naam) instead of idol worship.

The dharma comprised four key components: deva (god), naam (prayers), bhakats (devotees), and guru (teacher).

The Neo-Vaishnavite reformist movement initiated by Sankardeva led to the establishment of monastic institutions called Thans/Sattras across Assam.

As Sankardeva traveled, spreading his teachings, these Sattras/Thans became centers for religious, social, and cultural reforms in the 16th century.

Presently, the Sattras uphold Sankardeva's "worship through art" approach, incorporating music (borgeet), dance (xattriya), and theatre (bhauna).

Each Sattras has a naamghar (worship hall) as its nucleus and is led by an influential "Sattradhikar."

Karpoori Thakur named for Bharat Ratna honour

Context: On the Eve of Birth Centenary, Karpoori Thakur Named for Bharat Ratna Honour

Bharat Ratna

- The Bharat Ratna is the highest civilian award in India, established on 2 January 1954, recognizing exceptional service or performance of the highest order.
- It is conferred without distinctions of race, occupation, position, or gender.
- Initially focused on arts, literature, science, and public services, the criteria were expanded to encompass "any field of human endeavor" in 2011.
- Recommendations for the Bharat Ratna are made by the Prime Minister to the President, with a maximum of three recipients annually.
- A Sanad (certificate) signed by the President and a peepal leaf-shaped medallion are awarded, with no monetary grant.
- Bharat Ratna recipients hold the seventh rank in the Indian order of precedence.

Recipients	Suspension
<ul style="list-style-type: none"> • The first awardees in 1954 were C. Rajagopalachari, Sarvepalli Radhakrishnan, and C. V. Raman. • Traditionally awarded to India-born citizens, exceptions include Mother Teresa (a naturalized citizen), Khan Abdul Ghaffar Khan, and Nelson Mandela (non-Indians). 	<ul style="list-style-type: none"> • Briefly suspended twice: from July 1977 to January 1980 during a change in the national government, and from August 1992 to December 1995 due to constitutional challenges. • While "Bharat Ratna" cannot be used as a prefix or suffix, recipients may identify themselves as "Awarded Bharat Ratna by the President" or "Recipient of Bharat Ratna Award."

Benefits

The award carries no monetary benefits but includes special entitlements:

Medallion and miniature.	Sanad signed by the President.
Treated as a state guest by state governments during intra-state travel.	Assistance from Indian missions abroad upon request.
Entitlement to a diplomatic passport.	Lifetime free executive class travel on Air India.
Holds the seventh position in the Indian order of precedence.	

Madhika Language on Brink of Extinction

Why in News?

- The Chakaliya community in the remote colony of Kookanam, near Karivellur grama panchayat, Kerala, is facing the potential loss of its unique language, Madhika.
- Only two individuals remain as the last fluent speakers of Madhika, raising concerns that the language may vanish with their passing.

Madhika Language	Chakaliya Community
<ul style="list-style-type: none"> • Madhika is a language devoid of a script, blending elements from Telugu, Tulu, Kannada, and Malayalam. 	<ul style="list-style-type: none"> • Originally nomadic, the Chakaliya community were worshippers of Thiruvengatramana and Mariamma.

- Despite its similarity to Kannada, Madhika can perplex listeners due to its diverse linguistic influences.
- The language is significantly influenced by Havyaka Kannada, an ancient form of Kannada.
- Neglect of Madhika is linked to the social stigma faced by the Chakaliya community, who were historically considered untouchables.
- The absence of documentation (no script) and the passing of older speakers pose a substantial risk to the survival of Madhika.
- They migrated from the hilly regions of Karnataka to northern Malabar centuries ago.
- Initially classified as a Scheduled Tribe (ST), the community was later reclassified into the Scheduled Caste (SC) group in Kerala.

Linguistic Diversity of India

Indian Linguistic Space

- India boasts a rich linguistic heritage with diverse languages and writing systems.
- The tradition of writing in India dates back to the Indus Valley Civilization, around four thousand years ago.

Linguistic Survey

- The first linguistic survey during colonial rule (1894-1928) identified 179 languages and 544 dialects.
- The 1991 Census of India listed 1576 mother tongues with separate grammatical structures and 1796 speech varieties classified as 'other mother tongues.'
- UNESCO considers languages spoken by fewer than 10,000 persons as "potentially endangered."

Language Families of India

- Major language families in India include Indo-Aryan, Dravidian, Austric, Tibeto-Burman, and others.

Threat of Extinction

- According to the People's Linguistic Survey of India (PLSI), around 400 languages are at the risk of extinction in the next 50 years.
- Most endangered languages are spoken by marginal tribes, often with little access to education.

Initiatives Taken to Conserve Threatened Languages

- Schemes such as the Scheme for Protection and Preservation of Endangered Languages in India.
- Observance of International Mother Language Day by UNESCO.

Constitutional Provisions Related to Languages in India

- **Article 29:** Protects the interests of minorities, ensuring the right of all citizens to preserve their distinct language, script, or culture.
- **Eighth Schedule:** Part XVII of the Indian Constitution recognizes 22 official languages.
- **Article 350A:** Mandates every state to provide primary education in the mother tongue.
- **Article 350B:** Provides for the appointment of a "Special Officer" for linguistic minorities.
- **Article 351:** Empowers the Union government to issue directives for the development of the Hindi language.

Civilian and Gallantry awards

Context: President's Approval of Gallantry Awards and Padma Awards

Recipients of Civilian Awards

- Former Vice-President M. Venkaiah Naidu, actors Chiranjeevi, Vyjayanthimala Bali, and Bharatanatyam dancer Padma Subrahmanyam to receive the Padma Vibhushan.
- Bindeshwar Pathak, founder of Sulabh International, to be posthumously conferred the Padma Vibhushan.
- Posthumous recipients of the Padma Bhushan include late actor Vijayakanth, M. Fathima Beevi, Satyabrata Mookherjee, and Togdan Rinpoche.
- Young Liu, chairman of Taiwan's Foxconn Group, to be honored with the Padma Bhushan.
- Padma Bhushan recipients also include actor Mithun Chakraborty, singer Usha Uthup, O. Rajagopal, Tejas Madhusudan Patel, Ram Naik, Hormusji N. Cama, Sita Ram Jindal, Dattatray Ambadas Mayaloo, Pyarelal Sharma, and Kundan Vyas.
- Padma Shri awardees include Dukhu Majhi, K. Chellamal, Sanghthankima, Rohan Bopanna, Joshna Chinappa, Harbinder Singh, Uday Deshpande, Purnima Mahato, Gaurav Khanna, and Satendra Singh Lohia.

Padma Awards

- Instituted in 1954, Padma Awards are announced annually on Republic Day, with three categories: Padma Vibhushan, Padma Bhushan, and Padma Shri.
- Padma Vibhushan recognizes "exceptional and distinguished service," being the second-highest civilian award.
- Padma Bhushan acknowledges "distinguished service of a high order," ranking as the third-highest civilian award.
- Padma Shri is awarded for "distinguished service" and is the fourth-highest civilian award.
- Bharat Ratna, instituted in 1954, is the highest civilian award, conferred for exceptional service/performance without distinction of race, occupation, position, or sex.

Recipients of Gallantry Awards

- President Droupadi Murmu approves gallantry awards for 80 military personnel, including 12 posthumous recipients.
- Kirti Chakras awarded to Major Digvijay Singh, Major Deependra Vikram Basnet, and Havildar Pawan Kumar Yadav.
- Posthumous Kirti Chakras awarded to Captain Anshuman Singh, Havildar Abdul Majid, and Sepoy Pawan Kumar.
- In total, 6 Kirti Chakras, 16 Shaurya Chakras, 53 Sena Medals (7 posthumous), 1 Nao Sena Medal, and 4 Vayu Sena Medals are conferred.

Details of the Award

- The decoration includes a sanad (Certificate) from the President and a Medallion.
- Recipients are provided with a replica of the medallion for ceremonial functions.

Wartime Gallantry Awards

Param Vir Chakra – Highest military award.

Maha Vir Chakra – Second highest military decoration for conspicuous gallantry.

Vir Chakra – Third in precedence for wartime gallantry.

Peacetime Gallantry Awards

Ashok Chakra – Awarded for valour, courageous action, or self-sacrifice away from the battlefield.

Kirti Chakra – Second in peacetime gallantry awards.

Shaurya Chakra – Third in peacetime gallantry awards.

Geography

Tsunami

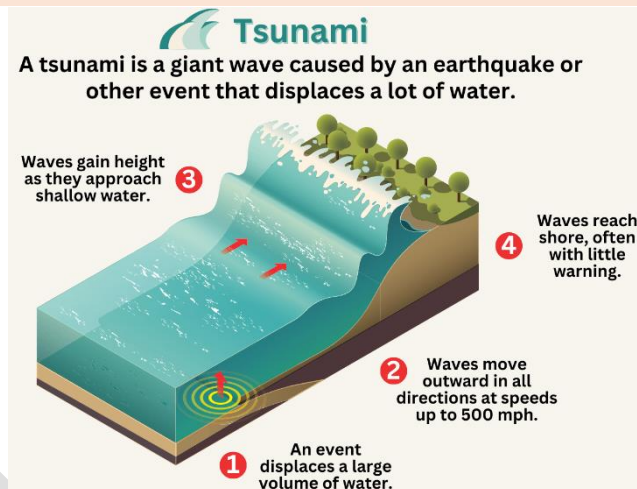
Context: Tsunami waves exceeding one meter in height struck central Japan on January 1, 2024, following a massive earthquake. The seismic event, registering at a magnitude of 7.5, occurred in Ishikawa prefecture on the Sea of Japan side of Honshu at 4:10 p.m.

Understanding Tsunamis

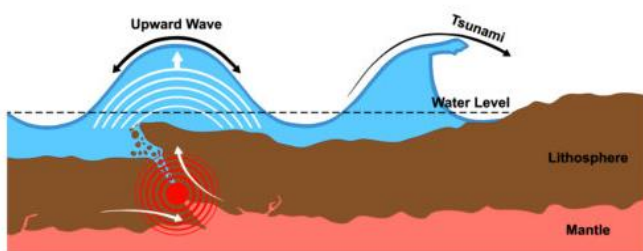
Tsunamis are a series of waves in a water body resulting from the displacement of a large volume of water, typically in oceans or large lakes. Unlike regular ocean waves and tides, which are wind or gravity-induced, tsunamis are generated by significant water displacement from events like earthquakes, volcanic eruptions, and other underwater disturbances.

Causes of Tsunamis

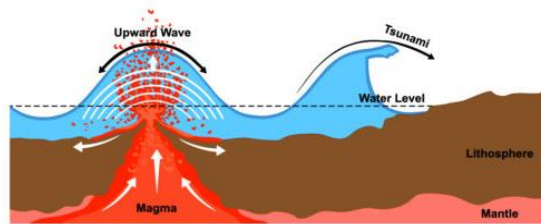
- **Underwater Earthquakes:** Vertical displacement of the seafloor during earthquakes, particularly when tectonic plates shift beneath the ocean, can push large volumes of water, creating a tsunami.
- **Volcanic Eruptions:** Underwater volcanic eruptions displace water, generating tsunamis as the explosion or collapse forces water upward.
- **Landslides:** Submarine landslides, often triggered by volcanic activity or undersea slope failures, can displace water, creating powerful waves.
- **Glacier Calving:** The collapse of a glacier's front can generate powerful underwater tsunamis.
- **Meteorite Impacts:** Rare but impactful, a large meteorite impact in the ocean can displace water, leading to a tsunami.



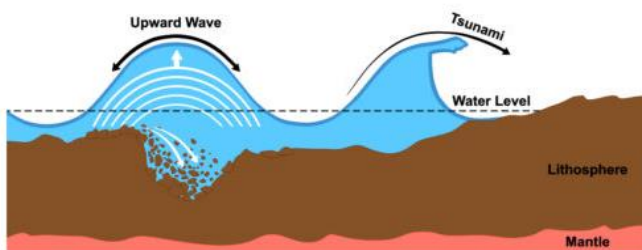
Earthquake Tsunami



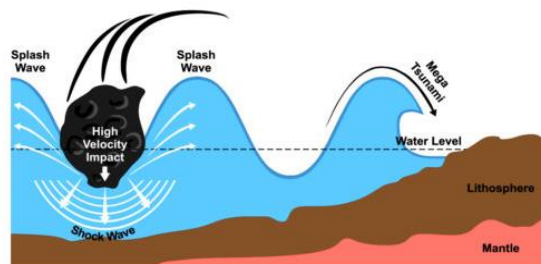
Volcano Tsunami



Erosion Tsunami



Falling Meteors Mega Tsunami



Characteristics of Tsunamis

Long Wavelengths

High Speeds

Low Wave Height in Deep Water

Amplification in Shallow Water

Multiple Waves

- **Long Wavelengths:** Tsunamis have long wavelengths, allowing them to travel great distances across open oceans with minimal energy loss.
- **High Speeds:** In deep ocean waters, tsunamis can travel at speeds exceeding 500 miles per hour, making them challenging to detect and giving coastal regions minimal preparation time.
- **Low Wave Height in Deep Water:** Despite high speed and energy, tsunamis may have a low amplitude in deep water, often unnoticed by ships at sea.
- **Amplification in Shallow Water:** As tsunamis approach shallower coastal areas, their energy compresses, significantly increasing wave height, potentially causing devastating waves.
- **Multiple Waves:** Tsunamis often come in a series, with subsequent waves being as powerful as the initial impact.

How Earthquakes Generate Tsunamis?

- **Destructive Tsunamis:** Large, shallow earthquakes near or on the ocean floor, common in tectonic subduction zones, generate the most destructive tsunamis.
- **Tectonic Plate Collisions:** Regions with tectonic plate boundaries experience high seismicity due to the collision of plates, causing large earthquakes that disturb the ocean floor and generate tsunamis.
- **Magnitude Requirement:** Usually, earthquakes with a Richter magnitude exceeding 7.5 are needed to produce a destructive tsunami.
- **Global Distribution:** Over 80% of the world's tsunamis occur in the Pacific along its Ring of Fire subduction zones.
- **Fault Rupture:** Great earthquakes at subduction zones cause faulting, leading to vertical slip and disturbing the ocean's surface, generating tsunamis that travel outward in all directions.

Drawback Effect and Warning Signs

Before a tsunami reaches the shore, coastal water may recede significantly, exposing the ocean floor. This effect is often misunderstood as low tide and can be dangerous as it precedes incoming tsunami waves.

The quake caused extensive damage to homes, triggered a major fire, and prompted authorities to advise residents to seek higher ground.

Winter Storms in the US

Why in News?

- Winter storms in the U.S. have resulted in challenges, impacting various states with sub-freezing temperatures, snow, and ice.
- The situation has led to at least 72 deaths nationwide in January 2024, primarily attributed to Hypothermia or Road Accidents.

Factors Causing Severe Winter Storms in the US

Polar Vortex

Arctic Air Masses

Jet Stream Patterns

Polar Vortex

- The Polar Vortex is a vast area of low pressure and cold air surrounding both Earth's poles.

- The term "vortex" denotes the counterclockwise air flow that maintains colder air near the Poles, existing consistently but weakening in summer and strengthening in winter.
- Disruptions in the polar vortex can lead to outbreaks of cold air moving southward into the United States, resulting in frigid temperatures.
- Arctic amplification, caused by climate change, accelerates warming in the Arctic compared to the rest of the globe, weakening the polar vortex and making it more prone to disruptions.
- The weakened polar vortex may stretch or split, allowing cold Arctic air to spill southward.

Arctic Air Masses

- Intrusions of Arctic air masses into the US cause a rapid drop in temperatures, originating in the Arctic and extending southward, bringing extreme cold to unaccustomed areas.

Jet Stream Patterns

- The jet stream, a swift-flowing ribbon of air high in the atmosphere, influences weather systems.
- Changes in the jet stream pattern can enable the southward movement of cold Arctic air, affecting large regions of the country.

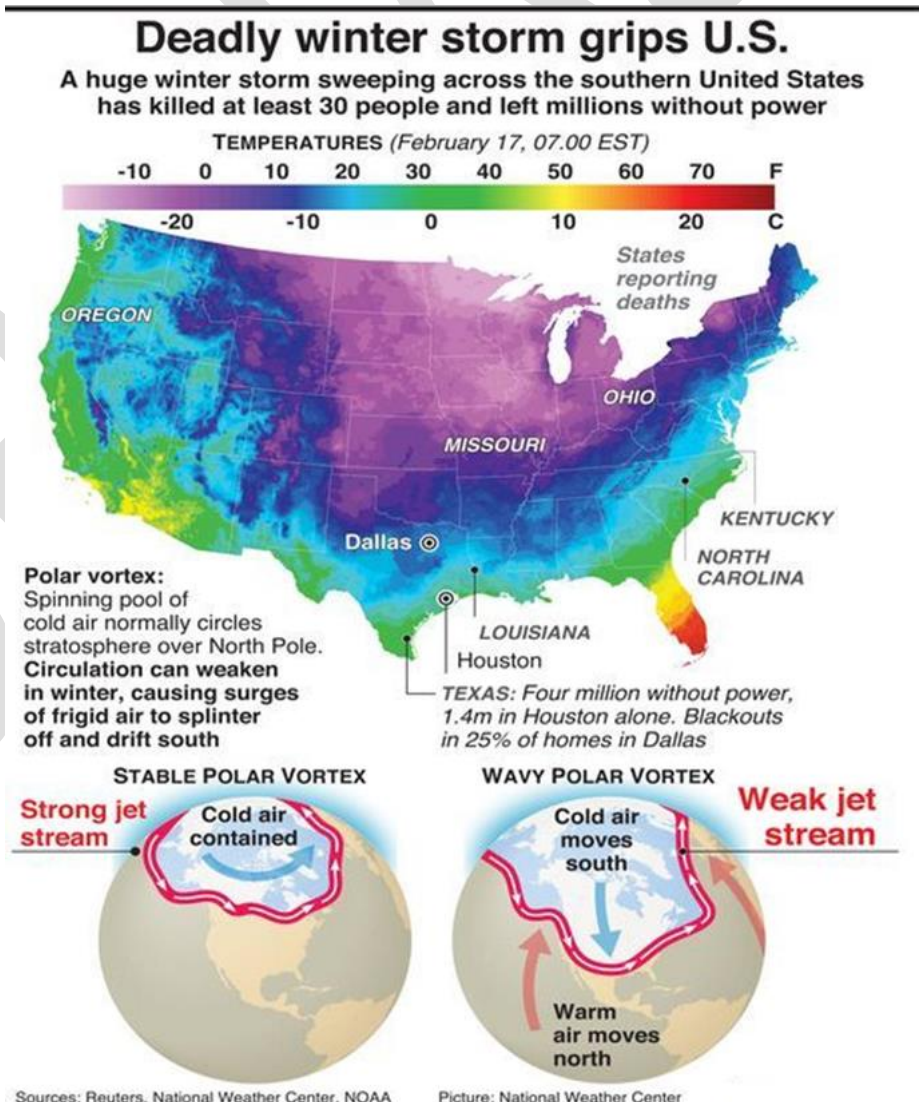
Winter Storms

Winter storms are weather events characterized by extreme cold temperatures, precipitation in the form of snow, sleet, or freezing rain, often accompanied by strong winds.

- These storms disrupt normal activities, impact transportation, and pose hazards to communities.

Formation

- Winter storms begin with moist air rising into the atmosphere, occurring at a cold front where warm air is lifted above cold air or as air ascends hills or mountains.
- A source of moisture is essential for cloud formation and precipitation, often provided by air blowing across large bodies of water, such as lakes or oceans, picking up water vapor.
- The key factor distinguishing winter storms is the presence of cold air, with temperatures below freezing, causing precipitation in the form of snow or ice.



Types of Winter Storms

Snowstorms

These storms involve precipitation falling mainly as snow, with snowflakes forming as water vapor condenses and freezes based on air temperature.

Blizzards

Defined by strong winds (at or above 35 MPH), blizzards create blowing snow conditions, reducing visibility and causing snowdrift accumulation.

Lake Effect Storms

These storms result from moisture from the Great Lakes, where cold, dry air passing over the lakes picks up water vapor, leading to heavy snowstorms in areas south and east of the lakes.

Ice Storms

Winter storms with at least 0.25 inches of ice accumulation on outdoor surfaces, creating hazardous conditions for travel and walking, as well as potential damage to branches and powerlines.

Polity

Unlawful Body Declaration: Tehreek-e-Hurriyat, Jammu and Kashmir (TeH)

Context: The Union Home Ministry has declared Tehreek-e-Hurriyat, Jammu and Kashmir (TeH), an "unlawful association" under Section 3 of the Unlawful Activities (Prevention) Act (UAPA).

Background

- Founded by separatist Syed Ali Shah Geelani, TeH is a constituent of the All Party Hurriyat Conference (APHC).
- Numerous criminal cases have been registered against TeH under various sections of UAPA, the Arms Act, the Ranbir Penal Code, and the Indian Penal Code.

Government Directives

- The Union government's notification is effective for five years, subject to any orders under Section 4 of UAPA.

Unlawful Activities Prevention Act (UAPA)

- UAPA aims at preventing unlawful activities and associations in India, specifically those directed against the integrity and sovereignty of the nation.
- The Constitution (Sixteenth Amendment) Act, 1963, was enacted to impose reasonable restrictions in the interests of the sovereignty and integrity of India.

Provisions and Amendments

- The original bill empowered authorities to address activities against India's integrity and sovereignty.
- In 2004, amendments were made to criminalize fundraising for terrorism and enhance law enforcement capabilities.
- Subsequent amendments in 2008 and 2012 broadened the definition of "terrorist act" to include economic threats and counterfeiting.
- In 2019, an amendment allowed the designation of an individual as a "terrorist."

Definition of Unlawful Activity under UAPA

Section 2(o) of UAPA:

- Defines "unlawful activity" in relation to an individual or association.



	<ul style="list-style-type: none"> Includes actions intended to bring about territorial secession, disrupt sovereignty, or cause disaffection against India.
Designation of a Terrorist under UAPA	<p>Section 15 and Section 35:</p> <ul style="list-style-type: none"> Defines a "terrorist act" as any action threatening the unity, integrity, security, or sovereignty of India. Empowers the central government to designate an individual as a "terrorist" without giving them an opportunity to be heard. Legal presumption of guilt applies to individuals convicted in a terror case.
Effects and Procedures of Designation	<p>International Treaties:</p> <ul style="list-style-type: none"> UAPA includes treaties in its schedule, expanding the definition of terrorist acts. <p>Consequences of Designation:</p> <ul style="list-style-type: none"> The act does not specify sanctions like travel bans or asset freezing. No requirement for immediate legal action upon designation. Provides the central government with the power to remove a name from the schedule upon application. Individuals can seek a review within one month of rejection, involving a review committee and court challenges.

Conclusion

In summary, the UAPA serves as a preventive measure against unlawful activities and designates individuals as terrorists based on defined criteria, with procedural avenues for review and challenge.

New Hit-and-Run Law

Context: A nationwide transportation strike has been initiated by truck, bus, and tanker drivers in protest against the stringent jail and fine regulations introduced under the newly implemented Bharatiya Nyay Sanhita (BNS) for hit-and-run cases. These regulations have led to disruptions in fuel supply and long queues at petrol pumps across the country.

Understanding the Latest Hit-and-Run Legislation

The recently implemented hit-and-run law in India is a component of the Bharatiya Nyay Sanhita (BNS), which has replaced the Indian Penal Code (IPC). This legislation introduces more severe penalties for individuals who flee the scene of a hit-and-run incident.

Overview of the Updated Hit-and-Run Law

- Stricter Penalties for Hit-and-Run Incidents:** The revised law introduces stringent penalties for hit-and-run incidents, particularly those resulting in fatalities. Offenders causing a fatal crash and fleeing may face imprisonment of up to 10 years, coupled with a fine.
- Two Distinct Categories:** The law establishes two categories of offenses:
 - Rash or Negligent Acts:** Offenders may be imprisoned for up to five years, with a fine imposed for causing death through rash or negligent acts that do not amount to culpable homicide.
 - Rash and Negligent Driving:** Those escaping without promptly reporting the incident to authorities may face up to 10 years of imprisonment, along with a fine.

Key Features of the New Hit-and-Run Law

The law specifies that drivers causing a serious road accident through negligent driving and subsequently escaping without informing authorities may face imprisonment for up to 10 years or a fine of Rs 7 lakh. Protests from truck and bus drivers have erupted across India in response to the law, with a three-day nationwide demonstration involving road blockades.

- Provisions of the New Hit-and-Run Law:** The Bharatiya Nyay Sanhita (BNS) imposes more stringent penalties for drivers involved in hit-and-run accidents in India.
 - Applicable to private vehicle owners, the law stipulates that drivers causing a serious road accident through negligent driving and fleeing without informing the police or any administration official can be subjected to a maximum punishment of 10 years in prison and a fine of Rs 7 lakh.

Defining Hit-and-Run Accidents

A hit-and-run accident is characterized by a driver involved in an incident with another property, pedestrian, or vehicle, who then leaves the scene without providing aid or exchanging insurance details. To address concerns about potential attacks, drivers fearing retaliation can report the accident to the nearest police station or contact the police or the toll-free emergency helpline number 108.

Comparison with Previous Hit-and-Run Legislation

Previous Legislation	Before the introduction of the Bharatiya Nyay Sanhita (BNS), individuals implicated in hit-and-run cases were prosecuted under Section 304A of the Indian Penal Code. The penalties were less severe, with offenders facing imprisonment of up to two years upon identification.
Shift towards Stricter Consequences	The implementation of the new legislation signifies a notable shift towards more severe consequences for hit-and-run offenses in India. This legislative change reflects an intention to address such incidents with greater rigor.

Critiques and Concerns Regarding the New Hit-and-Run Law

Harsher Penalties

Discouragement of Drivers

Risk of Mob Violence

Blaming Larger Vehicles Without Investigation

Harassment and Extortion

- Harsher Penalties:** Critics highlight the imposition of harsher penalties under the new hit-and-run law, including up to 10 years in jail and a fine of Rs 7 lakh, as opposed to the previous punishment of two years in jail and a smaller fine.
- Discouragement of Drivers:** Some private transport operators express concerns that the stringent law may discourage drivers, potentially resulting in unjust punishments and impacting the willingness of individuals to take up driving roles.
- Risk of Mob Violence:** Operators worry about the potential for mob violence when drivers attempt to transport injured individuals to hospitals, fearing a hostile reaction from bystanders or communities.
- Blaming Larger Vehicles Without Investigation:** Truck drivers, in particular, are concerned that law enforcement may hastily blame larger vehicles without thorough investigation, potentially leading to unjust accusations and penalties.
- Harassment and Extortion:** The industry raises concerns about potential harassment, extortion, unnecessary detention, and legal consequences for drivers, adding to the challenges faced by those in the transportation sector.

The newly enacted Bharatiya Nyay Sanhita (BNS) in India, replacing the Indian Penal Code, introduces stringent penalties for hit-and-run incidents.

- Drivers fleeing after causing a serious accident face up to 10 years in jail or a Rs 7 lakh fine.
- This has triggered nationwide protests by truckers, demanding a rollback. Critics cite concerns about discouraging drivers, potential mob violence during rescues, unfair blame on larger vehicles, and worries about harassment.
- The BNS marks a significant shift towards stricter consequences for hit-and-run offenses.



The Citizenship (Amendment) Act (CAA)

Context: Government sources have revealed that the rules governing the Citizenship (Amendment) Act (CAA) of 2019 are set to be announced well before the upcoming Lok Sabha elections.

Citizenship (Amendment) Act (CAA) 2019

- The CAA aims to amend the definition of illegal immigrant, specifically benefiting Hindu, Sikh, Parsi, Buddhist, Jain, and Christian (excluding Muslims) immigrants from Pakistan, Afghanistan, and Bangladesh without proper documentation.
- These individuals will be eligible for fast-track Indian citizenship within 5 years (as opposed to the previous 11-year period).
- The Act also allows for the cancellation of Overseas Citizen of India (OCI) registration if the OCI cardholder violates any Citizenship Act provision or other applicable laws.

Eligibility

- Applicable to those who sought refuge in India due to religious persecution, excluding areas covered by the Constitution's sixth schedule (autonomous tribal regions) and states with an inner-line permit regime (Arunachal Pradesh, Nagaland, and Mizoram).
- The cutoff date for citizenship is December 31, 2014, requiring applicants to have entered India on or before that date.

Implementation and Reasons for Delay

- Despite the enactment of the CAA in 2019, the rules for its implementation were not notified, leading to multiple extensions sought by the government.
- Opposition and protests in states like Assam and Tripura, concerns about demographic changes, and challenges to the constitutional validity of the CAA have contributed to the delay.
- Protests extended beyond the North-East region to other parts of the country, and legal challenges claim the law violates the Right to Equality (Article 14) and is selectively discriminatory.

Counterclaims and Responses

- The government contends that the CAA's basis is not religion but addresses religious discrimination in neighboring countries with state religions.
- Parliament, acknowledging minority issues, enacted the amendment to address a specific problem in specified countries.
- The legislation was not intended as a comprehensive solution to global issues, and the Indian Parliament cannot be expected to address persecutions worldwide.

Way Forward

- The rules for the CAA are finalized, with an online portal ready for implementation.
- Once issued, these rules will facilitate the online application process for Indian citizenship without requiring documents from applicants.
- Requests from applicants who applied after 2014 will be processed according to the new rules.

Adani-Hindenburg row

Context: The Supreme Court of India has endorsed the ongoing investigation by the Securities and Exchange Board of India (SEBI) into the Adani-Hindenburg controversy.

Securities and Exchange Board of India (SEBI)	
About	<ul style="list-style-type: none">• SEBI is a statutory regulatory body established in 1992 by the Government of India through the SEBI Act, 1992.• It aims to curb unfair practices, malpractices, and protect investors from such activities.

Objective	<ul style="list-style-type: none"> Regulate the securities market in India and safeguard the interests of investors.
Powers of SEBI	<ul style="list-style-type: none"> Quasi-judicial powers for passing judgments in cases of frauds and unethical practices. Quasi-executive powers for examining books of accounts, identifying violations, and imposing rules. Quasi-legislative powers to formulate rules, including those for listing obligations and insider trading regulations.
Adani-Hindenburg Controversy	
About	<ul style="list-style-type: none"> Involves allegations of accounting fraud and stock price manipulation by Hindenburg Research against the Adani Group.
Allegations by Hindenburg Research	<ul style="list-style-type: none"> Large-scale stock price manipulation. Falsely inflating the value of assets. Controlling over 75% of shares through offshore entities. Accusation of the largest con in corporate history.
Controversy	<ul style="list-style-type: none"> Adani Group stocks dropped by USD 140 billion. Hindenburg Research profited from the crash through short-selling.
Significance of Allegations	<ul style="list-style-type: none"> Suggests regulatory failure if true. Implies illegal gains of over \$100 billion for the Adani Group.
Role of Supreme Court in Adani-Hindenburg Controversy	
Petitions Filed	<ul style="list-style-type: none"> Wide range of petitions filed before the SC, alleging conspiracy and seeking an investigation.
Expert Committee Formed	<ul style="list-style-type: none"> SC formed a 6-member committee led by Justice A.M. Sapre to investigate allegations and claims of regulatory failure. SEBI allowed to conduct a separate investigation simultaneously.
Expert Committee's Report	<ul style="list-style-type: none"> Concluded "no regulatory failure" by SEBI. SEBI sought an extension for its probe due to transaction complexity.
SC Judgement Highlights	<ul style="list-style-type: none"> No need to transfer the case from SEBI. The court has the power to transfer investigations in appropriate cases. SEBI to complete remaining investigations within three months. Instructions for SEBI and other agencies to probe Hindenburg Research and other entities for legal violations. Appropriate action to be taken if violations are found.

Assisted Reproductive Technology (ART) Act, 2021

Context: Health Ministry Seeks Information on Unmarried and Single Women Utilizing Assisted Reproductive Technology (ART)

- To evaluate the effectiveness of the Assisted Reproductive Technology (ART) Act of 2021, the Union Health Ministry has requested data from all States and Union Territories regarding the number of successful uses of ART by single women (including divorcees and widows) and unmarried women. Fertility experts commend this initiative, particularly the inclusion of single and unmarried women as a specific category.

Assisted Reproductive Technology (ART)

ART encompasses fertility treatments involving the handling of eggs or embryos. Procedures involve surgically removing eggs, combining them with sperm in a laboratory, and then either returning them to the woman's body or donating them to another woman. ART includes in-vitro fertilization, gamete donation (sperm or egg), and gestational surrogacy, where the child is not biologically related to the surrogate mother.

Provisions of the ART Act, 2021

- Provision of ART services: The Act defines ART to include techniques aiming to achieve pregnancy by handling sperm or oocytes outside the human body.
- Registration of ART clinics and banks: Registration is mandatory under the National Assisted Reproductive Technology and Surrogacy Registry, ensuring adherence to specified standards.
- Boards: The National and State Boards constituted under the Surrogacy (Regulation) Bill, 2019, also function as the regulatory bodies for ART services.
- Eligibility criteria: Married couples or women meeting specific age criteria may commission ART services, with additional conditions for donors.
- Conditions for offering services: Written consent, insurance coverage for egg donors, and prohibition of sex-selective services are mandatory.
- Rights of a child born through ART: The child is considered the biological child of the commissioning couple, and donors have no parental rights.
- Duties of ART Clinics and Banks: Information sharing with the National Registry, maintenance of records, and compliance with specified regulations.
- Offences and penalties: Offences include abandoning or exploiting children born through ART, and penalties range from fines to imprisonment.

Issues

Exclusion of single parents and the LGBTQ community

Provisions on data sharing may infringe on the right to privacy

Lack of provisions for counseling and withdrawal of donor consent

- **Exclusion of single parents and the LGBTQ community:** The act limits ART services to married couples and single women, excluding single men and the LGBTQ community, potentially violating the right to equality.
- **Provisions on data sharing may infringe on the right to privacy:** Mandatory collection of Aadhar details by ART banks raises concerns regarding privacy, potentially conflicting with the Supreme Court judgment in the Puttuswamy case.
- **Lack of provisions for counseling and withdrawal of donor consent:** The Act lacks specific provisions addressing counseling and the withdrawal of consent for donors.

The Ministry has sought category-wise figures for couples and single women who have successfully undergone surrogacy following the implementation of the Surrogacy Act of 2021.

Insolvency And Bankruptcy Code, 2016

Context: The Insolvency and Bankruptcy Code (IBC), implemented in 2016, aimed to achieve multiple objectives such as maximizing debtor's asset value, promoting entrepreneurship, ensuring timely case resolution, and balancing stakeholder interests. However, recent developments have raised concerns about the effectiveness of the code and the resolution process.

Key Issues with the IBC



- **Low Repayment Percentage**
 - The resolution plan approval process involves only around 15% payment by the purchaser.
 - Repayment periods, as per the RBI's Financial Stability Report (FSR) in 2023, can extend for years without further interest collected, raising concerns about the effectiveness of the repayment process.
- **Settlement and Recovery**
 - Recent cases like Reliance Communications Infrastructure Ltd. (RCIL) show low settlement amounts and extended resolution periods.
 - RCIL settlement amounted to 0.92% of the debt, taking four years instead of the stipulated 330 days.
 - Time-consuming processes for identifying defaults contribute to reduced recovery rates.
- **Haircuts and Recovery Rates**
 - "Haircuts," involving writing off loans and accrued interest, have led to substantial losses for financial creditors.
 - Promoters take advantage, leaving lenders with minimal recovery rates, sometimes as low as 5% of the outstanding loan.
 - Borrowers and Insolvency Professionals (IPs) benefit, while banks face losses.
- **Realizable Value**
 - RBI's FSR in 2023 highlights low realizable value to creditors, with banks recovering only 10-15% in NCLT-settled cases of large corporates.
 - Concerns raised about the minimal amount realized from liquidations, indicating challenges in the recovery process.
- **Regulatory Concerns**
 - FSR indicates concerns about Corporate Insolvency Process (CIRP), with admitted claims less than dues and low recovery rates.
 - Parliamentary Standing Committee Report emphasizes issues with Resolution Professionals (RPs), Insolvency Professionals (IPs), and the need for a professional code of conduct for the Committee of Creditors (COCs).
- **Limited Judicial Bench Strength**
 - IBC resolution process faces delays due to a shortage of judges, slowing down case processing and contributing to prolonged resolution times.

Key Highlights of the Insolvency and Bankruptcy Code, 2016

About	<ul style="list-style-type: none"> • IBC, 2016 provides a framework for resolving bankruptcy and insolvency for companies, individuals, and partnerships in a time-bound manner. • The IBC (Amendment) Act, 2021 aims to provide an efficient alternative insolvency resolution framework for micro, small, and medium enterprises (MSMEs).
Objectives	<ul style="list-style-type: none"> • Maximizing the value of debtor's assets. • Promoting entrepreneurship.



	<ul style="list-style-type: none"> • Ensuring timely and effective resolution of cases. • Balancing the interests of all stakeholders. • Facilitating a competitive market and economy. • Providing a framework for cross-border insolvency cases.
IBC Proceedings	<ul style="list-style-type: none"> • Insolvency and Bankruptcy Board of India (IBBI) oversees insolvency proceedings. • National Companies Law Tribunal (NCLT) adjudicates proceedings for companies, while Debt Recovery Tribunal (DRT) handles proceedings for individuals. • Courts play a crucial role in approving the initiation, appointing professionals, and endorsing final decisions.
Procedure for Insolvency Resolution	<ul style="list-style-type: none"> • Initiated by debtor or creditor upon default. • Insolvency professionals manage the process. • A 180-day period prohibits legal action against the debtor. • Committee of Creditors (CoC) decides on debt revival or liquidation.
Liquidation Process	<ul style="list-style-type: none"> • Proceeds from the sale of debtor's assets follow a specific order, ensuring resolution costs and payments to various creditors.

Way Forward



- **Higher Repayment Percentage:** Implement measures for stricter evaluation criteria and substantial upfront payments in resolution plans and incentivize timely repayments.
- **RBI Decision on Credit Ceiling:** Support RBI's decision to implement a maximum credit ceiling of Rs 10,000 crore to a single corporate house, reducing the burden on banks during write-offs.
- **Full Review of IBC and NCLTs:** Urgently reevaluate IBC and NCLTs as original objectives remain unfulfilled.
- **Reevaluate "Haircuts" Concept:** Introduce safeguards to ensure a fair distribution of losses between promoters and financial creditors.
- **Enhance Transparency:** Ensure regular updates on case status and reasons for delays to enhance transparency in the resolution process.

Understanding the Tenth Schedule

Context: The Maharashtra Assembly Speaker has refused to disqualify 40 MLAs associated with the Eknath Shinde faction, acknowledging it as the authentic Shiv Sena.

10th Schedule of Constitution

About	<ul style="list-style-type: none"> ○ The Tenth Schedule was introduced in response to political instability caused by defections during the 1960s and 70s. ○ Defections led to the downfall of elected governments.
Objective	<ul style="list-style-type: none"> ○ The 52nd constitutional amendment in 1985 introduced the Tenth Schedule. ○ Aims to ensure stability in elected governments through an 'anti-defection' law.

Provisions	<ul style="list-style-type: none"> Members abandoning their party or voting against party instructions face disqualification. Party instructions issued by the 'whip' appointed by the 'political party.'
Distinction Between Political and Legislature Party	<ul style="list-style-type: none"> 'Political party' includes the entire organization, while 'legislature party' comprises party members in a Parliament or State legislature.
Original Tenth Schedule	<ul style="list-style-type: none"> Two exceptions to disqualification: one-third members splitting to form a separate group and party merger approved by two-thirds of its 'legislature party.' Para 3 omitted in 2003.

Instances of Party Mergers and Challenges

Cases like the merger of BSP MLAs with Congress in Rajasthan (2019) and Congress MLAs with BJP in Goa (2022) highlight challenges in implementing the 'anti-defection' law.

Disqualification Process

- The Speaker of the House holds the authority to decide on disqualification.
- Concerns about neutrality have arisen, with a tendency to favor the ruling dispensation observed in past instances.

Constitutional Amendment Recommendations

- In the K. M. Singh versus Speaker of Manipur (2020) case, the Supreme Court recommended constitutional amendments.
- Suggested transferring the powers of disqualification decisions from the Speaker to an independent tribunal headed by judges.

Dispute Over Minority Status of AMU

Context: The Supreme Court (SC) recently noted that an educational institution, specifically Aligarh Muslim University (AMU), doesn't lose its minority status merely due to statutory regulation of its administration.

Centre's Stand on Minority Educational Institutions

- The Centre, in front of the SC, clarified that minority educational institutions are not obligated to implement the reservation policy under the Central Educational Institute (Reservation in Admission) Act, 2006.

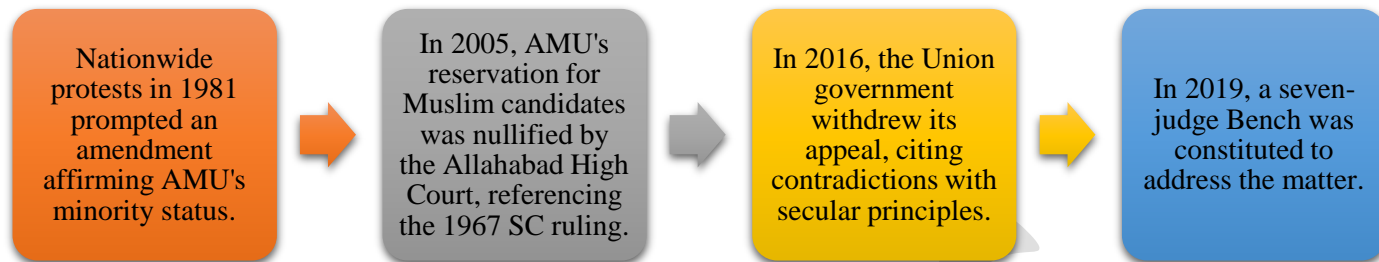
Origin of Dispute

- Legal challenges to the AMU Act of 1920 arose in 1967, particularly related to amendments made in 1951 and 1965.
- Changes included allowing non-Muslims in the University Court and reducing its authority.
- SC's 1967 ruling emphasized that AMU, as a central university, couldn't be considered a minority institution.

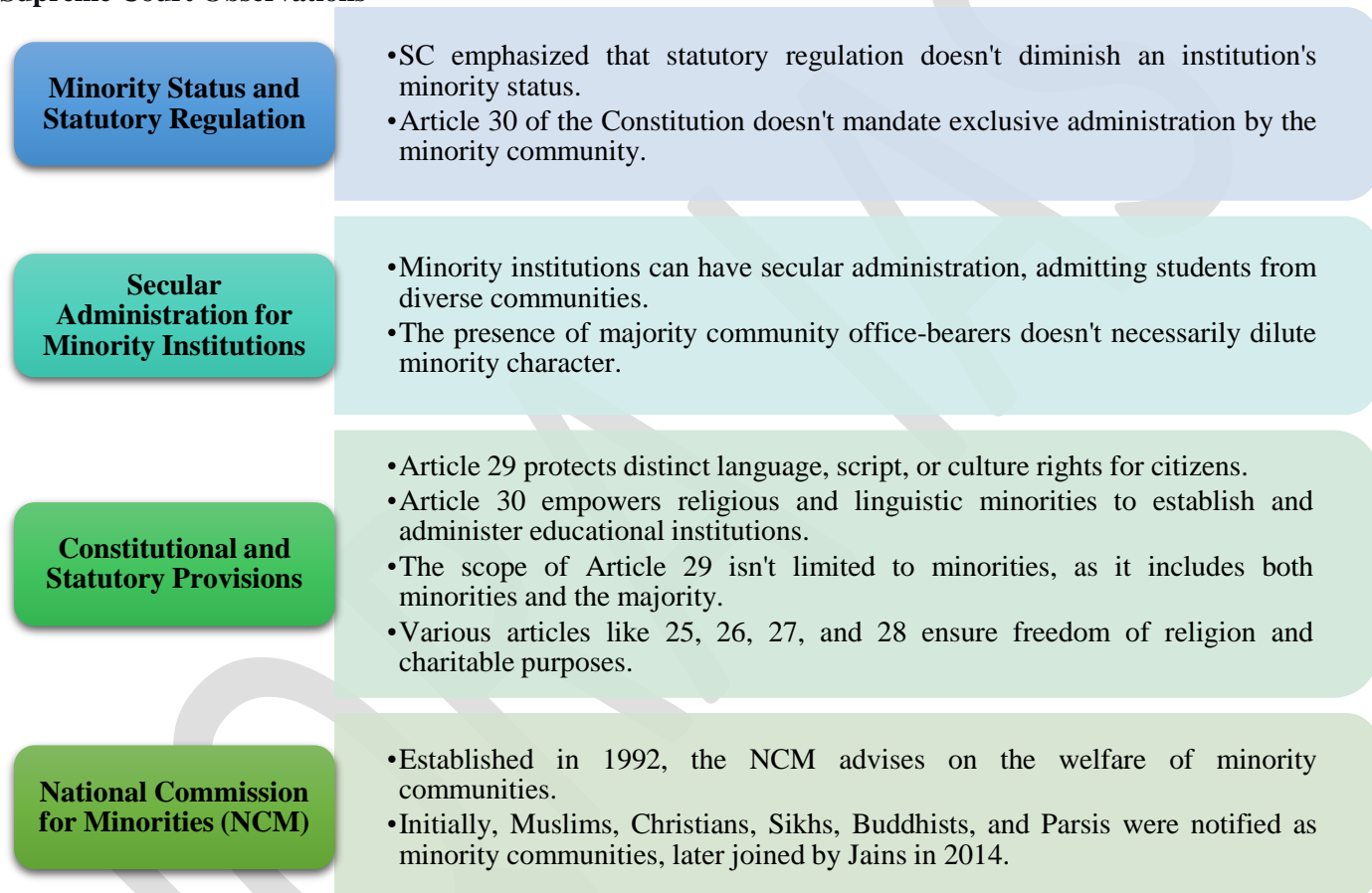
History of AMU

- The roots trace back to the Muhammadan Anglo-Oriental (MOA) College, established in 1875 by Sir Syed Ahmad Khan.
- AMU gained university status in 1920 through an Act, inheriting assets and functions from the MOA College.

Dispute Evolution



Supreme Court Observations



The SC's observations aim to clarify the nuanced relationship between minority institutions, statutory regulations, and constitutional safeguards.

Post Office Act, its unbridled powers of interception

Context: The Parliament's approval of the Post Office Act, 2023 presents various advantages but also triggers concerns regarding unchecked interception powers given to post office authorities. Issues include the undefined term 'emergency' and the absence of procedural safeguards, posing risks of arbitrary use and potential misuse of interception powers by authorities.

Key Highlights of the Post Office Act, 2023

Director General of Postal Services	<ul style="list-style-type: none"> Grants authority to the Director General of Postal Services to regulate additional services and set charges without parliamentary approval.
Interception of Shipments	<ul style="list-style-type: none"> Allows the Central Government to empower officers for interception, opening, or detention of postal items in the interest of state security, public order, emergency, or public safety. Addresses smuggling and illegal transmission of prohibited items.
Identifiers and Post Codes	<ul style="list-style-type: none"> Authorizes the Central Government to prescribe standards for addressing, address identifiers, and postcodes. Proposes the use of digital codes based on geographical coordinates for precise identification.
Removal of Offences and Penalties	<ul style="list-style-type: none"> Excludes punishment for theft, misappropriation, or destruction of postal articles by Post Office officers. Introduces penalties for individuals availing Post Office services.
Removes Centre's Exclusivity	<ul style="list-style-type: none"> Eliminates the exclusive privilege of the Centre in conveying all letters by post, allowing for competition from courier services.
Indian Post Office Act, 1898	<ul style="list-style-type: none"> Enacted in 1898 to regulate postal services, granting the Central government exclusive privilege over conveying letters.

Deficiencies in the Post Office Act, 2023

Regulation of Postal Services vs. Courier Services	<ul style="list-style-type: none"> Highlights disparities in the regulatory frameworks for public and private postal services. Points out differences in interception provisions and consumer protection between India Post and private courier services.
Lack of Procedural Safeguards	<ul style="list-style-type: none"> Raises concerns about the absence of procedural safeguards for intercepting postal articles, potentially violating fundamental rights. Cites the need for oversight mechanisms and judicial warrants.
'Emergency' Ground Beyond Reasonable Restrictions	<ul style="list-style-type: none"> Criticizes the undefined term 'emergency' in the Act, which may lead to wide-ranging interception powers. Advocates for refining and limiting the grounds for interception to prevent misuse.
Exemption from Liability for Lapses	<ul style="list-style-type: none"> Compares the Act unfavorably with the Railway Claims Tribunal Act, emphasizing the absence of liability provisions. Raises concerns about consequences for officers committing fraudulent acts.
Removal of Offenses and Penalties	<ul style="list-style-type: none"> Notes the absence of penalties for illegal opening of postal articles. Highlights potential adverse implications for individual privacy.
Lack of Clarity on Consequences	<ul style="list-style-type: none"> Questions the Act's failure to specify consequences for officers committing fraudulent acts. Stresses the need for a balanced liability framework to ensure accountability without compromising efficiency.

Way Forward

- **Incorporate Robust Procedural Safeguards**
 - Proposes clear safeguards for intercepting postal articles, including oversight mechanisms, judicial warrants, and adherence to constitutional principles.
- **Define Grounds for Interception**
 - Recommends refining and defining the grounds for interception, especially the term 'emergency,' aligning it with constitutional principles.
- **Balanced Liability Framework**
 - Advocates for clear rules for Post Office accountability without compromising independence.
 - Calls for holding authorities accountable for wilful misuse of interception powers.
- **Addressing Unauthorized Opening**
 - Suggests reintroducing offenses and penalties for unauthorized opening of postal articles.
 - Establishes a legal framework for holding individuals accountable for misconduct and fraud.

Stresses the importance of balancing security imperatives with individual rights in legislative amendments. Calls for careful consideration to align interception provisions with constitutional principles, international obligations, and the protection of individual privacy.

Why was FCRA registration for several NGOs cancelled?

Context: FCRA registrations of two prominent NGOs, Centre for Policy Research (CPR) and World Vision India (WVI), were canceled by the Foreign Contribution Regulation Act, 2010 (FCRA) this month. The Ministry of Home Affairs (MHA) alleged CPR diverted foreign donations for protests and legal battles against developmental projects, while WVI faced FCRA violations from 2012-13 to 2020-21.

The Foreign Contribution (Regulation) Act (FCRA)

The Union Ministry of Home Affairs (MHA) oversees FCRA implementation. FCRA regulates foreign donations for individuals and organizations to align with sovereign democratic republic values.

Salient Features

- FCRA mandates registration for those seeking foreign donations, requiring a State Bank of India account in Delhi for foreign funds.
- Utilization of funds must align with their intended purpose, and annual returns must be filed without transferring funds to other NGOs.
- FCRA prohibits foreign funds for election candidates, journalists, judges, government servants, political parties, and organizations of political nature.

FCRA: Regulating Foreign Donations

- **Objective:** FCRA regulates foreign donations to prevent adverse effects on India's internal security.
- **Compulsory Registration:** Any entity intending to receive foreign donations must register under FCRA.
- **Amendments:** Enacted in 1976, FCRA saw amendments in 2010 and significant changes in 2020.

Registration under FCRA

- NGOs seeking foreign funding submit applications online with relevant documentation.
- MHA conducts background checks through the Intelligence Bureau, deciding within 90 days.
- FCRA registration is valid for 5 years, with a renewal required within 6 months of expiry.

Cancellation of Registration

- The government can revoke FCRA registration for violations, including inactivity for two consecutive years or public interest.
- NGOs receive a 3-year re-registration ineligibility upon cancellation.
- The Ministry can suspend registration for 180 days pending investigation and freeze funds.

Significance and Controversies

- **Risk of Money Laundering and Terrorism Financing:** MHA's 2012 report highlighted NGO sector vulnerability to money laundering and terrorist financing risks.
- **Registrations:** In 2023, 1,111 associations received fresh FCRA registrations. In 2019-2022, ₹55,741.51 crore reached 13,520 associations in foreign contributions.
- **Reasons for Rejection:** Out of 1,615 FCRA registration applications in 2021-2022, 722 were granted, and 225 rejected.

Reasons for Cancellation: CPR and WVI

- **CPR Allegations:** MHA accused CPR of diverting foreign funds for protests and legal battles, affecting India's economic interests. CPR's publication of current affairs programs with foreign funds was considered a violation.
- **WVI's Allegations:** WVI's FCRA registration was canceled for alleged violations from 2012-13 to 2020-21.

FCRA Amendments: Recent Changes

Significant amendments in 2020 introduced restrictions, including fund transfer prohibition, designated bank account, shared information, Aadhaar requirement, and reduced administrative expenditure cap.

How many have lost registration?

1. Since 2015, over 16,000 NGOs lost FCRA registration due to violations.
2. As of January 22, 16,989 FCRA-registered NGOs were active in the country.

Criticisms and Government's Perspective

- **Criticisms:** NGOs criticize arbitrary restrictions on fund transfers and inconvenience of a Delhi-based bank account.
- **Government's Justification:** The government claims these amendments prevent foreign interference and curb malpractices in fund utilization.

MHA's 2012 report emphasized the NGO sector's vulnerability to money laundering and terrorist financing risks, prompting enforcement measures and international coordination.

Gender Equity in education

Context: The Annual Status of Education Report reveals that while both rural boys and girls aspire equally to become doctors or engineers, there is a notable gender disparity in the selection of Science, Technology, Engineering, and Mathematics (STEM) courses, with boys opting for them more frequently.

Gender Gap in Educational Attainment

- A comparison of learning outcomes through the National Achievement Survey (2017) shows parity in learning levels between boys and girls in elementary and secondary classes nationwide.
- Despite apparent learning equity, the analysis overlooks prevalent gender discrimination in education.
- Over the past two decades, the mean years of schooling for girls have nearly tripled from 1.7 years in 1990 to 4.7 in 2018, but the gender gap has widened from 2.4 to 3.5 years.

- Unlike global trends, India's gender gap has increased, diverging from improvements seen in other countries.
- The gender gap widens in higher education levels due to barriers faced by girls, influenced by social norms, gender stereotypes, and biological factors.

Way Forward

- The focus needs to shift to early childhood education (ECE) to address the roots of the gender gap.
- Early childhood (ages 3-7) is crucial for ingraining gender norms, identities, behaviors, and stereotypes.
- Challenges in ECE, such as lack of a regulatory framework, inadequate funding, poor quality, and no legislation for universal access, must be urgently addressed.
- Longitudinal studies indicate that every dollar invested in ECE yields over a thousand dollars in return.
- Establishing the foundations for a right education involves ensuring universal enrollment in ECE and eliminating gender stereotypes in preschool education.
- Increased funding and an actionable roadmap, coupled with initiatives like Beti Bachao, Beti Padhao, and the Draft National Education Policy, can pave the way for universal early childhood education across the country.
- Implementation of ECE initiatives is crucial to enhance social capital for the gender responsible for shaping the future.

Roots of Gender Discrimination

- Gender discrimination starts in the early stages of education, evident in the Annual Status of Education Report "Early Years."
- Boys are more often enrolled in private institutions, while girls are preferred in free government schools, showcasing societal biases in school choice.
- Even at age four, there is a five percentage point gender difference in total enrollment, escalating to eight percentage points by age eight.
- Cultures valuing male children's education tend to withdraw more girls from school.

BSF Jurisdiction

Context: The Supreme Court's Hearing on BSF Jurisdiction Expansion Dispute

About BSF

- The Border Security Force (BSF) was established under the Border Security Force Act in September 1968.
- Its primary role is to secure India's borders with neighboring nations, endowed with powers to arrest, search, and seize under various laws such as the Criminal Procedure Code, Passports Act, Passport (Entry into India) Act, and NDPS Act.
- Section 139(1) of the BSF Act allows the central government to designate an area near India's borders where BSF can prevent offenses under specified Acts.

Why BSF Jurisdiction Was Extended?

- Before October 2021, BSF had powers within 15 km of the border in Punjab, West Bengal, and Assam, extended to 50 km by the Centre.
- Within the expanded 50-km jurisdiction, BSF exercises powers under specific Acts, addressing concerns related to drones, UAVs, arms smuggling, fake currency, and cattle smuggling.
- The expansion aimed to achieve uniformity across states, aligning with the existing 50-km limit in Rajasthan, while reducing the jurisdiction in Gujarat from 80 km to 50 km.

Why Punjab Challenged the Extension?

- Punjab filed an 'original suit' in the Supreme Court, asserting that BSF's extended jurisdiction compromises the state's exclusive powers on police and public order legislations.
- Claimed that the notification was issued without consulting concerned states, viewed as a direct attack on federalism.

- Additional Advocate General for Punjab argued in 2023 that the 50-km jurisdiction disproportionately affects densely populated areas in Punjab compared to sparsely populated regions in Gujarat and Rajasthan.

Other States' Response

- West Bengal opposed the 2021 notification, passing a resolution demanding its withdrawal in the Assembly.

The court will assess the legitimacy of the notification's expansion of BSF jurisdiction, determining if it was arbitrary or supported by valid reasons.

It will examine whether the notification interferes with the powers of local police and encroaches upon states' constitutional powers.

Issues Before the Supreme Court

The court will decide the factors to consider when determining areas "within the local limits" adjoining India's borders and whether uniform treatment of all states is necessary.

Additionally, the court will consider whether the notification can be challenged through an original suit under Article 131 of the Constitution.

Registered unrecognised political parties (RUPPs)

Context: The Election Commission of India has implemented new guidelines for the allocation of symbols to Registered Unrecognised Political Parties (RUPPs). These parties are now required to submit audited accounts from the last three financial years, expenditure statements from the last two elections, and the signature of the authorized party official along with their symbol application.

Registered Unrecognised Political Parties (RUPPs)

- Political party registration is governed by Article 324 of the Indian Constitution and Section 29A of the Representation of the People Act, 1951.
- RUPPs include newly registered parties, those without sufficient votes to be a state/national party, and those that have never participated in elections since their registration.
- These parties do not enjoy all the benefits granted to recognized parties, which can be either National or State parties based on specific criteria.

Recognition of Parties

To attain national political party status, a party must meet either of the following criteria:

- Obtain a minimum of 6% of valid votes in at least four states during the preceding Lok Sabha or state Assembly election, and additionally, secure victory in four Lok Sabha seats.
- Secure at least 2% of Lok Sabha seats (a minimum of 11 seats out of the current 543 members) from a minimum of three distinct states.

To achieve recognition as a state party, a party must fulfill any of the following conditions:

- Obtain a minimum of 6% of valid votes cast in the preceding Assembly election and win at least two seats.
- Win at least 6% of valid votes in the previous assembly election and have at least one Lok Sabha member from the state.
- Secure at least 3% of the seats, or a minimum of three seats, whichever is greater, in the previous Assembly election.
- Win at least one seat for every 25 seats allotted to the state in the Lok Sabha elections.
- Attain a minimum of 8% of the valid votes cast in the state during the preceding Assembly or Lok Sabha election.

Allotment of Election Symbols

- The Election Commission of India (ECI) is responsible for symbol allotment under The Election Symbols (Reservation and Allotment) Order, 1968.

- Symbols can be reserved (exclusive to recognized parties) or 'free,' available to unrecognised registered parties.
- Recognised national and state parties receive exclusive symbols, while unregistered parties propose preferences from a list of free symbols.

Rules for Unrecognised Political Parties

- Existing practice involved RUPPs undertaking to field at least 5% of total candidates in a Legislative Assembly election to receive common symbols.
- In 2014, the EC introduced transparency measures, requiring RUPPs to submit proof of contribution reports, audited accounts, election expenditure statements, and organization details.
- New rules integrate these details into the application format for a common symbol, effective from January 11 this year.

Way Forward

- The Election Commission's latest rules aim to enhance transparency in symbol allocation for Registered Unrecognised Political Parties (RUPPs).
- Previously, RUPPs availed common symbols based on a commitment to field 5% of candidates, and in 2014, additional transparency measures were introduced.
- The recent changes integrate the submission of financial and organizational details directly into the application process for a common symbol, becoming effective from January 11.

Structured Negotiation as a Boost for Disability Rights

Context: Structured negotiation is gaining prominence as a collaborative alternative to litigation for resolving disputes effectively.

Key Points

- **Global Adoption:** This technique has found increasing use across sectors and has proven effective, particularly in addressing disability rights issues in the United States.
- **Relevance to India:** Considering the dynamic legal landscape in India, exploring the potential, effectiveness, and successful applications of structured negotiation becomes crucial.

What is Disability?

- **Definition:** Disability arises when individuals with impairments encounter attitudinal or environmental barriers hindering their full participation in society.
- **Shift in Understanding:** The concept of disability has evolved from an individual-focused medical model to a more comprehensive social and human rights model.
- **Structured Negotiation's Role:** In addressing disability rights issues, structured negotiation emerges as a potent tool, focusing on collaboration to ensure adherence to legislation.

What is Structured Negotiation?

- **Collaborative Approach:** It is a collaborative and solution-driven technique for dispute resolution, in contrast to adversarial legal proceedings.
- **Inclusivity:** Involves inviting the defaulting party to negotiate and work towards mutually agreeable solutions, with an emphasis on compliance with social welfare laws, especially in the context of disability rights.
- **Success Stories:** Structured negotiation has demonstrated success, particularly in making essential services accessible for people with disabilities.

Success of Structured Negotiation

- **Examples of Success:** Accessible ATMs, point of sale devices, websites, and prescription bottles are outcomes of successful structured negotiations in the U.S.

Benefits of Structured Negotiation

- **Alternative to Litigation:** Offers a collaborative approach, steering clear of lengthy and costly legal battles.
- **Effectiveness in Disability Rights Cases:** Particularly successful in resolving accessibility issues for individuals with disabilities.
- **Win-Win Situation:** Creates mutually beneficial outcomes, avoiding high litigation costs for service providers while ensuring barrier-free access for complainants.

- **Positive Impact:** Structured negotiation creates a win-win situation, making services more accessible while avoiding the costs and negative publicity associated with litigation.
- **Direct Engagement:** Allows direct engagement between persons with disabilities and service providers, ensuring implementation of accessibility improvements.

Challenges with Regards to Disability in India

Limited Awareness: Inadequate awareness of government schemes for individuals with disabilities, especially in rural areas.



Limited Access to Education and Employment: Lack of inclusive educational institutions and vocational training centers in rural areas.



Inadequate Infrastructure: Public spaces often lack necessary accommodations for individuals with disabilities, restricting mobility and access.



Rights of Persons with Disabilities Act, 2016

- **Key Provisions:** Expanded definition of disability, rights and entitlements, reservation in education and employment, emphasis on accessibility, recognition of legal capacity, and provisions for social security and health.
- **National and State Commissions:** Establishes statutory bodies to monitor implementation.
- **Special Provisions:** Recognizes vulnerability of women and children with disabilities, providing special measures for their protection and development.

How Structured Negotiations Can Foster Disability Rights?

- **Overcoming Red Tape:** Addresses challenges in Indian civil courts, offering an alternative to bureaucratic red tape.
- **Supplementing CCPD's Efforts:** Complements the Chief Commissioner for Persons with Disabilities' efforts, as seen in the PayTM case.
- **Real-Time Accessibility:** Structured negotiations can ensure ongoing accessibility without the need for constant vigilance.

The Potential of Structured Negotiation in India

- **Avoiding Non-Compliance:** Assists service providers in avoiding non-compliance issues.
- **Direct Involvement:** Empowers individuals with disabilities to directly engage with service providers.
- **Prioritizing Disability Inclusion:** Encourages businesses to prioritize disabled users, tapping into their significant purchasing power.

Promoting Constitutional Mandates

- **Article 41 DPSP:** Emphasizes the state's duty to secure the right to work, education, and public assistance for cases of disability.
- **Inclusion in State List:** Structured negotiations can complement government efforts specified in the state list of the constitution.

Government Initiatives for Disabled Population

- **Unique Disability Identification Portal:** Aims for transparency, efficiency, and seamless delivery of benefits to individuals with disabilities.

- **Accessible India Campaign:** Seeks universal access and equal opportunities for persons with disabilities.
- **DeenDayal Disabled Rehabilitation Scheme (DDRs):** Offers financial support to NGOs dedicated to the education and rehabilitation of individuals with disabilities.

The success of alternative dispute resolution, including structured negotiation, hinges on service providers prioritizing the needs of persons with disabilities. Businesses not participating risk market loss and legal compliance issues.

Sub-categorisation of SCs

About the Committee for Sub-Categorization for SCs

- The Union government, chaired by the Cabinet Secretary, has established a five-member committee of Secretaries.
- The committee, formed this month, comprises Secretaries from the Home Ministry, Law Ministry, Tribal Affairs Ministry, and Social Justice Ministry.
- The committee's mandate is to explore strategies, including special initiatives and redirecting existing schemes, to address the specific needs of backward communities.
- The primary aim is to tackle the dominance of relatively forward and dominant communities, responding to the demand for sub-categorization raised by the Madiga community before the Telangana Assembly election.

Background

- **Historical Struggle:** The Madiga community initiated the quest for sub-categorization in 1994 through the Madiga Dandora movement.
- **Persistent Advocacy (MRPS):** Over the years, the movement continued with the formation of the Madiga Reservation Porata Samiti (MRPS) advocating for sub-categorization.
- **Commission Inquiries:** In 1996, Justice P. Ramachandra Raju led a commission to examine the demands of sub-categorization presented by the Madiga community.

Sub-Categorisation of Scheduled Caste

- **Under-representation among SCs:** States argue that certain Scheduled Castes (SCs) remain under-represented despite existing reservation policies.
- **Need:** Numerous reports emphasize the inequality within the SCs, drawing attention to the necessity of addressing disparities.
- **Special Quotas:** To tackle under-representation, various states have formulated and implemented special quotas.
- **Initiatives in Specific States:** Andhra Pradesh, Punjab, Tamil Nadu, and Bihar have introduced special quotas specifically targeting the most vulnerable Dalits.

Governance & Social Justice

Aadhaar-Linked Pay Made Mandatory for MGNREGS Workers

Context: Wages under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) will now be disbursed solely through an Aadhaar-based payment system (ABPS), necessitating the linkage of Aadhaar details to job cards.

- The initial order for implementing the ABPS system was issued on January 30, 2023, with subsequent extensions until February 1, March 31, June 30, August 31, and December 31.
- The decision not to extend the deadline further is primarily influenced by active workers, defined as those who have worked at least one day in the last three financial years.
- As of December 27, 12.7% of these active workers remain ineligible for ABPS out of the 25.25 crore registered workers in the rural jobs scheme, with 14.35 crore categorized as active workers.
- Union Rural Development Ministry data indicates that 34.8% of job card holders are ineligible for this payment mode.

- The Ministry, in mandating ABPS, has urged State governments to consider cases where linking has not occurred for genuine reasons.
- Under pressure for 100% ABPS-eligible job cards, States have deleted ineligible cards, citing reasons such as discrepancies in worker names and instances where the worker was unwilling to work.

Aadhaar-based Bridge Payment System (ABPS)

- ABPS is a unique payment system using the Aadhaar number as a central key for channelizing government subsidies and benefits into Aadhaar-Enabled Bank Accounts (AEBA).
- To opt for ABPS, a NREGA job card holder must link their bank account with Aadhaar and connect it to the National Payments Corporation of India (NPCI) mapper.

NPCI Mapper

- The NPCI mapper is a repository of Aadhaar numbers maintained by the APBS, routing APB transactions to destination banks.
- It includes Aadhaar numbers along with the IIN of the bank to which the customer has seeded their Aadhaar number.
- Banks upload Aadhaar numbers in the NPCI mapper through the NACH portal in a specified format.
- KYC details, biometric, and demographic authentication are required for seeding a bank account with Aadhaar and mapping it with the NPCI mapper.

Requirements for Aadhaar-based Bridge Payment System

- Seeding Aadhaar details to the job card, bank account, and mapping with NPCI requires KYC details, biometric and demographic authentication.
- Inconsistencies between Aadhaar database, bank account, and NREGA job card may impede wage payments.
- To receive payments under ABPS, a worker must seed Aadhaar details to their job card, link Aadhaar to their bank account, map Aadhaar with the NPCI database, and map the bank's institutional identification number with the NPCI database.

Benefits	Aadhaar linkage aims to reduce leakages, enhance transparency, and ensure timely payments for rural employment, directly impacting workers' livelihoods.
Concerns	Compelling ABPS usage with over one-third of MNREGA registered workers ineligible may deny the right to work, contravening the Parliament-passed Act.

ULFA

Context: In recent developments, a memorandum of settlement was signed by the Union Ministry of Home Affairs (MHA), the Assam government, and the pro-talks faction of the United Liberation Front of Asom (ULFA), marking a significant step towards peace.

Key Provisions in the ULFA Peace Accord

- **Development Measures:** The accord encompasses a comprehensive package for the holistic development of Assam, incorporating provisions for various developmental projects. The government has committed to investing ₹1.5 lakh crore over the years.



- **Political Inclusion:** Addressing concerns about political insecurity among indigenous people, the agreement reserves 97 out of 126 seats for them in the recent delimitation exercise. This principle is set to continue in future delimitation processes.
- **Non-Violence Commitment:** ULFA has committed to renouncing violence, disarming, disbanding the armed organization, vacating occupied camps, and participating in the peaceful democratic process. The Ministry of Home Affairs will formulate a time-bound program to fulfill ULFA's demands, with a monitoring committee in place.

It's noteworthy that the peace agreement was signed with the pro-talks faction led by Arabinda Rajkhowa, while the faction led by Paresh Baruah (ULFA-I) has not participated in the peace process.

Background on ULFA

The United Liberation Front of Assam (ULFA) is an armed militant organization operating in Assam, seeking to establish an independent, sovereign nation state for the indigenous Assamese people through armed struggle.

Factors Leading to Insurgency in Assam and ULFA



- **Historical Neglect:** Assam has faced perceived neglect and marginalization from the central government, fostering resentment and providing a basis for separatist movements like ULFA.
- **Cultural Identity Concerns:** The influx of migrants altered the demographic balance, leading to concerns about cultural assimilation and erosion of the indigenous Assamese identity.
- **Economic Grievances:** Underdevelopment, unemployment, and the exploitation of resources without equitable benefits contributed to economic grievances.
- **Demand for Autonomy:** Groups like ULFA demanded greater autonomy and control over resources to protect the interests of the indigenous population.
- **State Repression:** Heavy-handed approaches by security forces, including alleged human rights violations, fueled resentment and alienation.

ULFA Peace Accord Necessity



The challenges faced by the Indian government in dealing with North-East insurgencies necessitate peace deals with insurgent groups due to:

- **Diverse Ethnocultural Landscape:** The North-East's diverse ethnicities and cultures complicate efforts to find common resolutions acceptable to all.
- **Geographical Complexity:** Challenging terrain and porous borders provide hiding spots for insurgent groups.
- **Historical Grievances:** Deep-seated historical grievances related to identity, land rights, and autonomy fuel insurgencies.
- **Socio-economic Development Deficit:** Lack of development contributes to feelings of marginalization, making populations susceptible to recruitment by insurgent groups.
- **External Support:** Insurgent groups often receive support from external entities, adding complexity to resolving internal conflicts.



Challenges in ULFA Peace Accord Implementation

Lax Implementation

Challenges in implementing agreed-upon terms can undermine trust and reignite conflicts.

Deep-rooted Grievances

A peace deal might not comprehensively address all historical grievances, leaving underlying causes unattended.

Fragmented Insurgent Groups

Multiple groups with differing objectives pose challenges to achieving a comprehensive peace deal.

Socio-economic Disparities

A peace deal must address the lack of development to dissuade new recruits from joining insurgent groups.

External Factors

External support and sanctuaries might persist, allowing for continued sustenance of insurgent groups.

Changing Dynamics

A static peace deal might not adapt to evolving leadership, strategies, and external influences.

Way Forward

To effectively curb insurgency, a comprehensive approach is needed, addressing socio-economic development, historical grievances, inclusive governance, security, and sustained engagement with all stakeholders. This includes:



- **Dialogue and Negotiation:** Engage in sustained dialogues with insurgent groups for peaceful resolutions.
- **Development Initiatives:** Implement targeted development projects to address socio-economic disparities.
- **Inclusive Governance:** Ensure local community involvement in decision-making processes.
- **Security Measures:** Maintain law and order while respecting human rights.
- **Regional Cooperation:** Collaborate with neighboring countries to address cross-border issues.
- **Rehabilitation and Reintegration:** Provide programs for former insurgents' return to mainstream society.
- **Addressing Root Causes:** Tackle underlying issues such as historical grievances and identity politics.

Implementing these measures comprehensively and with a long-term perspective could contribute significantly to reducing and resolving insurgencies in India's North-East.

National Deep Tech Startup Policy (NDTSP)

Context: The Principal Scientific Advisor has announced the government's plan to present a new policy, the National Deep Tech Startup Policy (NDTSP), to the Union Cabinet in the coming weeks for approval. A draft of the policy was unveiled in July 2023, and after public feedback, a final version is reportedly prepared.

Background of Draft NDTSP

- 'Deep tech' gained prominence in tech and startup circles without a precise definition.

- The PM's Science, Technology, and Innovation Advisory Council (PM-STIAC) recommended the creation of a National Consortium and a Working Group in 2022 to propose a comprehensive policy framework for the Indian deep tech startup ecosystem.
- Chaired by the Principal Scientific Adviser, the National Consortium involves stakeholders from DPIIT, ISRO, DRDO, NITI Aayog, MeitY, etc.
- The draft NDTSP was developed through extensive multi-stakeholder consultations under the guidance of the National Consortium.

What is Deep Tech?

- Deep technology, or deep tech, refers to advanced technologies rooted in significant scientific or engineering innovation.
- These innovations are characterized as "deep" due to their sophistication and advanced solutions to complex challenges.
- Examples of deep tech breakthroughs include genomics, robotics, nanotechnology, and clean energy initiatives originating from research labs and academia.
- Deep tech startups aim to address complex problems through technologies requiring extensive R&D cycles.

Key Highlights in Draft NDTSP

- Complements existing Startup India policies, programs, and initiatives.
- Focuses on fostering a conducive ecosystem for deep tech startups to thrive and addresses their unique challenges.
- Proposes new policy instruments and changes under themes like Research, Development & Innovation, Intellectual Property Regime, Funding Access, Shared Infrastructure, Regulations, Human Resources, Procurement & Adoption, and Interlinkages.

Issues with India's 'Deep Tech' Startup Ecosystem

- As of May 2023, only about 10% of the 10,298 recognized startups by DPIIT fall under the 'deep tech' category.
- Funding is a significant challenge for deep tech startups, which require larger amounts compared to fintech or retail software-focused startups.

Viksit Bharat Sankalp Yatra

Context: On January 8, Prime Minister Narendra Modi emphasized that the primary objective of the Viksit Bharat Sankalp Yatra (VBSY) is to ensure the effective implementation of government schemes, reaching all deserving individuals.

About

- **Government's Mission:** The Government of India, in collaboration with States and Union Territories, actively pursues the goal of saturation through flagship schemes. These aim to provide basic amenities like sanitation, financial services, LPG connections, housing, food security, proper nutrition, healthcare, education, and other essential services to targeted and eligible beneficiaries.

Objectives

Reaching the Unreached

The primary goal is to reach vulnerable individuals eligible for various schemes but who have not yet availed the benefits.

Dissemination of Information

Generate awareness about government schemes and their benefits.

Learning from Citizens

Engage with beneficiaries through personal stories and experiences to gather valuable insights.

Enrolment of Potential Beneficiaries

During the Yatra, collect details for enrolling potential beneficiaries.

- **Awareness and Accessibility:** To further this mission, a nationwide campaign, the "Viksit Bharat Sankalp Yatra," is planned. This initiative involves outreach activities to raise awareness and ensure the last mile delivery of benefits and services to citizens.

Implementation

- **Nodal Ministries:** Ministry of Agriculture and Farmers' Welfare, Ministry of Rural Development, and Ministry of Tribal Affairs are designated as nodal ministries for rural and Scheduled Tribe-populated areas. For urban areas, Ministry of Information & Broadcasting and Ministry of Housing and Urban Affairs are the nodal ministries.
- **Coordination:** Nodal Officers will be appointed at the State and District levels to facilitate effective coordination between Viksit Bharat Sankalp Yatra and State/District administrations, ensuring synergy in implementation.

Rapid Rise In Web Blocking Orders, Shows RTI Reply

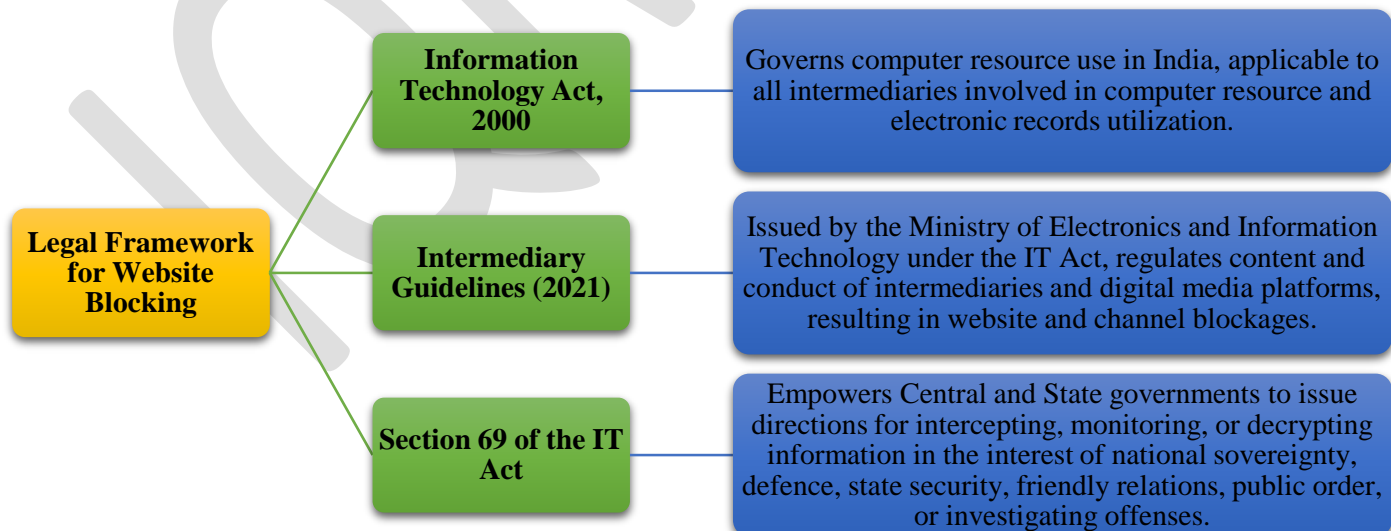
Context: The number of website blocking orders in India has surged over a hundred times from 2013 to October 2023, as revealed in response to a Right to Information (RTI) application.

Trends of Website Blocking Orders in India

- **Growth:** Website blocking orders escalated from 62 in 2013 to 6,954 by October 2023, issued under Section 69A of the Information Technology (IT) Act, 2000.
- **Association with Internet Use:** The surge correlates with increased internet usage, particularly following the substantial reduction in mobile data prices in 2016.
- **Nature of Blocked Content:** Most blocked web pages likely comprise individual posts, videos, or profiles, with immediate tracing of web/application servers if non-compliance with laws or court orders occurs.

Duration

- **Launch Date:** The Yatra commenced on November 15, 2023, on Janjatiya Gaurav Divas, flagging off Information, Education, and Communication (IEC) Vans.
- **District Visits:** Initially, the vans will visit districts with a significant Scheduled Tribe population. Subsequently, they will cover the remaining districts from the third week of November 2023 until January 26, 2024.
- **Election States/Constituencies:** In areas with elections, the Yatra will be scheduled post the lifting of the model code of conduct.



Reasons for Government Website Blocking and Challenges

- **Motivations:** Driven by concerns over national security, public order, and legal compliance to counter threats like terrorism, hate speech, or illegal content.
- **Challenges**
 - Users can easily bypass blocks using VPNs, complicating enforcement.
 - Evolving encryption technologies in browsers and firms make website blocking more challenging.

Implications of Government Website Blocking



- **Freedom of Expression:** Raises concerns about Freedom of Expression, emphasizing the need for a balance between national interests and citizens' rights.
- **Information Access:** Hinders access to diverse information, limiting public awareness and decision-making.
- **Economic Consequences:** May disrupt legitimate businesses, impacting revenue and hindering innovation and economic growth.
- **Public Perception and Trust:** Shapes public perception and trust; arbitrary or unjustified blocking can lead to a loss of trust in government institutions.

Way Forward

- **Efficiency Enhancement:** Collaborate with major CDNs (Content Delivery Network), such as Amazon Web Services, Google Cloud, and Cloudflare, for more effective mechanisms in content blocking.
- **Transparent and Accountable Processes:** Emphasize careful consideration and transparent, accountable processes to mitigate adverse impacts on freedom of expression, businesses, and public trust while addressing genuine threats through website blocking.

Surat, Indore Cleanest Cities; Maharashtra Tops State List

Context: The Ministry of Housing and Urban Affairs (MoHUA) hosted a prestigious ceremony for the Swachh Survekshan Awards 2023. President Droupadi Murmu presented accolades to 13 distinguished awardees across various cleanliness categories.

What is Swachh Survekshan?	<ul style="list-style-type: none"> • Swachh Survekshan, a Sanskrit term, translates to cleanliness survey. • An annual survey conducted by the Ministry of Housing and Urban Affairs (MOHUA).
Top Cleanest Cities in 2023	<ul style="list-style-type: none"> • Indore secured the top spot for the seventh consecutive year. • Surat shared the cleanest city honors with Indore. • Navi Mumbai ranked third in the list.
Other Category Winners	<ul style="list-style-type: none"> • Cities with Population under 1 Lakh: Sasvad, Patan, and Lonavala claimed the top three spots. • Cleanest Cantonment Board: Mhow Cantonment Board in Madhya Pradesh emerged as the top performer. • Cleanest Ganga Towns: Varanasi and Prayagraj received recognition. • Best Performing States: Maharashtra, Madhya Pradesh, and Chhattisgarh secured the top three awards.

	<ul style="list-style-type: none"> Safaimitra Surakshit Sheher: Chandigarh received the award for the Best Safaimitra Surakshit Sheher.
Swachh Survekshan 2023 Highlights	<ul style="list-style-type: none"> The President launched the Swachh Survekshan 2023 dashboard. A total of 110 awards were presented, celebrating cleanliness initiatives. The theme for the Cleanliness Survey 2024 is “Reduce, Reuse, and Recycle.” Union Housing and Urban Affairs Minister Hardeep Singh Puri and other dignitaries attended the ceremony.
Key Statistics and Achievements	<ul style="list-style-type: none"> 4,447 urban local bodies participated, making it the world’s largest cleanliness survey. Received an impressive 12 crore citizen responses, indicating widespread public engagement.
Indore’s Focus Areas	<ul style="list-style-type: none"> The Indore Municipality Corporation (IMC) targeted crucial cleanliness metrics. Interventions included doorstep waste collection, NGO engagement, waste treatment plants, and specialized waste collection vehicles. Initiatives also focused on curbing public littering and constructing additional toilets. Indore's consistent focus on administrative commitment, technological upgrades, and civic participation has maintained its reputation as India’s cleanest urban center since 2017.

With the Swachh Survekshan scope expanding annually, maintaining cleanliness momentum across cities, both small and large, remains crucial. Committed leadership and reliable funding are essential for transforming civic conditions and fostering hygienic urban habitats across India.

Atal Setu Nhava Sheva Sea Link

Context: The Prime Minister of India officially inaugurated the Mumbai Trans Harbour Link (MTHL), also known as Atal Setu Nhava Sheva Sea Link. This monumental infrastructure project spans 22 km and aims to transform travel between Sewri and Chirle, promising a significant reduction in travel time.

Key Highlights of MTHL

- Atal Setu holds the distinction of being the longest bridge in India and the country's longest sea bridge.
- The bridge spans 21.8 km, featuring a six-lane structure with 16.5 km over the sea and 5.5 km over the land.
- Named after former Prime Minister Atal Bihari Vajpayee.
- Originating from Sewri in Mumbai, it concludes at Nhava Sheva in Uran taluka, Raigad district.
- Funded by the Japan International Cooperation Agency (JICA), covering 80% of the total project cost, with the remainder shared between state and central governments.

Technologies Incorporated

- MTHL integrates innovative technologies, including Reverse Circulation Drilling (RCD) piling, Orthotropic Steel Deck (OSD) bridge girders, and Open Road Tolling (ORT) system.
- RCD, a first in India, minimizes noise disturbances during pile foundation laying compared to traditional vertical drilling.
- OSD, combining strength and flexibility, enables the bridge's steel deck to withstand heavy loads while maintaining a lightweight structure.
- MTHL pioneers the ORT toll collection method, allowing tolls to be collected without requiring vehicles to stop or slow down.



Benefits

- A study by Mumbai Metropolitan Region Development Authority (MMRDA) and JICA indicates that MTHL will reduce the average travel time between Sewri and Chirle from 61 to less than 16 minutes.
- Expected daily usage of the link is approximately 40,000 vehicles in the opening year (2024).
- The project is anticipated to enhance economic integration, benefiting Navi Mumbai and extending advantages to Panvel, Alibaug, Pune, and Goa.
- The bridge shortens the distance between Mumbai and Pune Expressway.

What Are The Complaints About Digi Yatra?

Context: Air travelers are expressing privacy concerns on social media regarding the aggressive promotion of the Digi Yatra initiative at airports by security personnel.

Introduction to Digi Yatra

- Digi Yatra is a government-backed initiative aimed at streamlining air travel by allowing passengers to use facial biometrics for various checkpoints.
- Key pillars include Connected Passengers, Connected Airports, Connected Flying, and Connected Systems.
- Targets both Indian citizens (with or without Digi Yatra ID) and foreign nationals.
- Operated by the DigiYatra Foundation under the Ministry of Civil Aviation, funded by airports (not the government).

Enrollment and Usage

- Passengers are required to scan boarding passes and faces at the first entry point, creating a biometric face token for subsequent checkpoints.
- As of August 10, 2023, 34,60,454 passengers enrolled, with 1.29 million using the Digi Yatra mobile app.

Problems Associated

Unauthorized Data Collection	Enrollment Drive Explanation	Data Collection Process	Privacy Concerns
<ul style="list-style-type: none"> • Reports of security personnel collecting facial biometrics without passengers' consent. • Complaints about coercive and deceptive enrollment practices by private staff and Central Industrial Security Force (CISF) personnel. 	<ul style="list-style-type: none"> • CEO of Digi Yatra Foundation clarified the surge in enrollment was part of a "day of travel" drive to let passengers experience and understand the benefits. 	<ul style="list-style-type: none"> • Passengers register on the app, providing personal details and a selfie for facial recognition. • Facial scans and boarding pass scans create a unique travel ID for subsequent checkpoints. 	<ul style="list-style-type: none"> • Concerns about data protection despite the government's claim of no central storage. • Mention of adherence to data protection laws in the Digi Yatra policy, but uncertainties due to the absence of finalized rules. • User complaints about lack of trust in securely maintaining privacy data, citing instances of data breaches and exemptions for airports to share data.

Significance

Aims to improve operational efficiency and enhance security by allowing faster processing of passengers and preventing boarding pass exchanges.



About Digi Yatra Foundation

- Not-for-profit organization founded to implement the Digital Yatra Central Ecosystem.
- Shareholders include Airport Authority of India (AAI), Cochin International Airport (CIAL), Bangalore International Airport (BIAL), Delhi International Airport Ltd. (DIAL), Hyderabad International Airport Ltd (HIAL), and Mumbai International Airport Ltd (MIAL).
- Objective is the rollout of the "Digi Yatra" system with a digital ID backed by verifiable government-issued identities like Aadhaar, passport, and others.

The Delusion Of Eliminating ‘the Last Terrorist’

Context: The Director General of Police in Jammu and Kashmir reported a significant decrease in civilian killings and attacks on forces in 2023.

Terror Situation in Jammu and Kashmir

- Active terrorists reduced to 31, with 4 in Jammu region, an all-time low.
- In 2023, 76 terrorists (55 foreigners) killed; 4 policemen also lost their lives.
- Targeted attacks on civilians dropped from 31 (2022) to 14 (2023).
- Recruitment declined to 20 (2023) from 130 (2022), an 80% decrease.
- DGP warns of a potential rise in terrorist numbers in 2024.

Challenges in Counter-Insurgency	
Ineffectiveness of Killing Approach	<ul style="list-style-type: none"> • Critics argue focusing solely on killing terrorists is futile. • Instances like Rajouri-Poonch show insurgency declining without addressing the root problem.
Influence of Tangibles	<ul style="list-style-type: none"> • Decline in terrorist incidents may lead to a disregard for means in pursuit of tangible results. • Factors like limited tenures, short-term gains, competition, and a false sense of glory impact counter-insurgency approaches.
Reluctance to Adapt	<ul style="list-style-type: none"> • Despite varying fatalities, security forces' modus operandi remains unchanged, affecting peacebuilding efforts.
Need for People-Centric Approach	<ul style="list-style-type: none"> • Tactical operations should be people-centric, but a focus on performance often sacrifices people's aspirations. • Lack of alignment between formulated people-centric policies and execution.

Government's Future Approach Defending People and Dignity

The primary goal of security forces is to defend people and their dignity.

Political leadership should bridge the gap between people's interests and soldiers' sacrifices.

Conflict Management

Security forces should manage the conflict, paving the way for political processes with increased people participation.

Political Initiatives

Strong political initiatives are necessary to strengthen people's voices.

Whole-of-Government Approach

A comprehensive approach is needed to address terrorism, focusing on sustainable peace rather than eliminating terrorists.



Operation Sadhbhavana

- **Overview:** Indian Army's goodwill initiative focusing on Topa Pir village in Poonch, Jammu and Kashmir.
- **Objectives:** Achieve national integration, women empowerment, employment generation, and national building.
- **Collaborative Approach:** Projects aligned with local aspirations, coordinated with civil administration.
 - Aims to transform Topa Pir into a model village with community development.

The decline in terrorist activities prompts a reevaluation of counter-insurgency strategies. Advocates for a people-centric approach addressing root causes and ensuring long-term stability through political initiatives. Emphasizes the need for a comprehensive, whole-of-government approach for sustainable peace in Jammu and Kashmir.

Concerns Related to Anganwadi Workers

Context: Andhra Pradesh's anganwadi workers are on strike in protest of their pay and benefits. The protesting Anganwadi staff and assistants have been subject to legal action by the State government under the Essential Services and Maintenance Act (ESMA), 1971. Citing the effects of their ongoing indefinite strike on the Integrated Child Development Services (ICDS) at Anganwadi Centers, the ruling forbids them from going on strike for six months in the State.

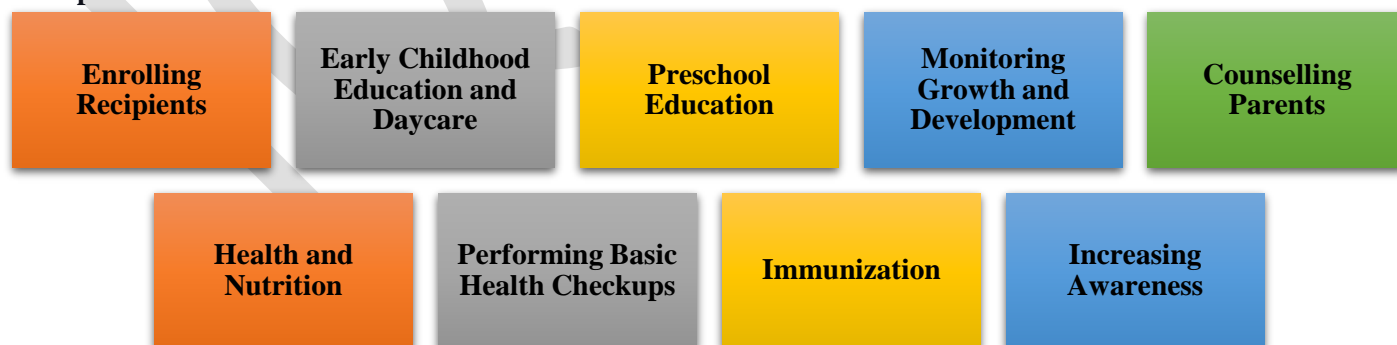
What Are the Services Offered by Anganwadi and What Do Anganwadi Workers Do?

- In India, the ICDS program was introduced on October 2, 1975. The services are now provided as part of Saksham Anganwadi and Poshan 2.0 after being renamed Anganwadi Services.
- It is a State-/Unit-sponsored program that offers early childhood development and care to eligible beneficiaries, including children aged 0 to 6, pregnant women, and nursing mothers, via a vast network of Anganwadi workers (AWW) and Helpers (AWH).

Services That Anganwadi Offers

- It has been made available to all eligible recipients, including children between the ages of 0 and 6, expectant moms, and nursing mothers, via the nationwide network of Anganwadi Centers.
- The National Rural Health Mission & Public Health Infrastructure offers three services that are related to health: health check-ups, referral services, and immunizations.
- ICT infrastructure Poshan Tracker was created to record data in real-time on the nation's Anganwadi Service deployment and monitoring.
- It offers a full beneficiary management perspective, as well as a 360-degree view of the Anganwadi Center's (AWC) operations and the services provided by AWWs.

Principal Duties and Functions of AWWs



- **Enrolling Recipients:** Determining and registering children under six years old, expectant moms, and nursing mothers who qualify for ICDS services.
- Raising community knowledge of ICDS programs, encouraging healthy lifestyle choices, and supporting community involvement in Anganwadi activities are all examples of mobilizing communities.

- **Early Childhood Education and Daycare:** Running Anganwadi Centers making sure the facility is hygienic and clean, keeping records, and putting together instructional materials.
- **Preschool Education:** Educating young children through storytelling, age-appropriate play, and fundamental learning activities to get them ready for official schooling.
- **Monitoring Growth and Development:** this involves taking regular measurements of children's weight and height, spotting any developmental delays, and, if necessary, referring them for additional interventions.
- **Counselling Parents:** Offering direction on healthy habits, kid nutrition, and daycare procedures.
- **Health and Nutrition:** Supplementary Nutrition Distribution: Providing hot meals, take-home rations, and nutritional supplements to combat malnutrition, particularly in children under six years old and pregnant and nursing mothers.
- **Performing Basic Health Checkups:** Checking children's health for common ailments, and making referrals to medical facilities when necessary.
- Additionally, to provide direction for Accredited Social Health Activists (ASHA) working with the National Rural Health Mission as they provide medical services.
- **Immunization:** Helping medical professionals plan and carry out childhood vaccination drives to guarantee vaccines in a timely manner.
- **Increasing Awareness:** Teaching moms and local communities about sanitation, health, and well-being of their children.

What Are the Main Obstacles Faced by AWWs?

- **Poor Pay:** Anganwadi workers receive a monthly honorarium that is frequently between Rs. 5,000 and Rs. 10,000, which is far less than the minimum wage in many states. They are also not recognized as government employees.
- They find it challenging to provide for their fundamental requirements as a result, and they become discouraged from giving their employment their all.
- They frequently experience delays in obtaining their honorarium, which exacerbates their financial difficulties and instability.
- **Overworked and overburdened:** Anganwadi personnel are given a lot of responsibilities. Additionally, state governments frequently give them extra work without paying them extra for it, including tasks linked to COVID-19, the Census, or implementing government programs like Ayushman Bharat.
- Their ability to provide high-quality services is hampered by their heavy workload, which frequently causes burnout.
- **Lack of Resources and Training:** Although Anganwadi workers receive some initial training, it frequently falls short of providing them with the necessary tools to manage the challenging duties they encounter daily.
- Moreover, Anganwadi centres sometimes lack basic supplies including appropriate buildings, instructional materials, and medications, which makes it harder for them to run efficiently.
- **Lack of Social Respect and Recognition:** Despite their important contributions to the community, Anganwadi workers frequently experience social stigma and a lack of appreciation. It may have a detrimental effect on their motivation and morale.

The Way Ahead

Increased Salary and Benefits

Advancement and
Acknowledgment in the
Profession

Better Resources and Working
Conditions

- **Increased Salary and Benefits:** It includes timely, equitable salary adjustments that reflect the cost of living. Strong social security benefits, such as maternity leave, provident fund, and health insurance should be introduced.

- **Advancement and Acknowledgment in the Profession:** Specific career advancement routes with chances for promotion. Frequent, comprehensive training courses including early childhood education, health, nutrition, and child development.
- **Better Resources and Working Conditions:** Optimize personnel numbers combined with extra Anganwadi assistants to lessen the workload. Update Anganwadi centres with better furnishings, technology, and educational resources. Tech-enabled methods for effective communication, monitoring, and record-keeping should be introduced.

Wetland 'nature tourism' gets a fillip

Context: The Central government has initiated the Amrit Dharohar initiative to boost tourism in ecologically-sensitive Ramsar sites like Chilika Lake in Odisha and Sultanpur Bird Sanctuary in Haryana.

Alternative Livelihood Programme (ALP)

Launched by the Ministry of Tourism (MoT) in collaboration with the Ministry of Environment, Forest & Climate Change (MoEFCC) under the Amrit Dharohar Capacity Building Scheme-2023 at Sultanpur National Park, a Ramsar Site in Haryana.

- The program **aims** to train facilitators, tourism service providers, and stakeholders in partnership with the State Tourism Department to strengthen nature tourism at Ramsar sites.
- The Indian Institute of Tourism & Travel Management (IITM) collaborates with MoEFCC to build the capacity of local communities around Ramsar sites, providing alternative livelihoods with the help of State Forest Department.
- **Objective**
 - The goal is to improve local livelihoods by tapping into the nature-tourism potential of Ramsar Sites.
 - Focus on shifting from high-volume to high-value nature tourism to support conservation, local communities, and economies.
 - Nature tourism includes activities like birdwatching, photography, stargazing, camping, hiking, hunting, fishing, and visiting parks.
- **Identification and Capacity Building**
 - Currently, 16 Ramsar sites are identified, with 5 chosen as pilot projects for skill development.
 - Training participants at sites like Sultanpur, Bhitarkanika, Chilika, Sirpur, and Yashwant Sagar under the Alternative Livelihood Programme (ALP) for 15 days each.
 - A conference in Indore is planned to formulate SOPs and guidelines for the States and stakeholders in early February.

What are Ramsar Sites?

- Ramsar sites are wetlands recognized internationally for their importance, especially in providing habitat for waterfowl.
- An environmental treaty signed in 1971 in Ramsar, Iran, under the auspices of UNESCO, focuses on the conservation and sustainable use of wetland resources.
- India has 75 Ramsar sites, including Chilka Lake, Bhitarkarnika Mangroves, Sundarbans, and Chitrangudi Bird Sanctuary.

What is the Amrit Dharohar Initiative?

- Part of the 2023-24 budget announcement, launched in June 2023 to promote Ramsar Sites' conservation values.
- Jointly undertaken by the Union Tourism Ministry and the Ministry of Environment, Forest, and Climate Change under the 'Amrit Dharohar Capacity Building Scheme' 2023.
- **Implementation of the Amrit Dharohar Capacity Building Scheme 2023**
 - Implemented in convergence with various Central government ministries, State wetland authorities, and formal/informal institutions.
 - 16 Ramsar sites identified, with 5 selected as pilot projects for skill development of facilitators, tourism service providers, and stakeholders.

- **Significance of the Amrit Dharohar Capacity Building Scheme 2023**

- Emphasizes the importance of wetlands for global biological diversity and sustaining human life.
- Shifts focus to nature tourism at Ramsar sites to support conservation, local communities, and economies.

What is Nature Tourism and Who are High-Value Travelers?

- Nature tourism involves activities based on natural attractions, appealing to experiential tourists interested in diverse natural and cultural resources.
- High-value travelers are those likely to spend more, stay longer, and explore beyond typical tourist hotspots.

Recognizing the significance of wetlands in conserving global biodiversity and sustaining human life, the emphasis is on promoting nature tourism at Ramsar sites.

Pradhan Mantri Solar Rooftop Scheme (Suryodaya Yojana)

Context: PM Narendra Modi has recently announced the Pradhan Mantri Solar Rooftop Scheme (Suryodaya Yojana) with the goal of electrifying one crore households using solar electricity.

What is Pradhan Mantri Suryodaya Yojana?

- **Aim:** Installation of rooftop solar on 1 crore houses.
- **Target:** Reduction of electricity charges for the poor and middle class, contributing to India's self-reliance in energy.
- **Significance:** Aims to help India achieve the target of generating 500 GW of renewable energy capacity by 2030.

What is the Rooftop Solar Programme?

- **Launched in:** 2014
- **Aim:** Expand India's rooftop solar installed capacity in the residential sector.
- **Approach:** Provides Central Financial Assistance and incentives to DISCOMs (distribution companies).
- **Target:** Increase rooftop solar installed capacity to 40GW by March 2026.

India's Current Solar Capacity

- **As per MNRE:** Solar power installed capacity in India is approximately 73.31 GW as of December 2023.
- **CEEW Report:** Residential rooftop solar installations constitute only 20% of the total, with the majority in commercial and industrial sectors.

Conclusion

India aims to achieve 50% of its electric power capacity from non-fossil fuel sources by 2030, as outlined in its updated Nationally Determined Contribution (NDC) to the UNFCCC.

Centre's Digi Yatra enrolment takes off

Context: Recently, air travelers expressed shock and anger on social media due to privacy violations at airports. The cause of this infringement was attributed to the forceful promotion of the Digi Yatra initiative by the Union government.

DigiYatra

- DigiYatra, initiated in December 2022, began as a voluntary program and was rolled out in three airports, including Delhi.
- Presently implemented in 11 airports, plans include expansion to 14 more in the coming months.
- An industry-led initiative coordinated by the Ministry of Civil Aviation, aligning with Digital India's vision for a digitally empowered society.

- DigiYatra offers a Biometric Enabled Seamless Travel experience (BEST) based on Facial Recognition Technology.
- Facial recognition technology facilitates automatic processing at checkpoints such as airport entry, security checks, and boarding.

Availing the Facility

- Passengers must download the DigiYatra app and register using Aadhaar credentials.
- After scanning the boarding pass QR code or barcode, credentials are shared with the airport.
- Entry into the airport and other checkpoints involves scanning boarding passes at e-gates and using the facial recognition system.

DigiYatra Foundation

- Implemented by the DigiYatra Foundation, a joint-venture company registered under the Companies Act, 2013.
- The foundation manages passenger ID validation, sets compliance criteria, and provides guidelines for local airport systems.

Benefits

- Eliminates the need for passengers to show boarding passes or IDs at multiple checkpoints.
- Reduces human intervention, minimizing queuing time.
- Enhances airport security by validating passenger data with Airlines Departure Control System.
- Provides real-time information on passenger load for better resource planning.

Concerns Raised

- **Privacy Violations:** Air travelers express concerns about their privacy being compromised through the Digi Yatra initiative.
- **Data Security:** Collection of facial biometric data raises security concerns.
- **Confusion:** Lack of clarity on the purpose of Digi Yatra and its cost-saving implications on security deployment.

Stand of Digi Yatra Foundation

- The foundation asserts that biometric data is not stored permanently but in a secure wallet inside the app.
- Biometric Boarding System has access to data only on the day of travel, purged within 24 hours.
- Questions remain about the government's promotion of a private entity and the effectiveness of cost-saving measures in security deployment.

PRITHvi Vigyan (PRITHVI) Scheme

Context: The Union Cabinet has given approval to the "PRITHvi Vigyan (PRITHVI)" scheme, set to be implemented from 2021-26, with a total cost of Rs. 4,797 crore.

PRITHvi Vigyan (PRITHVI) Scheme: What is it?

- A comprehensive scheme addressing all components of the Earth system (atmosphere, hydrosphere, geosphere, cryosphere, and biosphere).
- Aims to enhance the understanding of Earth System Sciences and provide reliable services for the country.

Objectives

- Enhance and maintain long-term observations of the atmosphere, ocean, geosphere, cryosphere, and solid earth to monitor essential indicators of Earth System dynamics and changes.
- Create modeling systems to comprehend and forecast weather, ocean conditions, and climate risks, while studying the science behind climate change.
- Explore polar and high seas regions for the discovery of new phenomena and resources.

- Develop technology for sustainable exploration and utilization of oceanic resources for societal applications.
- Translate knowledge and insights from Earth systems science into services for societal, environmental, and economic benefit.

Components

Subsumes five existing schemes of the Ministry of Earth Sciences (MoES)

ACROSS (Atmospheric, Climate Science and Services): Focuses on long-term observations and advanced modeling systems for weather and climate predictions. It comprises the following sub-schemes:

1. Monsoon Convection, Clouds, and Climate Change (MC4)
2. High-Performance Computing System (HPCS)
3. Monsoon Mission (MM-II)
4. Atmospheric Observations Network
5. Weather & Climate Services
6. Upgradation of Forecast System
7. Commissioning of Polarimetric Doppler Weather Radars (DWRs)

O-SMART (Ocean—Services, Modelling, Application, Resources and Technology): Targets sustainable exploration and utilization of marine resources, utilizing cutting-edge technology. It encompasses the following major components:

1. Centre for Marine Living Resources and Ecology—Marine Living Resources Programme
2. National Centre for Coastal Research
3. Ocean observation and network
4. Ocean advisory and information services, computational infrastructure, and communication systems
5. Ocean—modeling data assimilation and process-specific observations
6. Ocean science and technology for islands
7. Harnessing ocean energy for generating freshwater
8. Manned and unmanned underwater vehicles
9. Marine sensors, ocean electronics, and acoustics
10. Operating and maintaining research vessels
11. Seafront Research Facility
12. Studies on Gas hydrates
13. Polymetallic nodules
14. Polymetallic Sulphides
15. Geoscientific studies of exclusive economic zone
16. Extension of the continental shelf
17. Deep Ocean Mission (DOM)

PACER (Polar Science and Cryosphere Research): Aims to explore the mysteries of the Earth's poles and glacial regions, contributing to a deeper understanding of global climate changes. It has the following major objectives:

1. To ensure the country's strategic and scientific interests in the Polar Region and surrounding oceans.
2. To continue long-term frontline scientific programs in Antarctica, the Arctic, the Himalayas, and the Southern Ocean, relevant to national needs with potential societal, strategic, and global significance.
3. Planning, coordination, and implementation of annual Indian Antarctic, Arctic, Himalayan, and Southern Ocean expeditions.
4. Maintenance of Indian Research bases in Antarctica, the Arctic, and the Himalayas.
5. Establishment of state-of-the-art polar research and logistic facilities in the country.

SAGE (Seismology and Geosciences): Strives to strengthen earthquake monitoring and research on the Earth's solid components. It comprises the following six activities:

1. Seismological monitoring and microzonation
2. Geodynamics and surface processes
3. Indian Ocean: Deep ocean observations and dynamics of lithospheric evolution (International Ocean Discovery Program-IODP and geoid low)
4. Scientific deep drilling in the Koyaintraplate seismic zone
5. Seismicity and earthquake precursors
6. Setting up a facility for geochronology

REACHOUT (Research, Education, Training and Outreach): Fosters talent development and ensures effective translation of research into services directly benefiting society. It is an umbrella scheme with the following six sub-schemes:

1. Research and Development in Earth System Science (RDESS).
2. Outreach and awareness.
3. Knowledge Resources Center Network (KRCNet).
4. BIMSTEC Centre for Weather and Climate (BCWC).
5. International Training Centre for Operational Oceanography (ITCOcean).
6. Program for the development of skilled workforce in Earth system sciences (DESK).

Mulya Pravah 2.0

Context: The University Grants Commission (UGC) recently introduced Mulya Pravah 2.0, aiming to instill human values and professional ethics in higher education institutions.

What is Mulya Pravah 2.0?

- Mulya Pravah 2.0 represents an updated set of guidelines by the UGC, focused on cultivating human values and ethics in higher education.
- The objective is to build value-based institutions by fostering a deep respect for fundamental duties, constitutional values, and promoting bonding among individuals and institutions.

Reasons for Issuance

A survey of human resource managers highlighted unethical practices prevalent in higher education institutions, including bias, sexual harassment, gender discrimination, inconsistencies, lack of confidentiality, and questionable arrangements with vendors.

Key Aspects of Mulya Pravah 2.0

Transparency	Calls for transparency in administration and decision-making guided by public interest, avoiding biased interests.
Accountability	<ul style="list-style-type: none"> • Advocates abolishing discriminatory privileges and rooting out corruption through strict action. • Directs authorities to ensure accountability, transparency, fairness, honesty, and the highest ethical standards.
Inclusivity	<ul style="list-style-type: none"> • Instructs higher education authorities to promote inclusiveness, commitment, respectfulness, belongingness, sustainability, constitutional values, and global citizenship. • Emphasizes treating scholars equally and allowing proactive participation in protecting and promoting institutional culture and standards.
Good Work Culture	<ul style="list-style-type: none"> • Recommends creating a conducive culture and work environment, where officials work impartially and in the best interests of the institution. • Encourages teachers to be role models and staff/student unions to support the administration while raising issues in a dignified manner.



Free Thought and Integrity

Encourages institutions to foster free thinking, giving advice, ensuring integrity, and trusteeship.

Concerns Related to Mulya Pravah 2.0

Confidentiality

Emphasizes the importance of maintaining confidentiality, potentially conflicting with the right to information. Lack of transparency may encourage malpractices, impacting public confidence.

Policing of Staff

Suggests unions support administration, potentially stifling dissent. Concerns about discouraging legitimate concerns without mentioning the role of staff associations and unions.

Use of Vague Terms

Guidelines use terms like "dignified manner" without clear definitions, potentially undermining collective stakeholder voices.

Suspending Associations

Instances of associations being banned or suspended raise concerns about potential suppression of rights and interests.

Similar Policies Worldwide

Countries like Japan, Finland, Australia, Singapore, and Canada have implemented moral education or value-based programs to foster social responsibility and ethical development.

Way Forward

- Institutions should voluntarily disclose critical information for public scrutiny.
- Guidelines should exclude vague terms to prevent misuse.
- Regulators must demonstrate zero tolerance for corruption and biases in the higher education sector.

Mulya Pravah 2.0 aims to address bias and discrimination by instilling values in higher education. While promoting transparency and accountability, concerns about confidentiality and stifling dissent need careful consideration.

Infrastructure Push in Kerala

Context: The Prime Minister recently inaugurated three key projects in Kochi, Kerala, including the New Dry Dock (NDD) at Cochin Shipyard Limited (CSL), the International Ship Repair Facility (ISRF) of CSL, and the LPG Import Terminal of Indian Oil Corporation Limited (IOCL).

Projects Inaugurated in Kerala

New Dry Dock (NDD)

- The NDD, spanning 310 meters, meets international standards.
- It can handle aircraft carriers twice the displacement of INS Vikrant, showcasing India's engineering and project management capabilities.
- Incorporates the latest technology for efficiency, safety, and environmental sustainability.



International Ship Repair Facility (ISRF)	<ul style="list-style-type: none"> India's first fully developed ship repair ecosystem. Represents a ₹970 crore investment, adding 25% capacity to the country's ship repair industry. Aims to modernize and expand CSL's ship repair capabilities, positioning it as a global hub.
LPG Import Terminal for IOCL	<ul style="list-style-type: none"> In Kochi, an LPG Import Terminal for IOCL was inaugurated with advanced infrastructure. Connected to a Multi-User Liquid Terminal Jetty through a 3.5 km Cross Country Pipeline. Aims for a turnover of 1.2 million metric tons per annum, enhancing LPG distribution and strengthening India's energy infrastructure.
Significance of These Projects	
Strategic Vision for Maritime Development	<ul style="list-style-type: none"> Aligns with the 'Sabka Saath, Sabka Vikaas' vision, setting global benchmarks. Maritime Amrit Kaal Vision 2047 aims to elevate Kochi into a prominent Maritime Cluster and a Global Hub for Green Ship.
Investment and Employment in Maritime Sector	<ul style="list-style-type: none"> Projects anticipate ₹45,000 Crores in investment, generating over 50,000 jobs in the maritime sector. Focuses on increasing India's tonnage, achieving self-sufficiency, and reducing dependency on foreign ships.
Role of Cochin Shipyard Limited (CSL)	<ul style="list-style-type: none"> CSL, known globally for delivering autonomous electric barges, plays a vital role in India's resurgence in the maritime industry. Strong product portfolio, including Next-Generation Green Technology ships, positions CSL as a key contributor.
National Pride and Environmental Impact	<ul style="list-style-type: none"> Symbolizes national pride, showcasing India's engineering capabilities. Expected to lead to logistic savings and reduced CO2 emissions, emphasizing environmental responsibility.
Alignment With Global Vision	<ul style="list-style-type: none"> Aligns with agreements during India's G20 Presidency, strengthening the Middle East-Europe Economic Corridor (MEEEC). MEEEC to boost India's coastal economy.
Future Plans for Maritime Infrastructure	<ul style="list-style-type: none"> Ministry of Ports, Shipping & Waterways plans to establish a Centre of Excellence in Shipbuilding & Repair. Creation of ship repair clusters, relaxation of trade conditions, and discussions for a Ship Repair facility at Vadinar.

Major and Minor Ports

- India has 12 major ports and 200 non-major ports.
- Major ports governed by the Major Port Trusts Act, 1963, and owned by the Central Government.
- Minor ports governed by the Indian Port Act, 1908, and owned by State Governments.

Recent Developments

- Indian ports achieved double-digit annual growth in the last decade.
- India surpassed developed nations in turnaround time.
- Changes in laws related to Indian seafarers led to a 140% increase in their numbers.

Measures to Strengthen the Infrastructure Sector

- Consistency in Policy/Regulatory Framework**
 - Address the lack of consistency in the tendering process.
 - Formulate dedicated policies for non-performing assets and PSU revamp.

- **Reasonable User Charges**
 - Essential for infrastructure financing, financial viability, and resource sustainability.
 - Overuse and wastage can be mitigated through reasonable user prices.
- **Autonomous Regulation of Infrastructure**
 - As private participation increases, demand for autonomous infrastructure regulation grows.
 - Multi-sectoral regulators conserve resources and prevent regulatory capture.
- **Asset Recycling (AR) and BAM**
 - Brownfield Asset Monetisation can free up funds for greenfield investments.
 - Transfer assets to Infrastructure Investment Trusts (InvITs) or Toll Operate Transfer (TOT) model.
- **Utilizing Domestic Funds**
 - Efficient use of domestic sources like India Pension Funds.
 - Emulate practices from countries like Canada, the Netherlands, and Australia for infrastructure development.

International Relations

Free Movement Regime to end at Myanmar border

Context: According to government officials, the Union government plans to eliminate the Free Movement Regime (FMR) along the Myanmar border, necessitating visas for individuals residing in border areas who previously could cross into India freely.

Background

- The Indo-Myanmar border spans 1,643 km, shared by Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km), and Mizoram (510 km).
- The demarcation of 1,472 km out of the total has been completed, leaving two un-demarcated sections: Lohit sub-sector of Arunachal Pradesh (136 km) and Kabaw valley in Manipur (35 km).
- Security concerns include secessionist movements, support to insurgents and terrorists, narcotics smuggling, and porous borders providing safe havens to insurgents.
- The Assam Rifles, known as "Friends of the North East People," is deployed for border security, equipped with modern weapons and surveillance tools.
- Initiatives like border fencing, the Comprehensive Border Infrastructure Project, Integrated Check Posts (ICPs), and the Border Area Development Programme (BADP) aim to enhance border management.



Free Movement Regime (FMR)

- Established in 2018 as part of the Act East policy, FMR allowed tribes along the India-Myanmar border to travel up to 16 km without visas.
- The FMR was deferred in 2017 due to the Rohingya refugee crisis.
- It aimed to facilitate movement for ethnically similar communities divided by the 1826 British demarcation, promoting local trade.
- Criticized for unintended consequences like aiding illegal immigration, drug trafficking, and gun-running.
- Inoperative since 2020 due to the Covid pandemic and suspended in September 2022 after the Myanmar military coup and refugee crisis.



Way Forward

- The government sources indicate the impending end of the Free Movement Regime with Myanmar.
- The Centre plans to initiate tendering for an advanced smart fencing system along the entire India-Myanmar border.
- Key highlights include addressing security concerns, preventing illegal activities, and responding to Manipur CM's request to permanently terminate the FMR in September 2023.
- Challenges may arise from potential opposition in states like Nagaland and Mizoram, but border security falls under the jurisdiction of the Union government.

Understanding The EU's Carbon Border Tax

Context: The EU's plan to implement a carbon border tax effective January 1, 2026, has raised concerns among experts, particularly regarding its impact on the cost of India's exports.

- Starting October 2023, Indian exporters are required to submit process documents every two months, with EU 'verifiers' checking submissions.
- Initially applicable to steel, aluminum, cement, fertilizer, hydrogen, and electricity, the tax is expected to expand to all EU imports.

EU's Carbon Border Tax (CBAM)

Objective and Framework

Part of the "Fit for 55 in 2030 package," CBAM aims to price carbon emissions in goods imported into the EU.

Applicability

Initially covering cement, iron, steel, aluminum, fertilizers, electricity, and hydrogen from countries with less stringent climate policies.

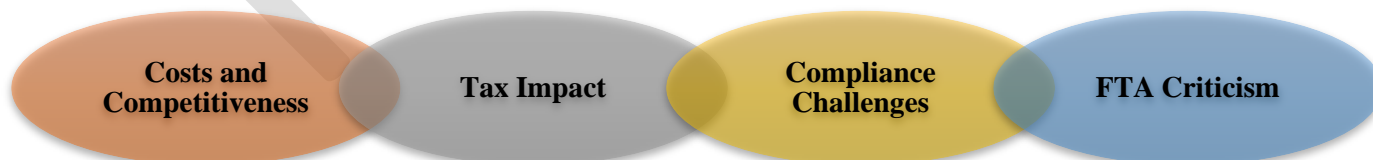
Mechanism

Importers must purchase carbon certificates reflecting embedded emissions, priced equivalent to the EU Emissions Trading System.

Purpose

Encourage cleaner production globally, prevent carbon leakage, and align with the EU's goal to reduce greenhouse gas emissions by 55% by 2030.

India's Concerns



- **Costs and Competitiveness:** CBAM may elevate costs and reduce competitiveness, particularly in steel and aluminum, impacting around 26.6% of India's exports to the EU.
- **Tax Impact:** Predicted to impose a 20-35% tax on select imports, potentially affecting India's annual exports of iron ore pellets, iron, steel, and aluminum products worth around USD 8 billion to the EU.

- **Compliance Challenges:** CBAM poses administrative and technical challenges for Indian producers, especially smaller firms, reminiscent of past issues faced during the 2006 EU REACH regime.
- **FTA Criticism:** CBAM is criticized as a non-tariff barrier conflicting with zero-duty FTAs, contradicting the EU's commitment to support the green transition of other nations.

India's Response



- **Opposing CBAM:** India should resist CBAM in international forums, arguing that it hampers the principle of 'common but differentiated responsibility' and restricts developing nations' industrialization.
- **Reciprocal Tax:** India considers imposing a similar tax on exports to the EU, with funds reinvested to enhance environmental sustainability. However, uncertainties exist about EU acceptance and potential legal questions.
- **Diversifying Export Markets:** India should explore new markets in Asia, Africa, and Latin America to reduce reliance on the EU, mitigating vulnerability to CBAM and other economic changes.
- **Incentivizing Greener Production:** Preparation for a greener and sustainable production process can be initiated, aligning with India's goals and contributing to a more carbon-conscious future.

The EU's CBAM poses challenges for India's exports, especially in vital sectors. A comprehensive strategy is essential, involving opposition in international forums, seeking bilateral agreements, diversifying markets, and promoting greener production. Striking a balance between environmental responsibility and economic prosperity is crucial for India's position in a carbon-conscious global market.

Red Sea Crisis

Context: Since November, the Houthi militia in Yemen has targeted cargo ships in the Red Sea, disrupting the fastest marine route between Asia and Europe via the Suez Canal.

- **Reasons for Attacks:** The Houthi militia's attacks are a display of support for Hamas in the conflict against Israel. The attacks have compelled cargo ships to take a longer route around the Cape of Good Hope, increasing both shipping costs and delivery times.

Significance of the Red Sea Trade Route

Historical Importance	Economic Significance	Geopolitical Importance
<ul style="list-style-type: none"> •The Red Sea has historically connected civilizations and continents, including Asia, Africa, and Europe. 	<ul style="list-style-type: none"> •The Suez Canal, operational since 1869, serves as a vital trade route, reducing the distance between Europe and Asia by 7000km. 	<ul style="list-style-type: none"> •Due to its economic and strategic significance, especially the narrow width of the Suez Canal, the region holds geopolitical importance.

Impact on Freight Rates

- **War Risk Surcharges:** Global shipping firms have imposed war risk surcharges, leading to increased freight rates.
- **Potential Surge in Freight Rates:** Indian exporters anticipate a potential surge of 25-30% in freight rates for shipments to Europe and Africa, impacting labor-intensive sectors.

Implications for India's Imports

Increased Costs

- Longer transit times and the crisis may result in costlier imports, necessitating better inventory management.

Fuel Price Impact

- The crisis could affect India's plans to reduce fuel prices, given its high dependence on crude oil and petroleum product imports.

Tanker Market Dynamics

- Despite increased rates, widespread rerouting of tankers has not been observed.

Global and Indian Responses

- **UN and US Actions:** The UN condemned the Houthi attacks, and the US seeks support for 'Operation Prosperity Guardian' to ensure safe sea lanes.
- **Indian Government Monitoring:** The Indian government closely monitors the situation, with the Commerce Secretary discussing potential impacts with officials and trade bodies.

Sector-Specific Impact

- **Most Affected Sectors:** Chemicals, plastics, and petrochemicals are severely impacted due to their inability to absorb freight hikes.
- **Options for High-Value Goods:** Airlifting is an option for high-value, low-volume commodities, but most affected goods are large in volume.

Measures Taken by India

Enhanced Maritime Surveillance

Aerial Surveillance

Coordination with Maritime Agencies

Monitoring Overall Situation

- **Enhanced Maritime Surveillance:** The Indian Navy has increased maritime surveillance efforts in the central/north Arabian Sea and deployed task groups for security operations.
- **Aerial Surveillance:** Aerial surveillance using long-range maritime patrol aircraft and remotely piloted aircraft has been intensified.
- **Coordination with Maritime Agencies:** The Indian Navy operates in close coordination with the Indian Coast Guard for effective surveillance in the economic exclusive zone.
- **Monitoring Overall Situation:** The Indian Navy continues to monitor the situation in coordination with national maritime agencies.

Operation Prosperity Guardian

- **US Announcement:** US Defense Secretary Lloyd Austin announced 'Operation Prosperity Guardian' to protect Red Sea commerce.
- **Indian Decision:** India is yet to decide on joining 'Operation Prosperity Guardian.'

The Red Sea situation poses ongoing challenges for global and Indian trade, with no immediate resolution. The crisis highlights the vulnerability of global trade routes to geopolitical conflicts, emphasizing the need for diversified shipping strategies.

U.S.-India Social Security Totalisation Agreement

Context: The agreement is a proposed arrangement between the U.S. and India to address social security contributions made by expatriates. The goal is to exempt expatriates from contributing to the social security scheme of the host country.

Katherine Tai's Involvement

- Katherine Tai, the United States Trade Representative (USTR), acknowledged receiving essential information from India about the proposed agreement.
- She highlighted the need for further work despite having the necessary data to advance negotiations.
- Katherine Tai made her statement during the 14th meeting of the Trade Policy Forum (TPF) between the U.S. and India.
- The meeting was co-chaired by Katherine Tai and India's Minister of Commerce and Industry, Piyush Goyal.

Status of the Agreement

- The agreement is currently in the initial stages of negotiation.
- India has provided relevant data on its social security schemes, and the U.S. is reviewing this information for further discussions.

Impact on Services Trade

- The agreement is expected to significantly enhance services trade between the U.S. and India.
- By resolving the social security contribution issue, it could encourage more Indian professionals to work in the U.S., benefiting both economies.

Primary Beneficiaries

- Temporary and short-term workers, especially from India, working in the U.S. are the primary beneficiaries of the agreement.
- Exemption from dual social security contributions provides significant financial relief.
- Increased economic efficiency by eliminating the obligation to contribute to two different social security systems.
- Encourages mobility for professionals and is likely to benefit the IT sector.

Key Highlights

Key Asks in Trade Policy Forum

- The social security totalisation agreement is one of the key requests from India in the Trade Policy Forum meeting.

Data Submission by India

- India has submitted all relevant data on its social security schemes, initiating negotiations on the agreement.

Objective of India-US TPF

- The Trade Policy Forum aims to activate working groups in various sectors and address mutual concerns for the benefit of both countries.

Impact on India-U.S. Relations

- The agreement is a significant step in strengthening economic and trade relations between India and the U.S.
- It addresses a long-standing issue affecting skilled professionals' mobility, fostering a more conducive environment for bilateral cooperation.

Why has South Africa dragged Israel to the ICJ?

Context: South Africa invoked the Genocide Convention, 1948, against Israel at the International Court of Justice (ICJ), accusing it of committing genocide during the Gaza military campaign.



What is ICJ?

- World's court and principal judicial organ of the United Nations, not located in New York.
- Composed of 15 judges elected to 9-year terms by the UN General Assembly (UNGA) and the Security Council.
- Elections conducted triennially, with five judges elected every three years for a nine-year term.

Two types of jurisdiction

Contentious (resolving legal disputes between consenting states)

Advisory (opinions on legal questions for UN bodies)

ICJ's Role and Significance

- Hears cases related to war crimes, illegal state interference, ethnic cleansing, etc.
- Settles legal disputes between states, gives advisory opinions to the UN and specialized agencies.
- Rules only on cases involving nations, not individuals or private entities.
- The court's judgments are final and binding, but enforcement depends on states' compliance.

Concerns About ICJ

- Non-compliance issues as enforcement lies with the UN Security Council (UNSC).
- Non-participation of powerful states like Russia and the US in certain cases.
- Lengthy procedures, as seen in past cases like Bosnia-Serbia.

Why South Africa Approached ICJ?

- South Africa seeks provisional measures under the Genocide Convention to stop alleged genocide by Israel in Gaza.
- Accuses Israel of causing hunger, dehydration, and starvation in Gaza, hindering humanitarian assistance, and failing to provide shelter to Palestinians.

Israel's Response

- Israel denies genocidal intent, claims self-defense against Hamas, and argues its actions are lawful.
- Disputes South Africa's reliance on Hamas-provided statistics about casualties.

Genocide Convention, 1948

- Codified the crime of genocide in 1948.
- As of 2022, 152 state parties.
- Defines genocide as acts with intent to destroy a national, ethnic, racial, or religious group.

What Lies Ahead?

- ICJ may issue provisional measures, but enforcement depends on the UNSC.
- The potential for a U.S. veto if the ICJ rules against Israel.
- Calls for a decentralized judiciary to foster judicial independence.

Denmark's Green Fuels Alliance To Boost Sustainable Energy Solutions Sector

Context: India and Denmark announced the Green Fuels Alliance India (GFAI) to enhance collaboration in sustainable energy solutions and work towards carbon neutrality. The Green Strategic Partnership (GSP) signed in 2020 lays the foundation for the GFAI.

Green Fuels Alliance India (GFAI)

Definition

Strategic collaboration between India and Denmark in the sustainable energy sector, led by the Consulate General of Denmark and the Embassy of Denmark.

Aim	Foster innovation, collaboration, and partnerships between Danish and Indian industries, specifically focusing on the green fuels sector, including green hydrogen.
Objectives	Promote sustainable energy growth in India through an ecosystem fostering collaboration among businesses, government entities, research institutions, and financial stakeholders.
Members	<ul style="list-style-type: none"> ○ Founding members include Maersk, Topsoe, Umwelt Energy, Mash Makes, European Sustainable Solutions, Novozymes, Danfoss, Brdr. Christensen, and Hydrogen Denmark. ○ Advisory Board members include India Hydrogen Alliance, Energy Consortium at the Indian Institute of Technology-Madras, Danish Energy Agency, and State of Green.
Key Features	<ul style="list-style-type: none"> ○ Steering Committee, led by Danish businesses and coordinated by the Secretariat at the Danish Consulate, Bangalore. ○ Advisory Board comprising industry experts to ensure initiatives align with industry requirements and trends. ○ Collaborative initiatives inspired by existing programs like the India-Denmark Energy Partnership and joint R&D efforts on Green Fuels.

Green Strategic Partnership

Definition	Focus	Ambitious Goals	Mechanisms
<ul style="list-style-type: none"> • Mutually beneficial agreement between India and Denmark to enhance political cooperation, expand economic relations, promote green growth, create jobs, and address global challenges. • Launched during the Virtual Summit in September 2020 between the Prime Ministers of India and Denmark. 	<ul style="list-style-type: none"> • Promotion of green and sustainable development. • Implementation of the Paris Agreement and UN Sustainable Development Goals (SDGs). 	<ul style="list-style-type: none"> • India aims for net zero emissions by 2070. • Denmark targets a 70% reduction in CO2 emissions by 2030 and international leadership on SDG 7 (affordable and clean energy). 	<ul style="list-style-type: none"> • Exchange of ideas, best practices, knowledge, and capacity building. • Collaboration through the Joint Commission for Cooperation and existing joint working groups.

Significance

- International collaboration aids in implementing the global green transition.
- Danish expertise contributes to India's green development.
- India's favorable conditions for renewable energy production align with Denmark's renewable energy leadership.
- Denmark's goal of 100% renewable energy by 2030 makes it a valuable partner for India's green transition.

Conclusion

The Green Fuels Alliance India represents a pioneering collaboration between India and Denmark in advancing sustainable energy. With ambitious goals and shared expertise, the initiative aims to drive innovation and propel India towards carbon neutrality, benefiting from Denmark's support.

What are labour rules for workers abroad?

Context: The National Skill Development Corporation (NSDC) is aiding the governments of Uttar Pradesh and Haryana in hiring approximately 10,000 workers for construction jobs in Israel.

National Skill Development Corporation (NSDC)

- Established in July 2008, NSDC is a not-for-profit public limited company.
- Conceived as a Public Private Partnership (PPP) model by the Ministry of Finance.
- The Government of India holds 49% of NSDC's share capital through the Ministry of Skill Development & Entrepreneurship (MSDE), with the private sector holding the remaining 51%.
- Currently under the MSDE's jurisdiction.

Goal

- Aims to enhance the skills of individuals in India by encouraging private sector involvement in skill development programs and providing funding.
- Seeks to promote skill development by catalyzing the establishment of large, quality, and for-profit vocational institutions.

Employment in Israel

- Approximately 18,000 Indian citizens reside in Israel, engaged in caregiving, diamond trading, IT professions, and education.
- A 2017 report by the International Labour Organization (ILO) notes a significant increase in international migration from Asia to Arab states over the last two decades.
- Workers heading to conflict zones or locations lacking sufficient labor protections must register on the Ministry of External Affairs' 'e-migrate' portal.
- The e-Migrate Project, launched in 2014, streamlines the emigration process through digital platforms, allowing workers to create profiles, register contracts, and obtain emigration clearance.

International Practices

- International labor standards governed by ILO conventions, including the Migration for Employment Convention (Revised), 1949, and Migrant Workers (Supplementary Provisions) Convention, 1975.
- While India hasn't ratified these conventions, Israel ratified the 1949 convention in 1953.

Labour Laws: International Practices

- India's non-ratification of ILO conventions, while Israel ratified the 1949 convention in 1953.
- The 1949 convention calls for action against misleading propaganda related to emigration and immigration.
- Workers heading to conflict zones or regions lacking labor protections must register on the 'e-migrate' portal, excluding Israel from this requirement.

Emigration Check Required (ECR) Scheme

- ECR scheme categorizes passports for Indian nationals wanting to work abroad.
- ECR passports issued to those without a 10th-grade or higher education pass certificate.
- ECR passport holders going to ECR countries must obtain Emigration Clearance (EC) from the Protector of Emigrants (POE).
- The Emigration Act, 1983, governs the functions of POEs, with passports under the ECR scheme covering workers traveling to 18 countries.

Opposition and Legal Concerns

- Central trade unions oppose sending workers to conflict zones, asserting it contradicts principles of evacuating citizens.
- Opposition claims the government's move is politically motivated to appease Israel.
- Trade unions highlight Emigration Act violations, prohibiting service charges exceeding ₹30,000.
- Recruitment for Israel involves substantial fees to NSDC and other expenses, seen as a violation of the Emigration Act.

Way Forward

- The ILO's World Employment and Social Outlook: Trends 2024 report urges countries to design sensible migration policies and skill development initiatives to support local labor markets.
- Recommends strengthening education and training systems in countries with growing labor resources.

The recruitment of workers for employment in Israel sparks legal concerns and opposition from trade unions, focusing on Emigration Rules, paid recruitment in conflict zones, and the need for enhanced labor protections. Consideration of international labor standards and the demographic transition in countries with surplus labor resources is crucial in the context of overseas employment.

Why are conflicts spreading in West Asia?

Context: The military confrontation between Israel and Hamas has escalated into a regional security crisis. Hezbollah, Kataib Hezbollah, Hashad al-Shabi, Houthis, Iran, Pakistan, and the United States are now involved in the expanding conflict theater.



Israel-Hamas War Spillover

- During Israel's war on Gaza, Hezbollah, backed by Iran, launched rockets at Israeli forces in the Shebaa Farms, claimed by Lebanon.
- Arab countries expressed displeasure with Israel's bombing and opted for diplomatic pressure.
- Iran-backed militias initiated new fronts against Israel.
- Houthis of Yemen targeted commercial vessels in the Red Sea, affecting shipping operations.
- The U.S. conducted airstrikes in Yemen in response to Houthi attacks.
- Hashad al-Shabi attacked U.S. troops in Iraq and Syria, leading to U.S. retaliation.
- Israel, the U.S., and Iran engaged in multiple strikes and counterattacks.

Key Players in the West Asia Conflict

- Major operational centers include Israel, Iran, and the U.S.
- Israel aims to dismantle Hamas and secure the release of hostages.
- Iran supports various anti-Israel non-state actors in the region.
- The U.S. focuses on ensuring Israel's security, protecting its troops and assets, and preserving the U.S.-led order.

Changing Regional Order in West Asia

- Historically, the U.S. dominated West Asia, shaping geopolitical outcomes.
- The current crisis indicates a breakdown of the old order.
- Iran-backed proxies directly target Israeli and American positions.
- The Houthis challenge the U.S.'s ability to secure vital shipping routes.
- Arab countries, U.S. allies, are increasingly frustrated with unconditional U.S. support for Israel.

The old order, anchored by the U.S., is crumbling, requiring a new security equilibrium. Urgent need for a ceasefire in Gaza and using peace between Israel and Palestinians as a foundation for broader regional security talks among key stakeholders.

India – Bangladesh Relationship

Context: Sheikh Hasina secured a historic fourth consecutive term in Bangladesh, with the Awami League winning two-thirds of the seats in the January national elections. Prime Minister Narendra Modi promptly congratulated Ms. Hasina, highlighting the close bilateral relationship between India and Bangladesh.

How have ties flourished?

- The foundation of India-Bangladesh relations was established during the 1971 Bangladesh Liberation War when India provided crucial military and material support for Bangladesh's independence from Pakistan.
- Relations soured in subsequent years due to military regimes, leading to anti-India sentiment in the mid-1970s over issues such as boundary disputes and insurgency.
- Ties improved in 1996 when Sheikh Hasina came to power, marked by a treaty on Ganga water sharing, leading to enhanced cooperation in trade, energy, infrastructure, connectivity, and defense.

Economic Cooperation

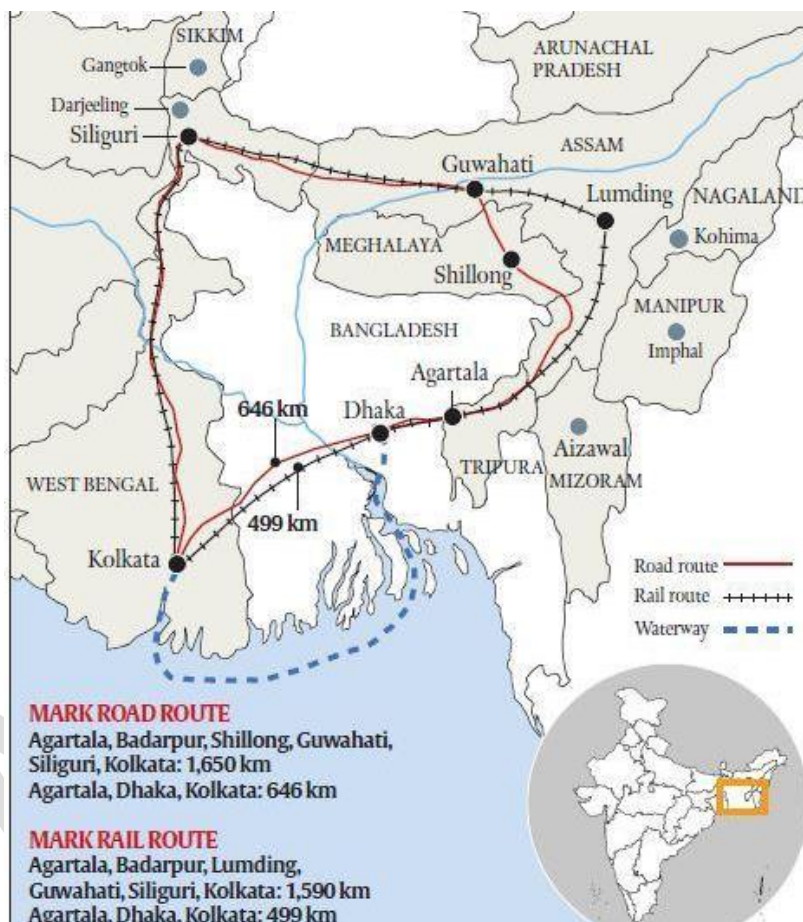
- Bilateral trade between India and Bangladesh has steadily grown, making Bangladesh India's largest trade partner in South Asia, reaching \$18 billion in 2021-2022.
- India is the second-largest trade partner for Bangladesh, with exports amounting to \$2 billion.
- A joint feasibility study on a Comprehensive Economic Partnership Agreement (CEPA) was concluded in 2022, aiming to reduce or eliminate customs duties and simplify trade norms.
- The CEPA gains significance as Bangladesh faces the loss of its Least Developed Country (LDC) status after 2026, prompting discussions on a Free Trade Agreement (FTA) with India and participation in the Regional Comprehensive Economic Partnership (RCEP).

Infrastructure

- India, as a major development partner, has provided over \$7 billion in Lines of Credits for infrastructure and connectivity projects in Bangladesh since 2010.
- The Akhaura-Agartala rail link, inaugurated by PM Modi and Sheikh Hasina, connects Bangladesh and the northeast through Tripura, providing India access to Chattogram and Mongla ports.
- India's attention is on the Matarbari Port, being built by Bangladesh, around 100 km from Tripura, establishing a crucial industrial corridor linking Dhaka and northeast India.

Points of Tension

- The Teesta water dispute and the Rohingya issue are points of contention. The Teesta dispute revolves around equitable water distribution, while Bangladesh seeks India's cooperation on the Rohingya repatriation issue.
- Cross-border terrorism, infiltration, and rising majoritarian forces pose additional threats to internal security. PM Hasina condemns attacks on Muslims in India.



About Global Ties

- The U.S. has criticized the Awami League government for "democratic backsliding" and imposed sanctions in 2021, escalating tensions.
- India is concerned about the growing ties between Bangladesh and China, marked by substantial Chinese investments in infrastructure. However, Hasina asserts her government's careful approach to the partnership with China.

Free movement Regime

Context: During a recent passing out parade of Assam police commandos in Guwahati, the Home Minister announced plans to fence the 1,643 km India-Myanmar border. Additionally, he stated that the Free Movement Regime (FMR) agreement with Myanmar would be reviewed to prevent border residents from crossing into each other's countries without proper documentation.

Background

- A significant portion of India's northeastern region was under Burmese occupation until the 1800s when the British expelled them.
- The Treaty of Yandaboo in 1826 between the British and Burmese determined the current India-Myanmar border.
- The border divided people of the same ethnicity and culture, like the Nagas of Nagaland and Manipur, and the Kuki-Chin-Mizo communities.
- The FMR agreement with Myanmar was established in 2018, delayed by the Rohingya refugee crisis in 2017.

About FMR

- The FMR allows border residents to travel 16 km into each other's country without a visa, requiring a border pass for a year's validity.
- The FMR aims to promote local border trade, customs stations, designated markets, and access to education and healthcare facilities.

Why is the FMR being reconsidered?

- The India-Myanmar border, except for a 10 km stretch in Manipur, is unfenced, leading to security challenges.
- Extremist groups operate from clandestine bases in Myanmar, contributing to cross-border issues like drug trafficking and wildlife trafficking.
- The conflict in Manipur in 2023 and concerns over an "influx" of Myanmar nationals prompt the reconsideration of FMR.
- Manipur Chief Minister attributes ethnic violence to the free movement of Myanmar nationals and urges ending the FMR.

Drug Trafficking and Terrorism related to FMR

- Insurgent groups in Myanmar engage in illegal activities like drug smuggling, aided by porous borders and misuse of FMR.
- Effective border management is essential to reduce drug trafficking and illegal cross-border movement.
- Manipur records numerous drug-related cases and arrests, indicating the challenges posed by unfenced borders.

What is the scale of migration?

- The civil war in Myanmar resulted in an increase in people seeking refuge in India, with Manipur pushing back thousands.
- The Mizoram government seeks funds to care for displaced people, wanting them to return once the situation in Myanmar normalizes.

What can happen if FMR is removed?

- Experts suggest that FMR needs better regulation, and its complete removal may impact livelihoods and essential travel for healthcare and education.
- Addressing the issue requires a nuanced approach, considering local interests and challenges in border control.



Why are Mizoram and Nagaland opposed to ending the FMR?

- Mizoram Chief Minister opposes fencing and ending FMR, citing historical imposition by the British to divide the Zo ethnic stock.
- Nagaland's Naga Students' Federation condemns the move, stating it would exacerbate conflicts in the region, emphasizing historical territorial claims.

Navy thwarts hijacking attempt in Arabian Sea

Context: INS Chennai, an Indian warship, successfully thwarted a hijack attempt on a Liberia-flagged merchant vessel in the north Arabian Sea. The operation led to the safe rescue of 21 crew members, including 15 Indians.

Incident at the Merchant Vessel Lila Norfolk

- The bulk carrier Lila Norfolk reported a boarding incident involving five to six unidentified armed individuals off the coast of Eyl, Somalia, as communicated on the U.K. Maritime Trade Operations portal.
- Responding swiftly, the Indian Navy redirected the destroyer INS Chennai, engaged in anti-piracy patrols, and a Maritime Patrol Aircraft verified the safety of the crew during a morning overflight.
- Indian Navy Marine Commandos, embarked on the deployed warship, boarded the vessel and initiated the sanitization process.

Maritime Piracy

- Defined by the UN Convention on the Law of the Sea (UNCLOS) as criminal acts like kidnapping, violence, or robbery on private boats or ships for personal gain.
- UNCLOS, an international treaty adopted in 1982, establishes a comprehensive regime of law and order in the world's oceans, governing all uses of oceans and their resources.

About MARCOS

- MARCOS, formally known as the Marine Commando Force (MCF), represents the specialized forces of the Indian Navy, entrusted with executing unique operations.
- Established in 1987, MARCOS showcases versatility in proficiently operating across diverse environments, encompassing sea, air, and land.
- In the late 1980s, MARCOS played a pivotal role in 'Operation Pawan' during the Sri Lankan Civil War, contributing significantly to the restoration of peace by capturing key LTTE-held territories.

Threats Posed by Maritime Piracy

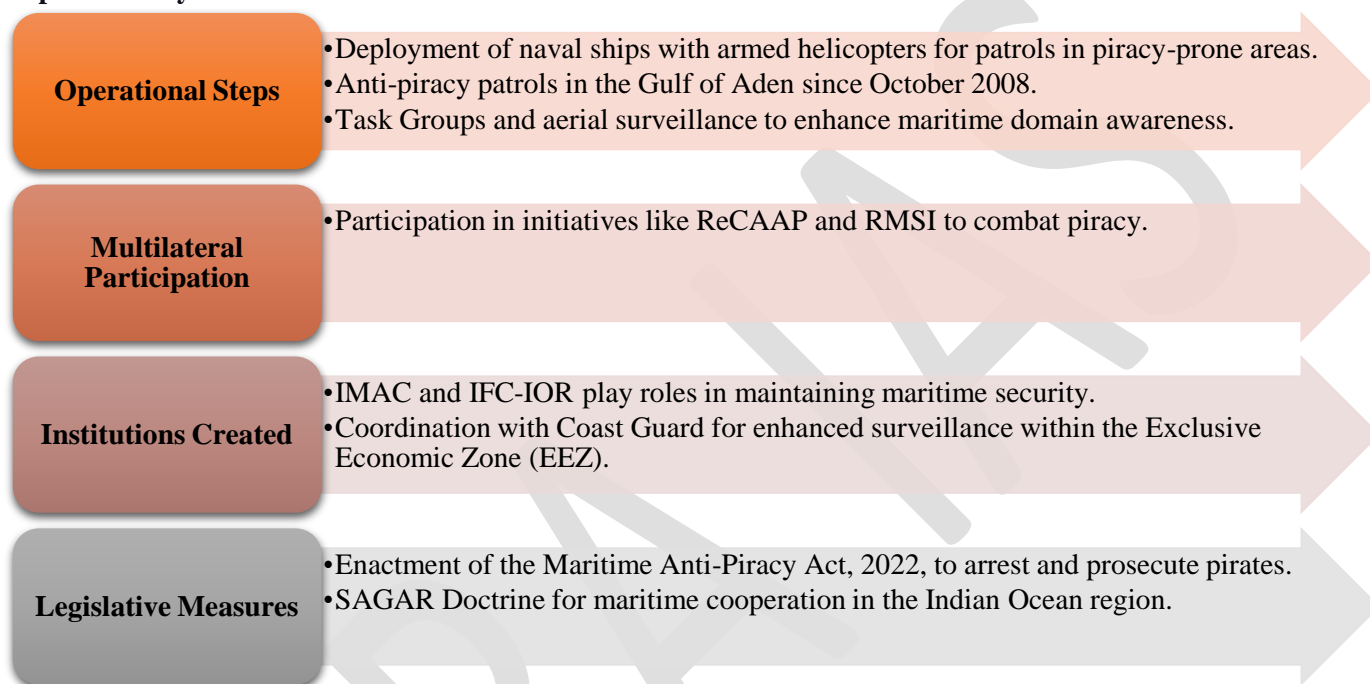


- **Physical Harm, Kidnapping, and Humanitarian Concerns:** Pirates can cause physical harm and often kidnap individuals for ransom. Crew members and passengers may suffer trauma and psychological distress.
- **Disruption of Trade:** Piracy disrupts maritime trade routes, causing delays in the delivery of goods and impacting global trade.
- **Economic Losses:** Businesses incur financial losses due to stolen cargo, ransom payments, increased insurance premiums, and anti-piracy measures.
- **Impact on Fishing Industry:** Fishing vessels may be targeted, affecting fishermen's livelihoods and seafood availability.



- **Environmental Risks:** Pirates engage in illegal activities, such as oil theft, posing environmental threats to marine ecosystems.
- **Security Concerns:** Piracy raises security concerns for coastal regions and international waters, requiring increased naval and maritime security efforts.
- **Global Security:** Piracy can be linked to broader security issues like terrorism and organized crime, posing challenges for international security.

Steps Taken by India



Way Forward

- INS Chennai successfully secured and evacuated 21 crew members from the merchant vessel Lila Norfolk, which faced a hijacking attempt off the coast of Eyl, Somalia.
- Key highlights include a distress message from Lila Norfolk, the prompt response of INS Chennai, and the use of a Maritime Patrol Aircraft for ensuring crew safety.

Notably, there have been attacks on merchant ships by Houthi rebels in Yemen in the Red Sea and the Arabian Sea.

Military Exercises, Defence & Security

Indian Air Force's Nighttime Landing of C-130J at Kargil Airport

Context: The Indian Air Force (IAF) recently achieved a milestone by successfully executing a technically challenging nighttime landing of a heavy C-130J aircraft at Kargil airport in Ladakh.

Significance of C-130J Super Hercules

The US-origin C-130J Super Hercules jets are known for special operations and quick troop or humanitarian supply mobility, particularly in harsh terrains and short runways. Night landings enhance the complexity of such missions.

Kargil Airport

- Positioned at a high altitude near the Line of Control, Kargil airport holds strategic significance despite posing challenges for aviators due to its topography.
- The airport suffered damage during the 1999 India-Pakistan conflict.

- Kargil airport is situated at an elevation of approximately 9,700 feet.
- It is strategically located between the 1999 battle sites of Dras and Batalik.
- Kargil airport played an active role during the 1999 conflict and earlier wars, serving as an air base for the IAF.

Terrain Masking

- IAF strategically employed high Himalayan peaks to mask the aircraft's movements during the night landing.
- Terrain masking, a military aviation tactic, involves using natural features like hills and valleys to conceal movements from enemy radar detection.
- In addition to night vision goggles, terrain masking involves maneuvering aircraft to exploit natural features for concealment.
- It is comparable to the aviation technique known as nap-of-the-earth or "ground-hugging" flying.
- The IAF demonstrated similar expertise in 2013 with a C-130J landing at Daulat Beg Oldie advanced landing ground in Ladakh.
- Ongoing efforts to upgrade Nyoma airbase and activate other airstrips in eastern Ladakh showcase India's commitment to bolster airpower along the China border.
- The nighttime landing aligned with training objectives for the Garud commando team, providing invaluable on-ground experience in executing smooth night-time landing and takeoff evolutions.
- The IAF's successful nighttime landing underscores its maturity in executing all-weather, day and night air mobility, crucial for managing national security across treacherous mountainous frontiers.

In summary, the IAF's accomplishment at Kargil airport reflects its enhanced operational capabilities and commitment to maintaining readiness in challenging terrains.

Environment

Pelagic Birds

Context: Recent bird watching efforts by a network of 180 enthusiasts have documented rare 'pelagic' birds along the Karnataka coast. These oceanic birds, including Sooty Shearwater, Brown Skua, Brown Booby, Streaked Shearwater, and Masked Booby, were observed, and their reduced density compared to the previous year has raised concerns about declining fish stocks near the coast.

Overview of Pelagic Birds

Pelagic birds are species spending a significant part of their lives in the open ocean, away from land. Specially adapted for marine life, these birds possess characteristics like long wings for efficient gliding, feeding on marine life, nesting habits that involve land visits for breeding, extensive migrations, physical adaptations such as salt glands and webbed feet, a longer lifespan, social behavior, and vulnerability to threats like oil spills, fishing interactions, and habitat destruction.

Pelagic Birds



About

- These are seabirds that live on open seas and oceans rather than inland or around more restricted waters such as lakes and rivers.
- They can be found thousands of miles offshore but can get blown onto land during high winds and storms.
- The most familiar types of pelagic birds include albatrosses, frigatebirds, fulmars, petrels, shearwaters, and tropicbirds.

Characteristics

- They feed on planktonic crustaceans and squid and hunt fish far from the land.
- Generally, they have dense, waterproof feathers and layers of fat to keep them warm.
- They have exceptionally long and thin wings that allow them to fly effortlessly for long periods without rest.
- Many pelagic birds have special salt glands. This allows them to drink seawater and discard extra salt accidentally ingested by their oceanic prey.
- Some have webbed or partially webbed feet for swimming, plucking fish from the shallows, or executing precise, plunging dives.
- In general, seabirds live longer than other wild birds; most have an average lifespan of 50 years.
- Almost all seabirds live in colonies, migrate annually, and mate for life.



Relation Between Declining Fish Stocks and Pelagic Birds

- The observed decrease in the density of pelagic birds from the previous year is linked to diminishing fish stocks near the coast.
- As fish constitute a primary food source for these birds, their scarcity affects the birds' ability to find sufficient food, impacting survival and breeding success.
- The presence and behavior of pelagic birds serve as indicators of the marine ecosystem's health, reflecting issues like overfishing, climate change, and pollution.

Habitat

- Found mainly in coastal waters.
- Many of these species are observed to nest on isolated islands and cliffs of northern Europe, Russia and the American continent.
- Generally found in offshore areas of Gujarat, these are not sighted commonly.

Conservation

- These seabirds are the most threatened bird group
- Globally 28 per cent are threatened.
- 5 per cent are in the highest category of Critically Endangered
- Further 10 per cent are Near Threatened.

Conservation Efforts in Karnataka

Several initiatives in Karnataka highlight conservation efforts:

Green Initiatives at New Mangalore Port (NMP)

- NMP's transformation into a green port, with 33% under a green canopy, has increased bird diversity.
- The selection of tree species conducive to avian life and community involvement, such as bird feeders, contributes to habitat creation and restoration.

Community Involvement

- Residents creating bird-friendly spaces by keeping feeders and water pots on rooftops and building birdbaths support local bird populations.

Bird Diversity around Kaiga Nuclear Power Generating Station (KGS)

- Annual bird-watching marathons around KGS in Uttara Kannada district indicate a stable and growing avian population, reflecting a healthy environment.

Publication and Awareness

Works like "Birds of the Southern Coastal Karnataka" contribute to understanding and awareness of the region's avian diversity, playing a role in conservation efforts.

Conclusion

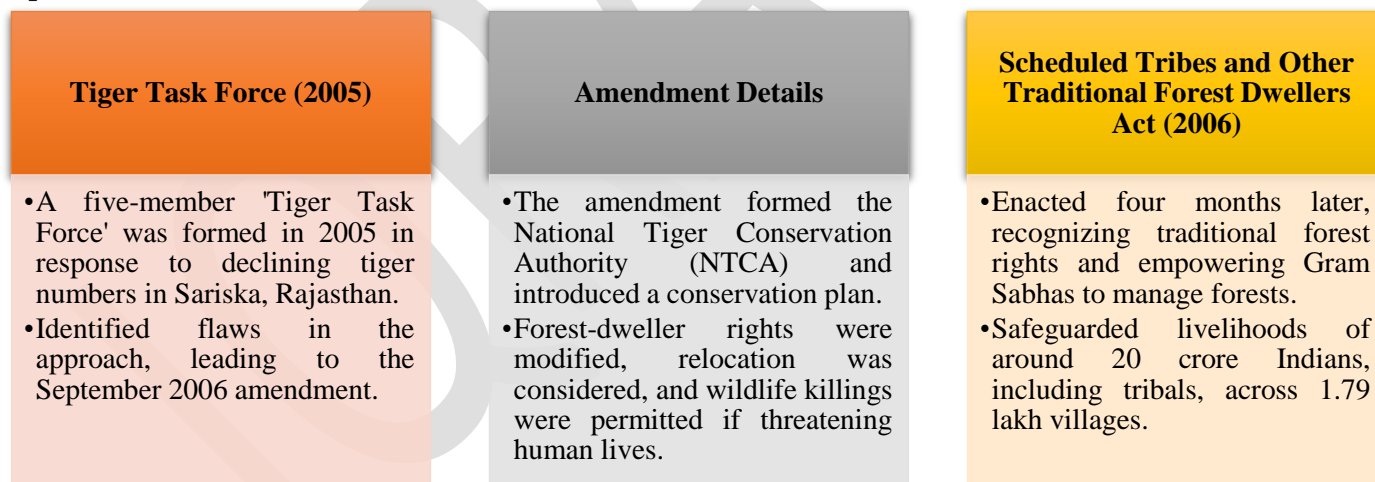
Bird watching activities along the Karnataka coast have not only documented rare pelagic birds but also highlighted the impact of declining fish stocks on bird populations. Conservation initiatives at New Mangalore Port and around the Kaiga Nuclear Power Generating Station, along with community involvement and awareness publications, contribute to the preservation of bird species and their habitats in Karnataka.

A Look At Project Tiger, 50 Years On

Context: Celebrating Project Tiger's 50th anniversary is a significant accomplishment in the field of wildlife conservation.

Project Tiger	
Initiation (1973)	<ul style="list-style-type: none"> Launched in 1973, Project Tiger introduced Tiger Reserves, evolving from an administrative category to a statutory one in 2006. Currently, there are 54 Tiger Reserves in 18 States, covering 78,135.956 sq. km, constituting 2.38% of India's total land area. Critical Tiger Habitats (CTH) encompass 42,913.37 sq. km, constituting 26% of the area under National Parks and Wildlife Sanctuaries.
Tiger Population Growth	<ul style="list-style-type: none"> In 1972, the tiger count was 1,827 (pug-mark method); by 2022, estimates using the more reliable camera-trap method ranged from 3,167 to 3,925. India claims to host 75% of the world's tigers, with an annual growth rate of 6.1%.
Legislative Impact	<ul style="list-style-type: none"> The Wildlife (Protection) Act in 1972 established National Parks and Wildlife Sanctuaries but altered forest-dwellers' rights. Project Tiger, initially a Centrally Sponsored Scheme, introduced CTHs and Buffer Areas, leading to conflicts over displacement.

September 2006 Amendment



Basis for Critical Tiger Habitats (CTHs)

- Democratic Tiger Reserve Creation:** Tiger Reserves were initially meant to be democratically created based on scientific criteria, considering the interests of people in these areas.
- CTH Establishment Principles:** CTHs founded on evidence of irreversible damage to wildlife due to human activities, requiring modifications to forest-dwellers' rights after consultation.
 - Emphasizes that CTH establishment shouldn't infringe upon Scheduled Tribes' or other forest dwellers' rights.

- **Buffer Areas:** Buffer Areas aim to balance human-animal coexistence, respecting local people's rights, determined by objective criteria and expert committee input. Most Tiger Reserves lack Buffer Areas, leading to conflict situations.

Relocation vs. Rehabilitation	
Legislative Framework	Wildlife (Protection) Act allows voluntary relocation based on mutually agreed terms, while the LARR Act 2013 outlines compensation and rehabilitation procedures.
Compensation Challenges	LARR mandates proper compensation, but the government limits it to Rs 15 lakh, often transferring responsibility to State governments. Officials obtain minimal consent for relocation.
Recognition of Forest Rights	As of 2019, over 57,000 families lived in CTHs across 50 Tiger Reserves, facing resistance to recognizing forest rights, causing conflicts. NTCA initially barred FRA rights recognition in CTHs, later withdrawing after the Union Environment Ministry issued guidelines.

Challenges and Future Concerns

- **Conflict and Biodiversity:** Growing tiger population and reserves may escalate conflicts rather than fostering biodiversity.
- **Clash in Regulations:** Conflict between FRA provisions for public utilities and the Union Environment Ministry's insistence on wildlife clearance.

Great Indian Bustard

Context: The Supreme Court has directed the Centre to disclose its plans for the conservation of the critically-endangered Great Indian Bustard.

Great Indian Bustard	
About	Considered India's most critically endangered bird and the State bird of Rajasthan.
Flagship Species	Regarded as the flagship grassland species, symbolizing the health of the grassland ecology.
Habitat	Primarily found in Rajasthan and Gujarat, with smaller populations in Maharashtra, Karnataka, and Andhra Pradesh.
Concerns	The proximity of Rajasthan's international border with Pakistan's Sindh and Punjab provinces raises concerns about the vulnerability of the birds to poaching.
Protection Status	<ul style="list-style-type: none"> • IUCN: Critically Endangered. • CITES: Appendix 1. • CMS: Appendix 1 (Convention on Migratory Species). • Wildlife (Protection) Act, 1972: Schedule 1.

Initiatives for GIB Conservation

- **Integrated Development of Wildlife Habitats:** GIB is included in the species recovery program under the Integrated Development of Wildlife Habitats by the Ministry of Environment, Forests, and Climate Change (MoEFCC).
- **Conservation Breeding Facility:** A conservation breeding facility was established in the Desert National Park at Jaisalmer in June 2019 through collaboration between MoEF&CC, Rajasthan government, and the Wildlife Institute of India (WII).
- **Project Great Indian Bustard:** Launched by the Rajasthan government with the goal of constructing breeding enclosures and developing infrastructure to alleviate human pressure on GIB habitats.

Urbanisation in Bhubaneswar impacts winter temperatures

Context: The School of Earth Ocean and Climate Sciences at IIT Bhubaneswar conducted computer-based simulations as part of a broader initiative to implement the city's digital twin.

- Simulations aimed to replicate urban growth in Bhubaneswar, analyzing micro-climate changes in relation to factors such as climate change, city expansion, and alterations in vegetation cover.
- Nearly 60% of the observed overall warming in the city was attributed to local activities and changes, as quantified in studies published in the journal Computational Urban Science.



Key Findings

- Apart from climate change-induced warming, additional warming was identified due to the heat-trapping nature of concrete and asphalt materials used in city construction.
- Replacement of natural surfaces with impervious ones led to decreased evapotranspiration, contributing to the observed warming.
- Inclusion of a minimalistic 3-D city structure in simulations during winter revealed enhanced warming (approximately 0.4°C) in the eastern lowland regions, influenced by topographical asymmetry.
- Wind speeds in the eastern fringes decreased by about 0.2 meters per second, limiting heat dispersion, while the influence was nullified in the western region, possibly due to lower surface specific humidity affecting longwave radiation.
- Terrain and local microclimate played a significant role in shaping winter urban surface temperatures, emphasizing the intricate interplay between urbanization and climate.
- Changes in winter temperatures are expected to modify the spatial pattern, intensity, and duration of rainfall events, impacting urban floods.
- The growing population and increased reliance on city resources will intensify vulnerabilities in the absence of science-driven strategies.
- Urgent need for comprehensive city-scale climate action plans, informed by science, to mitigate and adapt to the impacts of urbanization and climate change.

The study underscores the necessity for systematic scientific explorations in urban planning to address the complex interactions between urbanization and climate. Comprehensive city-scale climate action plans, driven by science, are crucial to mitigate and adapt to the impacts of urbanization and climate change.

Mosquitofish, used to fight mosquitoes, has become invasive in India

Context: In Andhra Pradesh, Odisha, and Punjab, various government and non-governmental organizations have introduced mosquitofish into water bodies to address the mosquito menace.

What is Mosquitofish?

- Mosquitofish is a freshwater species known for consuming mosquito larvae.
- Originating from the U.S., there are two species - *Gambusia affinis* and *Gambusia holbrooki*.

Mosquito Menace

- Mosquitoes are rapidly spreading diseases, driven by climate change leading to warmer and wetter conditions favoring their proliferation.
- Globally, over 500 million people fall ill annually due to mosquito bites, with 40 million cases reported in India alone each year.

- Introduced to India in 1928, initially as a malaria control measure by the British.

Effects of Mosquitofish on Ecosystem

- Considered a harmful invasive species due to aggressive feeding habits disrupting local food webs.
- Invasive nature has caused harm globally; in Australia, it led to the extinction of local fish species.
- Negative impact observed in New Zealand and reported by the Indian Council of Medical Research (ICMR).

Ecological Impact

- Mosquitofish are among the hundred most detrimental invasive alien species.
- Preying on native fauna leads to the extinction of native fish, amphibians, and freshwater communities.
- Australia and New Zealand have reported similar ecological harm due to introduced mosquitofish.
- WHO ceased recommending *Gambusia* for mosquito control since 1982.

Way Forward to Control Mosquitofish

- Urgent measures are needed to ban further introductions of mosquitofish into freshwater ecosystems.
- NCVBDC should withdraw the recommendation to use *Gambusia* and *Poecilia* (guppy) fishes for mosquito management.
- Alternatives to *Gambusia* for mosquito control need exploration.

Collaborative efforts among experts are essential to focus on specific river basins and identify native predators for effective mosquito control.

Golden Tiger

Context: On National Tourism Day, the Chief Minister of Assam shared an image capturing the sighting of a rare golden tiger in Kaziranga National Park.

Golden Tiger

The golden tiger is essentially a Bengal tiger with a unique coloration resulting from a recessive gene.

- **Coloration:** The distinctive feature of the golden tiger is its pale-golden fur with red-brown stripes, in contrast to the typical black stripes of other tiger variants.
- **Recessive Trait:** The golden tiger's coloring is attributed to the "wideband" recessive trait, impacting the expression of black pigment and influencing its overall appearance.

Mosquitofish in India

- *Gambusia*, a species of mosquitofish, gained popularity in India as a malaria control method but had unintended ecological consequences.
- Despite its initial good intentions, the use of mosquitofish led to severe ecological and environmental problems.

The Indian Council of Medical Research

- ICMR plays a crucial role in controlling mosquito-borne diseases in India.
- Reports indicate declines in native *Microhyala* tadpole populations after mosquitofish introduction.
- WHO stopped recommending *Gambusia* as a mosquito control agent in 1982 due to harmful effects.

Current Situation and Recommendations

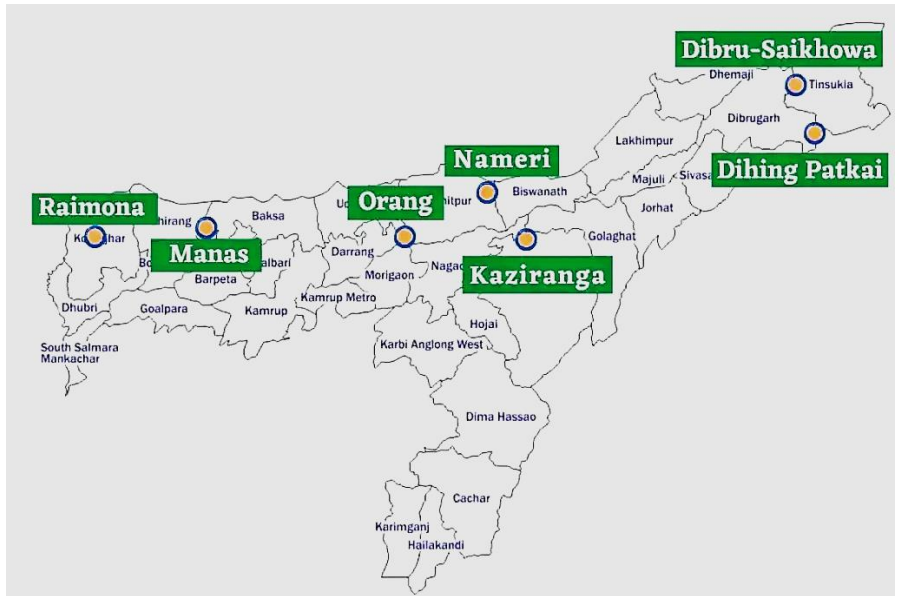
- Stringent enforcement measures are crucial to prevent further mosquitofish introductions and mitigate existing consequences.
- Collaboration among experts is suggested to identify native fish species capable of controlling mosquito larvae.
- Local alternatives should be prioritized to preserve indigenous aquatic biodiversity.
- NCVBDC should remove its recommendation for the use of *Gambusia* and *Poecilia* (guppy) fishes for mosquito control.



- **Not a Separate Subspecies:** Similar to white and black tigers, the golden tiger is not a distinct subspecies but rather a captivating result of genetic diversity within the Bengal tiger population.

Kaziranga National Park and Tiger Reserve

- **Location:** Situated in the Golaghat and Nagaon districts of Assam.
- **Flora:** Encompasses tall elephant grass, marshland, and dense tropical moist broadleaf forests.
- **Fauna:** Home to diverse wildlife, including one-horned rhinos, elephants, Royal Bengal tigers, and Asiatic water buffaloes.
- **River:** Positioned on the edge of the Brahmaputra River, with the Diphlu River flowing through the National Park.
- **Conservation Status:** Received designation as a National Park in 1974, UNESCO World Heritage Site in 1985, Tiger Reserve in 2007, and acknowledgment as an Important Bird Area by Birdlife International.



Economy

GST Challenges

Context: The recent Goods and Services Tax (GST) revenue data highlights uneven consumption growth among Indian states, indicating potential disparities in the national economic recovery.

Major Takeaways From Recent GST Data

- **Overall GST Collections:** Grew by 11.7% in the first nine months of 2023-24 compared to the previous fiscal year (2022-23).
- **State GST Collections:** Grew at a higher rate (15.2%) compared to Central GST, revealing differential consumption patterns across states.
- **Sharp Disparities Among States:** Some states (Madhya Pradesh, Maharashtra, Karnataka) showed robust growth in state GST revenues (17% to 18.8%). Others (Gujarat, West Bengal, Andhra Pradesh) lagged behind with single-digit growth or contraction.
- **Lowest Private Consumption Expansion:** National Statistical Office (NSO) estimates indicate a slow private final consumption expenditure (PFCE) growth of 4.4%, the lowest since 2002-03 (excluding pandemic times). PFCE includes expenditure by resident households and non-profit institutions on final consumption of goods and services.

What is Goods and Services Tax (GST)?

A value-added tax system levied on the supply of goods and services in India. Introduced on July 1, 2017, through the 101st Constitution Amendment Act, 2016, with the slogan 'One Nation One Tax.'

- **Tax Slabs**
 - Primary GST slabs for regular taxpayers: 0% (nil-rated), 5%, 12%, 18%, and 28%.
 - Other less commonly used rates: 3% and 0.25%.

- **Benefits**
 - **Simplified Tax Regime:** Replaced multiple indirect taxes, easing compliance and reducing paperwork.
 - **Increased Transparency:** Online GST portal simplifies tax administration and promotes transparency.
 - **Reduced Tax Burden:** Elimination of cascading taxes results in lower prices for consumers.
 - **Boosted Economic Growth:** Expected to contribute to higher economic growth and job creation.
- **GST Council**
 - A constitutional body responsible for making recommendations on GST implementation in India, constituted by the President.

Current Major Challenges Related to GST in India

Complexity and Compliance Burden

Complex structure with multiple tax slabs increases compliance requirements, posing challenges for businesses, especially smaller enterprises.

Technology and Infrastructure Readiness

Successful implementation relies on robust technological infrastructure.

Issues include lack of technological readiness among businesses and disparities in technology adoption.

Input Tax Credit (ITC) Verification

Over 29,000 bogus firms identified and busted for evading GST dues.

Multiple Registrations Across States

Businesses operating in multiple states must register separately, adding administrative burden and compliance costs.

Way Forward

- **Simplify and Rationalize Tax Structure:** Reduce the number of tax slabs for a more straightforward and uniform tax system, easing compliance for businesses.
- **Streamline Compliance Procedures:** Simplify and streamline compliance procedures to reduce administrative burden, including harmonizing return filing processes and ensuring timely refunds.
- **Focus on Anti-Evasion Measures:** Strengthen measures to curb tax evasion, especially through fake invoices and fraudulent activities. Utilize advanced data analytics and technology to identify suspicious transactions and implement stringent penalties for non-compliance.

Direct Tax Collections Cross 80% Of 2023-24 Target

Context: As of January 10th, 2024, net direct tax collections in India reached ₹14.7 lakh crores, showing a significant growth of 19.4% compared to the same period in 2022-23. This achievement means that the country has met over 80% of its target for the fiscal year 2023-24.

Trends in Direct Tax Collection

- **Total Collection:** Direct tax collection surpassed ₹14.7 lakh crores, representing 80.6% of the budget estimates for FY23-24. Net direct tax collection increased by ₹1 lakh crore since December 17, with a growth rate of 20.66% at that time.
- **Year-on-Year Growth:** The 19.41% increase over the net collections for the corresponding period of the previous year. Gross direct tax collections, according to the Central Board of Direct Taxes, rose by 16.77% to ₹17.18 lakh crore.
- **Breakdown by Category:** Personal Income Tax (PIT) inflows rose by 26.11%, while Corporate Income Tax (CIT) increased by 8.32%. Net growth in CIT collections is 12.37%, and PIT collections, after refund adjustments, recorded a growth of 27.26%. Net PIT and Securities Transaction Tax (STT) receipts rose by 27.22%.
- **Refunds Issued:** Refunds of approximately ₹2.48 lakh crore have been issued to taxpayers.

Projections by ICRA

- Predictions indicate that direct tax collection for the full year will exceed Budget estimates by ₹1 lakh crores, reflecting an 18% growth compared to provisional numbers for 2022-23.
- In 2023-24, direct tax revenues are projected to grow by 12%, driven by favorable commodity prices and efforts to boost compliance, supporting personal income tax inflows amid tax base widening.

Definition and Types of Direct Taxes

- **Definition:** Direct taxes are payments made directly to the imposing entity by individuals or companies and cannot be transferred.
- **Levying Authority:** The Central Board of Direct Taxes is responsible for levying and collecting direct taxes and formulating related policies.
- **Contribution to Economy:** Direct taxes contribute around half of the government's revenue.

Different Types of Direct Taxes

- **Income Tax:** Paid based on age and earnings, following government-determined tax slabs.
- **Corporation Tax:** Levied on the profits of corporations and business firms.
- **Minimum Alternate Tax (MAT):** Limits tax exemptions for companies, ensuring a minimum amount of corporate tax is paid.
- **Alternate Minimum Tax:** Equivalent to MAT for limited liability partnerships.
- **Capital Gain Tax:** Tax on profits from the sale of capital assets, differentiated for short-term and long-term gains.
- **Securities Transaction Tax (STT):** Tax on gains made on the domestic stock exchange.
- **Commodities Transaction Tax (CTT):** Charged on buyers and sellers of non-agricultural commodity derivatives.
- **Estate Duty:** Imposed on a person's entire estate upon death (discontinued since 1985).
- **Wealth Tax:** Abolished in 2015, it was imposed on individuals, joint Hindu families, and businesses with excess net worth.
- **Fringe Benefits Tax (FBT):** Repealed in 2009, it was paid by employers on benefits provided to employees.

Pros and Cons of Direct Taxes

- **Pros:** Economic and social balance, productivity, anti-inflation measures, certainty in tax collection, wealth distribution.
- **Cons:** Invasibility, arbitrariness, disincentivizing development.

India's direct tax collections exceeding 80% of the 2023-24 target signal robust economic recovery. Substantial growth in both Personal and Corporate Income Tax, coupled with government measures, suggests a positive outlook. Challenges like tax evasion and potential disincentives for development require continuous attention for sustained economic health.

Science & Technology

Xposat: ISRO's X-Ray Eye In The Sky

Context: ISRO recently launched the X-ray Polarimeter Satellite (XPoSat), marking the first mission of 2024 from the Satish Dhawan Space Center, Sriharikota.

- XPoSat is India's inaugural space observatory dedicated to studying the polarization of cosmic X-rays. This mission is the second of its kind, following NASA's Imaging X-ray Polarimetry Explorer (IXPE).

Mission Details

- XPoSat is an exploratory mission focused on studying X-ray emissions from bright celestial bodies.
- Observations target sources emitting polarized X-rays, particularly when neutron stars traverse Earth's shadow.
- Mission life expectancy is approximately 5 years.
- The satellite was launched into a low earth orbit (650 km) by the PSLV-C58, with successful deployment of its solar panel.

XPoSat Payloads

Indian X-ray Polarimeter (POLIX)

- World's first instrument designed for operation in the medium X-ray energy band (8-30 KeV).
- Components include a collimator, scatterer, and four X-ray proportional counter detectors.

X-ray Spectroscopy and Timing (XSPECT)

- Aims to conduct fast and high spectroscopic resolution in soft X-ray energy bands (0.8-15KeV).
- Targets various sources such as X-ray pulsars, black hole binaries, low-magnetic field neutron stars, active galactic nuclei, and magnetars.

Both payloads built by Raman Research Institute and UR Rao Satellite Centre, Bengaluru.

Significance of XPoSat

- XPoSat facilitates X-ray polarization measurement in the medium range, complementing previous timing and broadband spectroscopy efforts.
- Observations include both persistent sources and transient sources like pulsars and magnetars.
- POLIX provides valuable data on the degree and angle of polarization of X-ray photons, contributing to a comprehensive understanding of the universe.

Understanding X-ray Polarization

- X-rays, composed of electric and magnetic waves, are typically non-directional.
- Polarized X-rays, however, exhibit organized motion with waves vibrating in the same direction.
- XPoSat aims to measure the polarization of X-rays emitted by cosmic entities, such as black holes and neutron stars.

Similar Missions

Few missions have focused on X-ray polarization measurements.

- Examples include HX-POL and XL-CALIBUR (balloon-based short-duration experiments by NASA), AstroSat (India's first astronomy-based space mission), and IXPE (Imaging X-ray Polarimetry Explorer, a joint initiative by NASA and the Italian Space Agency).

Conclusion

Polarization measurements of X-rays are crucial for enhancing our understanding of the universe. However, achieving accurate measurements poses challenges, necessitating highly sensitive and precise instruments.



World's Largest Radio Telescope Project

Context: India has joined the international mega-science project, the Square Kilometer Array Observatory (SKAO), which is set to become the world's largest radio telescope. The inclusion of India in the project is notable as it brings the country's Giant Metrewave Radio Telescope (GMRT) into the collaboration.

Key Highlights

Radio Telescopes	<ul style="list-style-type: none"> Radio telescopes are instruments designed to detect and amplify radio waves from space, providing crucial insights into the universe. These telescopes observe various electromagnetic waves, including radio waves, gamma rays, X-rays, and infrared radiation. A basic radio telescope comprises antennas to collect radio waves, a receiver and amplifier to enhance weak signals, and a recorder to document the signals.
Giant Metrewave Radio Telescope (GMRT)	<ul style="list-style-type: none"> GMRT, situated near Narayangaon, Pune, is a collection of 30 steerable parabolic radio telescopes, each with a diameter of 45 meters. Operated by the National Centre of Radio Astrophysics (NCRA), GMRT began operations in 2000, focusing on low-frequency radio astronomy. It is recognized as one of the most challenging experimental programs in basic sciences and has been instrumental in studying various celestial bodies.
National Centre for Radio Astrophysics (NCRA)	<ul style="list-style-type: none"> NCRA, based in the Pune University Campus, is a research institution in India dedicated to radio astronomy. It originated from the Radio Astronomy Group of the Tata Institute of Fundamental Research (TIFR) in the early 1960s.
Square Kilometer Array Observatory (SKAO)	<ul style="list-style-type: none"> SKAO is an international radio telescope project being constructed in Australia and South Africa. The project involves countries such as the UK, Australia, South Africa, Canada, China, France, India, Italy, and Germany. SKAO aims to transform our understanding of the Universe through cutting-edge radio telescopes and global collaboration. India, represented by NCRA and other institutions, has contributed to SKAO since the 1990s, particularly in developing and operating the Telescope Manager software.
Gravitational Waves and LIGO	<ul style="list-style-type: none"> Gravitational waves are ripples in space-time caused by violent processes in the Universe, predicted by Albert Einstein in 1916. The Laser Interferometer Gravitational-Wave Observatory (LIGO) is the world's largest gravitational wave observatory, consisting of two widely-separated interferometers in the United States.

Conclusion

In summary, India's inclusion in the SKAO signifies collaboration on a global scale in advancing radio astronomy, with the GMRT playing a significant role in this endeavor.

Upcoming Space Missions

Context: In 2023, significant space missions, such as NASA's OSIRIS-REx and India's Chandrayaan-3, marked a pivotal year for space exploration.

- 2024 is anticipated to continue this trend with new missions under NASA's Artemis plan and Commercial Lunar Payload Services initiative targeting the moon.

Space Missions Planned for 2024	
Europa Clipper	<ul style="list-style-type: none"> NASA's upcoming mission to explore Europa, one of Jupiter's largest moons. Europa, slightly smaller than Earth's moon, has an icy surface concealing a potential saltwater ocean.



	<ul style="list-style-type: none"> The mission aims to investigate the moon's habitability for extraterrestrial life through detailed study of its icy shell, surface geology, and subsurface ocean.
Artemis II launch	<ul style="list-style-type: none"> Part of NASA's Artemis program, Artemis II is a crewed lunar mission set to orbit the Moon, marking humanity's return since 1972. Planned for a 10-day journey, it validates systems for sustained lunar presence and emphasizes NASA's commitment to lunar exploration and future missions to Mars.
VIPER to Search for Water on the Moon	<ul style="list-style-type: none"> VIPER (Volatiles Investigating Polar Exploration Rover) is a robot exploring the moon's south pole in late 2024. Designed to search for volatiles like water and carbon dioxide, VIPER aims to provide resources for future human exploration on the moon.
Lunar Trailblazer and PRIME-1 Missions	<ul style="list-style-type: none"> Lunar Trailblazer, part of NASA's SIMPLEx program, will orbit the moon, measuring surface temperature and mapping water molecules globally. PRIME-1, a mid-2024 mission, is Lunar Trailblazer's ride and will conduct a test run for the drill that VIPER will use.
JAXA's Martian Moon eXploration Mission	<ul style="list-style-type: none"> The MMX mission by the Japanese Aerospace Exploration Agency aims to study Mars' moons Phobos and Deimos. Launch planned around September 2024, with a three-year mission to observe, land on Phobos, and collect samples before returning to Earth.
ESA's Hera Mission	<ul style="list-style-type: none"> A European Space Agency mission to study the Didymos-Dimorphos asteroid system. Launching in October 2024, Hera will study the physical properties of these asteroids, testing the "kinetic impact" technique for planetary defense.

ISRO's Space Missions set for 2024



- PSLV-C58 with XPoSat:** India's first X-Ray Polarimeter Satellite launched in January 2023 to investigate X-ray sources' polarization in the universe.
- NASA-ISRO Synthetic Aperture Radar (NISAR):** A collaborative mission for remote sensing, providing insights into Earth systems.
- Gaganyaan 1:** A critical step in India's Human Spaceflight Programme, a test flight involving three crew members in collaboration with Hindustan Aeronautics Ltd.
- Mangalyaan-2 (MOM 2):** ISRO's sequel to the successful Mars Orbiter Mission, aiming to study Mars' surface, atmosphere, and climatic conditions with advanced scientific instruments.
- Shukrayaan-1:** Under the Venus Orbiter Mission, ISRO plans to launch Shukrayaan-1 to orbit Venus for five years, studying its atmosphere.

South Korea Superconductivity Claim Revived With New Data

Context: Last year, a material known as LK-99 gained widespread attention when South Korean researchers asserted its potential as a room-temperature superconductor. However, subsequent scrutiny by independent researchers uncovered issues in the data, leading to the dismissal of the claim. A recent study, however, is rekindling interest in LK-99.

Key Highlights

- A group of scientists from China and Japan, associated with research institutes, have revisited the controversial material LK-99.

- The scientists reported identifying signs of superconductivity in a compound called copper-substituted lead apatite, observing the Meissner effect.
- Superconductivity, a state with zero electrical resistance, has only been achieved at extremely low temperatures, typically around 100°C below zero. The pursuit of a room-temperature superconductor has been ongoing for decades.
- The Meissner effect is one of the phenomena exhibited by materials that can conduct electric currents without resistance, indicating superconductivity.
- The goal is to find a material displaying superconductivity at room temperature, facilitating applications such as lossless electricity transmission, medical diagnostics, computing, power generation, and advanced electronics.
- The hype in the scientific community surrounding superconductors led to controversies in 2023, including retractions of studies reporting superconductivity in lutetium hydride and manganese sulphide.
- The new study on LK-99 suggests the material might exhibit near-room-temperature superconductivity, challenging previous findings. The researchers employed a "state-of-the-art" approach and tested for signs of superconductivity using a hysteresis loop in direct current measurements.

Superconductivity

- Superconductivity involves materials with zero electrical resistance, allowing efficient flow of electricity.
- Current superconductors operate at extremely low temperatures, often below -250 degrees Celsius.
- The Meissner effect is a characteristic of superconductors, showcasing their ability to conduct electric currents without resistance.
- Scientists aim to discover materials displaying superconductivity at room temperature and normal pressure conditions.

Details on the new study

- The researchers synthesized LK-99 samples using a "state-of-the-art" method and tested for signs of superconductivity.
- The study focused on the hysteresis loop in direct current measurements, applying a slowly strengthening magnetic field to LK-99 samples at different temperatures.
- Results indicated a potential critical temperature of around -23 degrees Celsius, suggesting near-room-temperature superconductivity without the need for pressurization.
- The possibility of LK-99 being a near-room-temperature superconductor has captured the attention of scientists, rekindling interest in the material.

Further explanation of the hysteresis experiment

- The Chinese research group conducted a classic hysteresis experiment by applying a gradually increasing magnetic field to their synthesized LK-99 samples.
- The material became increasingly magnetized during the application of the magnetic field.
- When the magnetic field was slowly reduced, the material's magnetization did not retrace its original path but followed a separate trajectory, forming a hysteresis loop.
- The hysteresis loop's shape contains information about the material's properties under varying conditions, including temperature and magnetic field strength.

Reported findings of the new study

- The researchers reported that LK-99 samples might have a critical temperature of approximately -23 degrees Celsius.
- This critical temperature is considered near room temperature, presenting the possibility of near-room-temperature superconductivity in LK-99.
- The observed Meissner effect at this temperature further supports the potential superconducting properties of LK-99.

- Crucially, the reported superconducting states in these samples did not require pressurization, indicating a potential breakthrough in achieving near-room-temperature superconductivity without extreme conditions.

Significance and Attention

- The findings of the new study have drawn significant attention from the scientific community due to the potential implications of near-room-temperature superconductivity.
- If confirmed, such a discovery could mark a ground breaking advancement in physics, offering practical applications in various fields, including energy transmission, medical technology, computing, and electronics.
- The study serves as a cautious response to previous controversies surrounding LK-99, as the researchers employed a meticulous approach and distinct testing criteria.
- While the results are promising, further validation and independent verification will be crucial in establishing the legitimacy of LK-99 as a near-room-temperature superconductor.

The ongoing pursuit of room-temperature superconductors has been fueled by the intriguing findings of the new study, presenting the scientific community with a potential breakthrough.

How A Super-Energetic Particle From Outer Space Could Help Physics?

Context: Japanese scientists have identified a potent cosmic ray on Earth called 'Amaterasu,' marking it as the second-highest-energy cosmic ray ever detected.

What is Amaterasu?	
Naming and Origin	It is a high-energy cosmic ray named after the Japanese Sun goddess.
Unusual Arrival	Appears to have originated from a void in space where no known entities exist.
Energy Level	Possesses an energy exceeding 240 exa-electron volts (EeV), making it millions of times more powerful than particles produced by the Large Hadron Collider, the world's most powerful particle accelerator.
Ranking	Stands as the second-highest-energy cosmic ray, following the Oh-My-God particle detected in 1991 with a recorded energy level of 320 EeV.
What are cosmic rays?	
Nature	High-energy particles, nearly reaching the speed of light, originating from the Sun, our galaxy, and distant galaxies.
Composition	Includes protons, alpha particles (helium nuclei), and heavier ions.
Ultra-High-Energy Cosmic Rays (UHECRs)	Subatomic particles from extragalactic sources with energies surpassing 1 EeV.

More About News

- In May 2021, scientist Toshihiro Fujii discovered the high-energy cosmic-ray event 'Amaterasu,' naming it after the Japanese sun goddess. The data analysis, conducted between May 2008 and November 2021 by the U.S.-based Telescope Array Project, led to this remarkable finding.
- Amaterasu's energy level measured an astonishing 240 exaelectron-volt (EeV), approximately 40 million times more energetic than particles accelerated in the Large Hadron Collider (LHC).
- Ultra-high-energy cosmic rays (UHECRs), like Amaterasu, with energies exceeding 1 EeV, attract special interest due to limitations imposed by cosmic microwave background radiation on their propagation in space.
- Amaterasu's origin remains a mystery as it seems to emerge from an empty region of the universe, challenging existing astronomical explanations and prompting considerations of unknown phenomena.
- This discovery not only questions the Standard Model of particle physics but also implies the potential existence of uncharted phenomena. In 1991, the "Oh My God" particle, with an energy level of 320 EeV, remains the most energetic cosmic ray ever recorded.

Significance

Studying cosmic rays is vital for understanding astrophysical phenomena and gaining insights into particle properties at extremely high energies.

GM Mustard

Context: The Supreme Court is currently scrutinizing the approval process of the genetically engineered mustard hybrid, Dhara Mustard Hybrid-11 (DMH-11), specifically focusing on the consideration of reports from the court-appointed Technical Experts Committee (TEC) on biosafety by the Genetic Engineering Appraisal Committee (GEAC).

About Hybrid Mustard DMH-11

- Dhara Mustard Hybrid-11 (DMH-11) is a genetically modified hybrid variety of the mustard species *Brassica juncea*.
- Developed by Professor Deepak Pental from the University of Delhi to reduce India's dependence on edible oil imports.
- Contains two alien genes from *Bacillus amyloliquefaciens*, enabling the breeding of high-yielding commercial mustard hybrids.
- Created through transgenic technology involving the Bar, Barnase, and Barstar gene systems, conferring male sterility, restoring fertility, and providing resistance to Glufosinate.

About Mustard

- Mustard is a predominantly self-pollinating crop, posing challenges for the natural development of hybrids that typically yield more than normal varieties.

Supreme Court's Inquiry

- The Supreme Court questions whether GEAC considered TEC's biosafety reports before approving DMH-11.
- Attorney General asserts that GEAC, as a statutory body, examined relevant scientific data before approval.
- Justice Nagarathna raises concerns about the adequacy of consideration for TEC's reports, including a dissenting note.

Controversy and Debate

- Petitioners argue that GEAC's regulatory system is flawed and contains conflicts of interest.
- Concerns raised about the use of foreign genes and herbicide tolerance in DMH-11, with fears of environmental risks and impacts on pollination.

Future of GM Mustard in India

- Not the first GEAC approval for GM mustard; a similar approval in 2017 was stalled following a Supreme Court case.
- Despite GEAC's approval, the Environment Ministry has not officially endorsed GM mustard.
- If approved, DMH-11 would be commercially available after three growing seasons under ICAR supervision.

Genetic Engineering Appraisal Committee (GEAC)

- Functions under the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- Responsible for appraising activities involving large-scale use of hazardous microorganisms and recombinants, especially regarding environmental impacts.
- Reviews proposals related to the release of genetically engineered (GE) organisms and products, including experimental field trials.
- Chaired by the Special Secretary/Additional Secretary of MoEF&CC and co-chaired by a representative from the Department of Biotechnology (DBT).
- Monthly meetings with 24 members to review applications.

Regulatory Framework and Approvals

- The Centre claims a strengthened regulatory regime for GM crops since 2012, ensuring a transparent and science-based framework for environmental risk assessment.
- DMH-11's environmental release approval is conditional, based on a rigorous risk analysis approach.

Despite arguments for the benefits of GM mustard in enhancing agricultural productivity, concerns persist about biosafety, environmental impact, and the adequacy of the regulatory framework. The resolution of this case will be pivotal in shaping the future of genetically modified crops in India.

Quantum Gates: Devices That Translate Quantum Effects To Computing Awesomeness

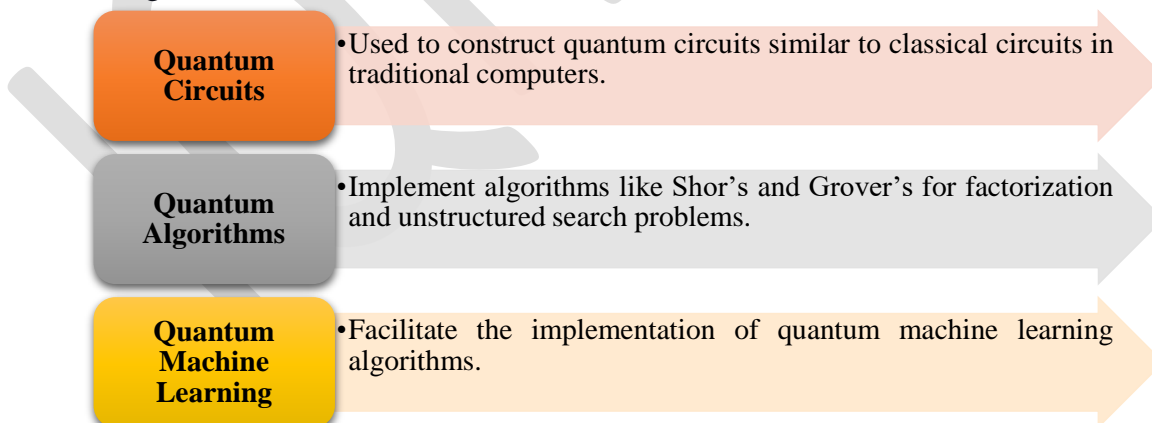
Context: Quantum gates and its technological applications are gaining momentum in the country.

About Quantum Gates

Quantum gates are physical processes or circuits altering the state of qubits or groups of qubits. Electromagnetic pulses often serve as gates when particles or superconducting qubits are the physical qubits.

- **Operations and Quantum Circuits**
 - They perform operations on qubits, enabling the creation of quantum circuits for intricate calculations.
 - Quantum algorithms, like those using Hadamard gates and CNOT gates, can be implemented through these operations.
 - Unlike classical bits, qubits can exist in superpositions of 0 and 1 simultaneously.
- **CNOT Gate**
 - Acts on two qubits: a control qubit and a target qubit.
 - Control qubit remains unaffected, while the target qubit flips if the control qubit is in the state of 1.
- **Comparison with Classical Bits**
 - In classical computing, bits can only be in a state of 0 or 1, whereas qubits exhibit superposition.
- **Challenges with Transistors**
 - Traditional computers use semiconductor transistors, but they become unreliable for computational tasks as they get smaller.
 - Quantum effects become more pronounced in smaller transistors.
- **Privacy Concerns and Superposition**
 - Superposition accelerates quantum computers but is fragile, degrading when qubits interact with the environment.
 - Privacy concerns arise due to uncertainties in data protection.

Applications of Quantum Gates



Challenges in Quantum Computing Sector

Engineering Challenges

Error Correction Challenges

India-Specific Challenges



- **Engineering Challenges**
 - Reliable quantum computers need at least 1,000 qubits; current processors are smaller.
 - Qubits require specific conditions such as very low temperatures and protection against physical shock.
- **Error Correction Challenges**
 - No-cloning theorem poses challenges in perfectly cloning qubit states.
 - Quantum computers amplify errors when more qubits are added.
- **India-Specific Challenges**
 - Shortage of candidates with expertise in quantum physics, engineering, and statistics.
 - Lack of domestic manufacturing capabilities for quantum computing hardware.
 - Absence of clarity on short or long-term quantum applications.

National Quantum Mission (NQM)

Objective	<ul style="list-style-type: none"> • Strengthen India's quantum research and development. • Indigenously develop quantum-based computers.
Deliverables	<ul style="list-style-type: none"> • Develop intermediate-scale quantum computers in various platforms. • Establish satellite-based secure quantum communications and quantum networks. • Develop magnetometers, atomic clocks, and quantum materials.
Thematic Hubs	<ul style="list-style-type: none"> • Four thematic hubs focusing on Quantum Computing, Quantum Communication, Quantum Sensing & Metrology, and Quantum Materials & Devices.
Benefits	<ul style="list-style-type: none"> • Accelerate quantum technology-led economic growth. • Address communication, health, financial, and energy sectors. • Contribute to national priorities like digital India and Make in India.

Challenges in Quantum Computing Development

- **Real-World Problem Solving:** Prototype quantum computers have not proven helpful in solving real-world issues.
- **Extreme Conditions Requirement:** Current quantum systems require extremely cold conditions for operation.
- **Engineering Limitations:** Practical quantum computers need at least 1,000 qubits; current processors fall short.
- **Disturbance and Error Correction:** Qubits in superposition are sensitive to disturbances, making error correction challenging. No-cloning theorem makes perfect copies impossible, amplifying errors in quantum computers.

Quantum gates represent a significant advancement in quantum computing. Challenges, from engineering limitations to skill shortages, highlight the need for strategic planning in India's quantum technology development.

THCBD

Context: Scientists at CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu, discovered antibiotic properties in phytocannabinoids, a class of compounds found in the cannabis plant.

How is THCBD made?

- Cannabinoids, a class of compounds in the cannabis plant, include phytocannabinoids with the prefix 'phyto' indicating their plant origin.
- Cannabinoids bind to receptors in animal bodies, producing various neurological effects.
- Researchers extracted cannabidiol from cannabis and, using palladium as a catalyst, reacted it with hydrogen, resulting in a mixture of molecules, including tetrahydrocannabidiol (THCBD).

What were THCBD's effects?

- THCBD was tested against bacterial cultures, exhibiting efficacy against Gram-positive *S. aureus*, with 0.25 g/ml termed "potent."
- THCBD showed strong effectiveness against efflux pump overexpression and MRSA strains.

- It significantly reduced viable microbial cells in *S. aureus* skin infections in mice.
- THCBD complemented or was indifferent to the effects of common antibiotics like mupirocin, penicillin G, and ciprofloxacin, suggesting potential combined use.

Is THCBD well-studied?

- The researchers found the study "exciting" and "thought-provoking," contributing to new therapeutics against antimicrobial resistance (AMR).
- THCBD, derived from cannabis, faced challenges in research collaboration due to legal constraints and its intoxicating reputation.
- By emphasizing cannabis's antibacterial nature, the project aims to overcome stigma, turning it into a valuable resource.

What is the solubility challenge?

- Solubility is crucial for drug effectiveness, and THCBD leans slightly towards lipophilicity.
- Achieving a balanced solubility is vital for appropriate absorption in the body, considering factors like hydrophilicity and lipophilicity.
- The cytoplasm and cell walls in a biological system influence solubility, emphasizing the importance of THCBD's "drug-like" balance for proper solubility.

NISAR Mission on track for a launch soon: NASA official

Context: The NASA-ISRO Synthetic Aperture Radar (NISAR) Mission, aimed at observing natural processes and changes in Earth's ecosystems, is scheduled for an "early 2024" launch.

About the Mission

Joint Collaboration

- NISAR is a Low Earth Orbit observatory developed through collaboration between NASA and ISRO, showcasing international cooperation in space exploration.

Launch Vehicle

- The mission is slated to launch from the Satish Dhawan Space Centre in Sriharikota using ISRO's GSLV Mark-II launch vehicle.

Data Utility

- NISAR's data will provide unprecedented detail, aiding researchers in monitoring volcanic activity, tracking groundwater effects, measuring ice sheet melt rates, and observing changes in global vegetation distribution. The mission's unique open science and open data policy broaden its scope.

Mission Life

- The \$1.5-billion NISAR mission has a planned mission life of three years, conducting Earth land and ice-covered surface surveys every 12 days post a 90-day commissioning period.

Advanced SAR Technology

- **Dual-Band SAR:** NISAR features L and S dual-band Synthetic Aperture Radar (SAR) utilizing the Sweep SAR technique, delivering both wide coverage and high-resolution data.
- **Observatory Structure:** SAR payloads are mounted on the Integrated Radar Instrument Structure (IRIS) with the spacecraft bus, forming an observatory.

- **Contributions:** NASA's Jet Propulsion Laboratory (JPL) provides the L-band SAR and key components, while ISRO's U R Rao Satellite Centre contributes the spacecraft bus, S-band SAR electronics, launch vehicle, and mission operations.

Important Milestones Achieved

Thermal Vacuum Testing

- Critical system-level thermal vacuum testing, conducted in Bengaluru, ensures the spacecraft's effective operation under extreme temperature conditions.

EMI and EMC Testing

- Electromagnetic interference (EMI) and electromagnetic compatibility (EMC) testing have been successfully accomplished.

Upcoming Vibration Tests

- The next phase involves conducting vibration tests to simulate the harsh launch environment, subjecting the satellite to intense vibrations resembling rocket launch conditions.

How physicists are making sense of the mystery of pulsar glitches

Context: In 1969, two research groups reported a sudden and brief increase in the rotation rate of a pulsar; this glitch remains unexplained 44 years later. Physicists have observed more than 3,000 pulsars to date, identifying around 700 glitches, providing insights into the reasons behind these phenomena.

About Pulsars

- Pulsars are rapidly rotating neutron stars emitting intense beams of radiation.
- Formed from collapsed star cores, their periodic signals, similar to lighthouse beams, result from the acceleration of charged particles along magnetic fields.
- Pulsars offer unique insights into stellar remnants and extreme physical conditions.
- Discovered in 1967 during a radio wave study at the University of Cambridge, pulsars are rotating neutron stars emitting periodic radio signals.
- Linked to the 1932 discovery of the neutron, pulsars result from the collapse of heavy star cores into super-dense neutron stars.

Pulsar Glitches

- Pulsar glitches are unexpected jumps in a pulsar's rotation, believed to be caused by its superfluid core briefly coupling with the crust, releasing a hidden burst of energy.
- These fleeting "hiccups" provide an opportunity to investigate the interior of these dense stars.
- The rotation of pulsars slows over time, releasing energy that accelerates charges, producing radio signals.
- Slow relaxation post-glitch indicates a superfluid state inside neutron stars, where vortices sticking to nuclei cause glitches.

Psychoanalysis

Context: In the recent context, the Delhi Police stated that the six individuals implicated in the Parliament breach incident underwent psychoanalysis at a government institute within the city to determine their motives.

Origins and Development of Psychoanalysis

- Psychoanalysis, coined by Sigmund Freud, is not just a form of psychotherapy but a worldview.
- It was the first modern Western psychotherapy system developed by Freud and his colleagues.
- Initially designed as a treatment for symptoms unresponsive to conventional methods, classical psychoanalysis has evolved over time.
- Influenced by various fields, such as neurology, psychiatry, psychology, philosophy, and natural sciences, psychoanalysis aims to raise awareness of unconscious wishes and defenses.

The Unconscious in Psychoanalytic Theory

- Freud proposed that threatening memories and impulses are kept in the unconscious.
- Cultural conditioning plays a role in repressing instinctual impulses.
- Repression, a vital construct, involves unconscious forgetting to protect the psyche.
- Freud distinguished between the id, ego, and superego, but contemporary psychoanalysts view the mind as having multiple self-states.

Fantasies, Defenses, and Resistance

- Freud suggested that fantasies serve various psychic functions, including safety and self-esteem regulation.
- Defense mechanisms, such as projection, reaction formation, rationalization, splitting, denial, displacement, identification, and sublimation, help individuals cope with emotional pain.
- Resistance, formalized by Freud, occurs when clients are hesitant to engage in psychoanalysis.

Transference

- Freud observed clients transferring past templates onto him, providing insights into adverse past experiences.
- Maintaining therapist anonymity minimizes transference.
- Freud acknowledged the therapist's potential unconscious conflicts and the need to address countertransference.

Psychoanalysis as a Therapeutic Approach

- Freud interpreted dreams as wish fulfillment, a central aspect of psychoanalysis, though contemporary psychiatrists disagree.
- Psychoanalysis posits that making the unconscious conscious leads to change.
- The therapeutic relationship serves as a change mechanism, challenging clients' maladaptive models.

Conclusion

Traditional psychoanalysis involves frequent sessions over years, but contemporary practice often opts for shorter, once or twice weekly consultations.

Aditya L1

Context: India's inaugural mission to explore the Sun, Aditya L1, is approaching its destination. Launched on September 2, the spacecraft is set to enter a 'halo orbit' around Lagrange Point 1 (L1), one of the five locations in the Sun-Earth system where gravitational effects balance.

Remote sensing payloads studying the Sun

- Visible Emission Line Coronagraph (VELC) for corona imaging and spectroscopy.
- Solar Ultraviolet Imaging Telescope (SUIT) for photosphere and chromosphere imaging.
- Solar Low Energy X-ray Spectrometer (SoLEXS) for soft X-ray observations.
- High Energy L1 Orbiting X-ray Spectrometer (HEL1OS) for hard X-ray observations.

In situ study payloads at Lagrange point L1

- Aditya Solar wind Particle Experiment (ASPEX) for solar wind analysis.
- Plasma Analyser Package For Aditya (PAPA) for electron and heavier ion analysis.
- Advanced Tri-axial High Resolution Digital Magnetometers for in situ measurements.

Aditya-L1 Mission

- **About:** Named after the Sanskrit word for Sun, Aditya is a planned coronagraphy spacecraft designed and developed by ISRO and various Indian research institutes. Launched on September 2, 2023, it marks India's first dedicated mission to observe the Sun.
- **Objective:** Aditya L1's payloads aim to provide essential insights into phenomena such as coronal heating, coronal mass ejections, pre-flare and flare activities, and space weather dynamics, including particle and field propagation.
- **Study conducted by Aditya L1:** The spacecraft carries seven payloads to observe the photosphere, chromosphere, and the outermost layers of the Sun (corona) using electromagnetic and particle/magnetic field detectors. Four payloads directly study the Sun, while three in situ study particles and fields at Lagrange point L1.

Significance of Aditya L1 Mission

- India joins the league of space agencies reaching L1, alongside NASA and ESA.
- Studying the Sun from space is crucial due to the various radiations emitted, necessitating space-based observations for a comprehensive understanding.
- Understanding space weather is vital for satellite orbits, electronics, and Earth's stability.

Lagrange Points

Lagrange points are positions where gravitational pull equals the centripetal force needed for a small object to move with two large masses. L1, currently hosting the Solar and Heliospheric Observatory Satellite SOHO, offers an uninterrupted view of the Sun.

Conclusion

The Aditya L1 spacecraft is set to reach L1 on January 6, initiating a crucial maneuver by ISRO to bind it to an orbit around L1. L1 is approximately 1.5 million km from Earth, representing 1% of the Earth-Sun distance. The halo orbit around L1 provides continuous observation of solar activities without occultation or eclipse, offering a significant advantage for ongoing solar monitoring.

Multiple Sclerosis

Context: DNA extracted from the bones and teeth of ancient Europeans, dating back up to 34,000 years, offers insights into the origins of Multiple Sclerosis, a neurological disease.

Key Observations

Research Scope

- Involves ancient DNA sequencing from 1,664 individuals in Western Europe and Asia.
- Comparison with modern DNA from the UK Biobank, including 410,000 "white-British" people and 24,000 born outside the UK.

Multiple Sclerosis and Migration Event

- Multiple Sclerosis, a chronic brain and spinal cord autoimmune disorder, showed a pivotal migration event 5,000 years ago.
- Yamnaya people migrated from modern Ukraine and southern Russia to Western Europe during the Bronze Age.
- Genetic traits, initially protective against infections from livestock, increased MS risk as sanitary conditions improved.

What is Multiple Sclerosis?

About	<ul style="list-style-type: none"> ○ Chronic autoimmune disease affecting the central nervous system. ○ Immune system attacks and damages the myelin sheath around nerve fibers in the brain and spinal cord.
Symptoms	<ul style="list-style-type: none"> ○ Muscle weakness, numbness, bladder issues, bowel problems, fatigue, dizziness, and damaged spinal cord nerve fibers. ○ Difficulty in early recognition due to common symptoms; diagnosis often delayed.
Causes	<ul style="list-style-type: none"> ○ Unknown exact cause; potential combination of genetic factors, smoking, stress, and deficiencies in Vitamin D and B12.

What is Deoxyribonucleic Acid (DNA)?

Definition

- Organic molecule with a complex molecular structure.
- Comprises strands of monomer nucleotides arranged in a double helix structure.
- Discovered as a double-helix polymer by James Watson and Francis Crick in 1953.

Essential Role

- Crucial for transferring genetic characteristics from one generation to the next.
- Majority found in the cell nucleus, known as nuclear DNA.

The problem with India's science management

Context: Scientific advances contributing to deployable technologies are crucial for sustained economic progress in any nation.

Steps Taken to Overhaul India's Science Establishment

- Establishment of the National Research Foundation (NRF).
- Restructuring of the Defense Research and Development Organisation (DRDO).

Issues with India's Science Management

Low R&D Expenditure

Slow Progress in Key Fields

Public Sector Domina

Long-Term Funding

Issues with Senior Scientist

Concentration of Power

- **Low R&D Expenditure:** India's R&D expenditure is only 0.7% of GDP, significantly lower than the USA (3.5%) and China (2.4%).
- **Slow Progress in Key Fields:** Fields like space, nuclear energy, genomics, robotics, and AI are experiencing sluggish advancements.
- **Public Sector Dominance:** Governmental bureaucracy results in slow funding approvals.
- **Long-Term Funding Issues:** Lack of commitment to sustained funding for critical projects.
- **Issues with Senior Scientists:** Micromanagement of institutional accounts and a lack of accountability among senior scientists.
- **Concentration of Power:** Limited institutions with exclusive access to scientific equipment lead to abuse of power and monopolization of appointments, awards, and foreign accolades.

Incorrect Assumption About Scientific Leadership

- **Administering Complex Organizations:** Administering an organization is different from scientific work and cannot be a side project for a working scientist.
- **Lack of Administrative Training:** Scientists lack training in prioritizing between time, cost, and precision in administrative decision-making.
- **Conflict of Interest:** Academic scientists with administrative control may lead to an abuse of power due to a potential conflict of interest.

Recommendations for Improvement

- **Learn from International Best Practices:** Adopt practices like the separation of administrators and scientists, as observed in US universities.
- **Establish a Central Service:** Select and train scientists for an all-India science administration central service.

Addressing these concerns in the administrative setup of India's science establishment is essential for achieving economic and strategic aspirations. Without such reforms, the potential for injustice to these aspirations remains.

Health

JN.1

Context: Designated as a Variant of Interest (VoI) by the World Health Organization (WHO), JN.1 exhibits genetic changes warranting monitoring, though it has not attained the status of a Variant of Concern (VoC).

Historical Context	
Origins and Spread of COVID-19	The initial reports of the novel coronavirus (2019-nCoV) surfaced in December 2019 in China, later named Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). The virus swiftly spread globally, prompting worldwide lockdowns and travel restrictions to mitigate transmission.
Vaccine Development and Variant Evolution	Multiple COVID-19 vaccines were swiftly developed and distributed globally. Nevertheless, the virus underwent mutations, leading to the emergence of diverse variants, such as Alpha, Beta, Gamma, and Delta, differing in transmissibility, severity, and vaccine effectiveness.
Omicron Variant	By the close of 2021, the Omicron variant (BA.1.1.529) gained prominence due to its heightened transmissibility. Although it caused a surge in cases, especially in vaccinated individuals, it generally resulted in less severe disease.
Continued Evolution and Surveillance	The virus continued evolving, giving rise to numerous subvariants and recombinant lineages. Health organizations and governments maintained vigilance through surveillance and genomic sequencing. In May 2023, the WHO declared the end of the COVID-19 pandemic but underscored the importance of ongoing monitoring.

JN.1 Sub-Variant

- JN.1, identified as a newly recognized subvariant of SARS-CoV-2, has attracted attention for its rapid spread since its emergence in September.
- Initially associated with BA.2.86, a lineage of the Omicron variant, JN.1 has been classified as a "variant of interest" by the WHO due to its increasing prevalence, especially in the Northern Hemisphere.
- While it constitutes a significant portion of COVID-19 cases in the United States and other countries, there is no current evidence suggesting increased severity or greater public health risk compared to other variants.

Analyzing the Surge in COVID-19 Cases

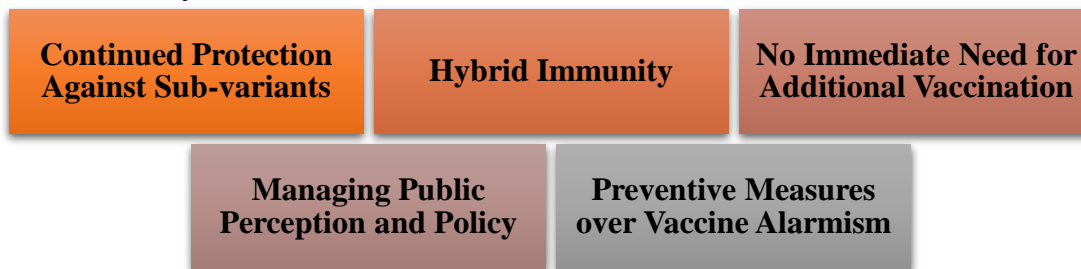
Endemic Nature of COVID-19: The article underscores that SARS-CoV-2 is likely to persist globally, similar to common viruses. Anticipating seasonal fluctuations in case numbers, continuous tracking of the virus and its variants is imperative.

Genomic Variability and Risk Assessment: Since 2019, over 1,000 subvariants and recombinant sub-lineages of COVID-19 have been reported. Not every genetic change is significant, necessitating international agencies and experts to assess associated risks.

Interpreting Data: The rise in cases in India may be attributed to increased testing, and COVID-19 deaths often occur in individuals already unwell, not necessarily caused by the virus. Daily COVID-19 deaths, when compared to deaths from other causes, are relatively low.

Normalization of COVID-19: As COVID-19 is no longer a novel virus, the article advocates treating it like any other respiratory illness, shifting focus from a public health crisis to an individual health concern.

Vaccination and Immunity in India



- **Continued Protection Against Sub-variants:** Existing vaccines and natural infections offer ongoing protection against emerging sub-variants, including JN.1.
- **Hybrid Immunity:** The article highlights the concept of hybrid immunity, combining the protective effects of natural infection and vaccination.
- **No Immediate Need for Additional Vaccination:** There is currently no scientific evidence supporting the necessity of a fourth COVID-19 vaccine shot for any age group.
- **Managing Public Perception and Policy:** The vaccine response plays a pivotal role in guiding public health policies and shaping public perception. The article suggests a shift from panic to a more measured approach, treating COVID-19 as a manageable respiratory illness rather than a public health emergency.
- **Preventive Measures over Vaccine Alarmism:** Emphasizing standard public health measures like surveillance and improved clinical management is advocated over undue alarmism about new vaccine doses.

Measures to be taken by Government and Public

By Government	By Public
<ul style="list-style-type: none"> • Continuous Monitoring: Maintain genomic sequencing to track new variants, especially JN.1. • Public Health Measures: Implement standard preventive measures and surveillance for respiratory infections. • Healthcare Services: Ensure readiness to manage a potential increase in respiratory illnesses. • Science Communication: Provide clear, interactive, and understandable public communication regarding COVID-19 and new sub-variants. • Education: Avoid drastic measures like school closures, managing risks with appropriate hygiene and safety protocols. 	<ul style="list-style-type: none"> • Responsibility and Awareness: Act responsibly by not spreading unverified information and stay informed through reliable sources. • Vaccination: Acknowledge the ongoing protection of current vaccines and natural immunity against sub-variants. • Personal Health Measures: Adhere to good respiratory etiquette, wear masks when experiencing flu-like symptoms, and practice frequent handwashing. • Rational Perspective: Recognize COVID-19 as similar to other respiratory illnesses, avoiding undue alarm.

Conclusion

The perception of COVID-19 as a regular respiratory illness, emphasizing individual health over public health concern is visible. While the virus is here to stay, it is not deemed a major cause for concern.

Entrepreneurship: Turning The Tide Against Antimicrobial Resistance

Context: In the battle against the growing threat of antimicrobial resistance (AMR), the exploration of novel antibiotics is crucial. Zosurabalpin emerges as a hopeful contender, presenting a potential alternative for addressing drug-resistant Acinetobacter infections. Its early potential has garnered attention in Nature magazine, and it is currently progressing through the initial phase of clinical trials.

Promising Antibiotics in the Fight Against AMR

- Zosurabalpin, highlighted in Nature magazine, is undergoing Phase 1 clinical trials as a potential solution for drug-resistant Acinetobacter infections.
- Cefiderocol, developed by Shionogi and distributed by GARDP, is gaining recognition as an effective agent against resistant infections and is already approved in various countries.
- Wockhardt's cefepime-zidebactam, currently in international Phase 3 trials, marks a significant advancement in the Indian pharmaceutical landscape.

Antimicrobial Resistance (AMR)	
Definition	AMR occurs when microorganisms no longer respond to medicines, making infections harder to treat and increasing the risk of severe illness and death.
Causes	Can arise through genetic mutation, species acquiring resistance from others, spontaneous occurrences, or horizontal gene transfer.
Main Causes	<ul style="list-style-type: none"> • Misuse and overuse of antimicrobials. • Lack of clean water and sanitation. • Inadequate infection prevention and control. • Lack of awareness.

Government Steps to Address AMR

National Action Plan (NAP) for AMR (April 2017)	• Focuses on increasing awareness, strengthening surveillance, promoting research, and improving infection prevention and control.
Delhi Declaration on AMR	• An inter-ministerial consensus signed by relevant ministries in India.
Antibiotic Stewardship Program (AMSP)	• Initiated by the Indian Council of Medical Research (ICMR) in 20 tertiary care hospitals to control antibiotic misuse.
Ban on inappropriate fixed dose combinations (FDCs)	• 40 FDCs banned by Drug Controller General of India (DCGI) based on ICMR recommendations.
Ban on Colistin in animal feed	• ICMR, Indian Council of Agriculture Research, and DCGI collaboration led to banning Colistin as a growth promoter in poultry feed.
One Health approach	• Encouraging interdisciplinary collaboration in human-animal-environmental interface, prioritizing areas like zoonotic diseases, food safety, and antibiotic resistance.
Integrated One Health Surveillance Network for AMR	• ICMR project to assess Indian Veterinary laboratories' preparedness for participation in an integrated AMR surveillance network.

Schedule H1

- ICMR establishes the National Anti-Microbial Resistance Research and Surveillance Network (AMRRSN) to compile national AMR data.
- Schedule H1, part of the Drugs and Cosmetic Rule, 1945, includes 46 drugs with strict control measures to regulate their sale.
- Conditions for sale include recording in a separate register, labeling with a red Rx symbol, and a warning about the dangers of taking the drug without medical advice.

National Policy and Programme for Containment of AMR

- Government's National Policy for Containment of Antimicrobial Resistance formulated in 2011.
- National Programme for Containment of AMR initiated in the 12th Five Year Plan with objectives:
 - Establishing a laboratory-based surveillance system.
 - Generating awareness on rational use of antibiotics.
 - Strengthening infection control guidelines and practices.

Leprosy

Context: Centre releases three-drug regimen for treating leprosy.

- The Union government has given approval to a new leprosy treatment regimen, with the goal of halting transmission at the sub-national level by 2027.
- A letter from the Directorate General of Health Services (DGHS) states that the National Leprosy Eradication Programme is actively working to prevent infection transmission.
- The Ministry of Health and Family Welfare, with competent authority approval, introduces a three-drug regimen for Pauci-Bacillary (PB) cases, replacing the existing two-drug regimen for six months.
- States and Union Territories are instructed to submit anti-leprosy drug requisitions 12 months in advance.
- The revised leprosy classification and treatment regimen for PB and multi-bacillary (MB) cases in India will be implemented from 2025.

What is Leprosy (Hansen's Disease)?	<ul style="list-style-type: none"> • Leprosy, or Hansen's disease, is caused by slow-growing bacteria called <i>Mycobacterium leprae</i>. • It affects nerves, skin, eyes, and nasal mucosa. • Early diagnosis and treatment are effective, allowing individuals to continue an active life. • Leprosy, once feared as highly contagious, doesn't spread easily, but untreated cases can lead to severe complications.
Symptoms of Leprosy	<ul style="list-style-type: none"> • Main symptoms include skin lesions, and it affects the peripheral nervous system (PNS). • Sensory, motor, eye, and autonomic nerve damage can occur, resulting in various complications.
Diagnosis	<ul style="list-style-type: none"> • Clinical diagnosis is common, with laboratory-based services needed for challenging cases. • Leprosy is classified into Paucibacillary (PB) and Multibacillary (MB) cases based on cardinal signs.
What are the Treatments Available for Leprosy?	<ul style="list-style-type: none"> • Leprosy is curable with a three-drug regimen: dapsone, rifampicin, and clofazimine (multi-drug therapy - MDT). • Treatment duration is six months for PB and 12 months for MB cases, effectively killing the pathogen and curing the patient. • Early diagnosis and prompt treatment prevent disabilities.

- No specific vaccine for leprosy is available, but the BCG vaccine for tuberculosis may offer some protection.

Government Initiative to Eradicate Leprosy

National Leprosy Eradication Programme

- NLEP is a Centrally Sponsored Health Scheme with the objective of reducing the disease burden, preventing disability, and raising awareness about leprosy.
- The program provides free treatment, medical rehabilitation, and focuses on reducing stigma attached to the disease.
- Strategies include integrated leprosy services, early diagnosis and MDT treatment, household contact surveys, and awareness campaigns.

National Strategic Plan & Roadmap for Leprosy (2023-27) and Nikusth 2.0

- A strategic plan aims to advance the campaign against leprosy, focusing on speeding case detection efforts and maintaining robust surveillance infrastructure.
- Nikusth 2.0 is an integrated portal for leprosy case management under NLEP, facilitating efficient data recording, analysis, and reporting at different levels.

Report & Index

Sanitation Challenges in Indian District Courts

Context: A recent publication from the Centre for Research and Planning of the Supreme Court of India, titled 'State of the Judiciary,' has drawn attention to disparities in gender-specific facilities within district court complexes nationwide.

- The report highlights the insufficient provision of separate toilets for women, the absence of sanitary napkin vending machines, and the lack of toilets for transgender individuals.

Key Findings of the Report

Inadequate Women-Friendly Facilities

- Nearly one-fifth of district court complexes lack separate toilets for women.
- Only 6.7% of women's toilets are equipped with sanitary napkin vending machines.

Challenges in Existing Washrooms

- Existing washrooms often have broken doors and face irregular water supply issues.
- Shared washrooms for male and female judges raise concerns about privacy and equality.
- Judges personally engage sweepers and cleaners to maintain cleanliness in court toilets.

Lack of Inclusive Facilities

- Most district courts do not have toilets for transgender persons.
- Emphasis on the need for "gender-inclusive toilets" in every court complex.

Challenges Posed by Inadequate Sanitation Facilities

- Health and Hygiene Risks

- Insufficient toilet facilities may result in unhygienic conditions, posing health risks for women.
- Lack of separate toilets can contribute to safety concerns for women, making them vulnerable to harassment or assault.
- **Violation of United Nations Human Rights**
 - The right to sanitation, as per the UN Human Rights, includes safe, hygienic, secure, and culturally acceptable access to sanitation with privacy and dignity.
- **Violation of Fundamental Right**
 - The Supreme Court, in *Virendra Gaur vs State Haryana (1995)*, highlighted that Article 21 protects the right to life, extending it to sanitation for the enjoyment of life with dignity.

Improving Sanitation Facilities in Courts

Allocate Dedicated Resources

Upgrade Existing Facilities

Develop Sanitation Guidelines

Encourage User Feedback

- **Allocate Dedicated Resources**
 - Budget sufficient funds for sanitation upkeep and assign staff responsible for cleaning and maintenance.
 - Consider establishing the National Judicial Infrastructure Authority of India (NJIAI) to centralize funds for sanitation improvement projects.
- **Upgrade Existing Facilities**
 - Renovate bathrooms to ensure cleanliness, functionality, and accessibility.
 - Install proper ventilation, lighting, and hygiene supplies like soap, paper towels, and sanitary bins.
- **Develop Sanitation Guidelines**
 - Set national standards for sanitation facilities in courts, ensuring consistency and quality.
 - Include guidelines for minimum amenities, accessibility requirements, and hygiene protocols.
- **Encourage User Feedback**
 - Establish mechanisms for court users to provide feedback on sanitation facilities.
 - Swiftly address and act upon suggestions and complaints.

Status of Toilet Facilities in India

- Sanitation is a State subject, and according to the National Family Health Survey (NFHS), 69.3% of households have access to improved toilet facilities.
- 19.4% of Indian households did not use any toilet facility in 2019-2021.
- Open defecation is practiced in 6.1% of urban households and 25.9% of rural households.

Majority Of Cities Far From Clean Air Target

Context: Recently, a study conducted by Climate Trends and Respirer Living Sciences has brought to light that the majority of cities are falling short of India's National Clean Air Programme (NCAP) clean air targets.

Key Highlights of the Study

PM2.5 Reduction Disparities

Mixed Progress Across Cities

Regional Vulnerabilities

Monitoring Challenges

Factors Impacting Pollution

- **PM2.5 Reduction Disparities:** Out of 49 cities with consistent PM2.5 data over five years, only 27 displayed a decline in PM2.5 levels.
 - Merely four cities met or exceeded the targeted decline set by the National Clean Air Campaign (NCAP) Goals.

- NCAP aims for a 40% reduction in average particulate matter (PM) concentrations by 2026 in 131 cities, with an initial goal of 20-40% reduction by 2024, later extended to 2026.
- **Mixed Progress Across Cities:** Varanasi, Agra, and Jodhpur demonstrated significant reductions in PM2.5 levels.
 - Delhi reported marginal declines (5.9%) or increased pollution loads.
 - Varanasi showed the most substantial reduction with a 72% average decrease in PM2.5 levels and a 69% reduction in PM10 levels from 2019 to 2023.
- **Regional Vulnerabilities:** The Indo-Gangetic Plain (IGP) remains highly vulnerable, hosting 18 of the top 20 most polluted PM2.5 cities.
 - Only Guwahati and Rourkela, outside the IGP, were among the 20 most polluted cities.
- **Monitoring Challenges:** Availability and distribution of continuous ambient air quality monitors significantly influence annual pollutant concentrations.
 - Many Indian cities lack an adequate number of monitoring stations, with only four out of 92 cities having more than 10 stations.
 - Disparities exist, with Mumbai and Delhi having several stations while most cities have only a handful.
- **Factors Impacting Pollution:** Pollution variations attributed to geographical locations, diverse emission sources, meteorological influences, and the interplay between emissions and meteorology, necessitating further investigation.

National Clean Air Programme (NCAP)	
Launch and Goal	<ul style="list-style-type: none"> ● Initiated by the Ministry of Environment, Forests and Climate Change (MoEFCC) in January 2019. ● Aims to reduce average PM concentrations by 40% by 2026 in 131 cities, initially targeting a 20-40% reduction by 2024.
Coverage	<ul style="list-style-type: none"> ● Encompasses 131 non-attainment cities identified by the Central Pollution Control Board (CPCB). ● Non-attainment cities are those falling short of National Ambient Air Quality Standards (NAAQS) for over five years.
Pollutants under NAAQS	NAAQS cover pollutants such as PM10, PM2.5, SO2, NO2, CO, NH3, Ozone, Lead, Benzene, Benzo-Pyrene, Arsenic, and Nickel.
PRANA Portal	PRANA serves as a monitoring portal for implementing NCAP.

Initiatives for Controlling Air Pollution

SAFAR Portal	<ul style="list-style-type: none"> ● System of Air Quality and Weather Forecasting and Research (SAFAR) Portal.
Air Quality Index (AQI)	<ul style="list-style-type: none"> ● Developed for eight pollutants including PM2.5, PM10, Ammonia, Lead, nitrogen oxides, sulphur dioxide, ozone, and carbon monoxide.
Graded Response Action Plan	<ul style="list-style-type: none"> ● Implemented for Delhi as an emergency measure.
Vehicular Pollution Control	<ul style="list-style-type: none"> ● Introduction of BS-VI Vehicles. ● Promotion of Electric Vehicles (EVs). ● Implementation of the Odd-Even Policy for Delhi.
New Commission for Air Quality Management	<ul style="list-style-type: none"> ● Establishment of a new commission for effective air quality management.
Subsidy for Farmers	<ul style="list-style-type: none"> ● Subsidy provided to farmers for purchasing Turbo Happy Seeder (THS) Machine to reduce stubble burning.
National Air Quality Monitoring Programme (NAMP)	<ul style="list-style-type: none"> ● Identifies four pollutants (SO2, NO2, PM10, and PM2.5) for regular monitoring at all locations under NAMP.



ILO Warns Of Rise In Unemployment, Decline In Real Wages

Context: The International Labour Organization (ILO) has issued a cautionary statement regarding a projected global increase in unemployment anticipated in 2024.

Key Highlights of Report

Deteriorating Macroeconomic Environment	Uneven Labor Market Recovery	Looming Risks	Global Working Poverty	Indian Wage Growth Outperforms	Long-Term Policy Priorities
--	---	----------------------	---------------------------------------	---	--

- **Deteriorating Macroeconomic Environment:** The ILO's annual World Employment and Social Outlook report highlights a significant macroeconomic decline in the past year due to global crises.
 - Major economies faced slowing growth in 2023 amid geopolitical tensions and central bank interest rate hikes to control inflation, impacting industrial production, trade, and investment flows.
- **Uneven Labor Market Recovery:** Despite global economic challenges, certain countries experienced jobs growth and lower unemployment, surpassing forecasts as pandemic impacts waned.
 - The global jobless rate decreased to 5.1%, and labor force participation nearly reached early 2020 levels, raising concerns about work quality.
- **Looming Risks:** The ILO warns that slowing economies may lead to a resurgence in global unemployment through 2024.
 - Structural weaknesses like skills gaps and inadequate social protection persist in many nations, contributing to concerns.
- **Global Working Poverty:** More people worldwide are falling into working poverty, surviving on less than \$2 daily, as real wage growth lags behind consumer prices in most G20 economies (except China and India).
- **Indian Wage Growth Outperforms:** India showed "positive" improvement in real wages in 2022 compared to 2021, surpassing all G20 countries except Mexico.
 - Robust productivity expansion in India likely contributed to this growth, but challenges remain in achieving broad-based social equality and labor rights.
- **Long-Term Policy Priorities:** Governments are urged to prioritize quality job creation and strengthen social safety nets to combat rising inequality.
 - Investment in workforce training, job matching programs, and unemployment schemes is recommended to address structural displacement from technological and climate change-driven disruptions.

International Labour Organization (ILO)	
Overview	<ul style="list-style-type: none"> • The International Labour Organization (ILO) is a specialized agency within the United Nations, focusing on matters related to the world of work. • Its primary purpose is to promote social and economic justice by establishing and upholding international labor standards.
Mandate	<ul style="list-style-type: none"> • The ILO's commitment to fostering peace is encapsulated in its motto, "Decent Work for all."
Headquarters and Affiliation	<ul style="list-style-type: none"> • Headquartered in Geneva, Switzerland, the ILO operates under the umbrella of the Economic and Social Council of the United Nations (ECOSOC). • Additionally, it is a member of the United Nations Development Group (UNDP), working towards achieving the Sustainable Development Goals.
History and Membership	<ul style="list-style-type: none"> • Established in 1919 after World War I, the ILO officially became a specialized agency under the United Nations in 1946.



	<ul style="list-style-type: none"> It boasts a membership of 187 states, including 186 out of the 193 UN member states, along with the Cook Islands.
Structure	<ul style="list-style-type: none"> Uniquely, the ILO functions as the sole tripartite U.N. agency, bringing together representatives from governments, employers, and workers' organizations from its 187 member states to address labor-related issues and promote fair working conditions.

Proactive reforms that enhance worker protections can mitigate the impending rise in joblessness and pave the way for a more equitable and inclusive future of work.

Global Risks Report 2024: WEF

Context: The World Economic Forum (WEF) recently released the Global Risk Report 2024, identifying significant risks over the next decade amidst technological advancements, economic uncertainty, climate change, and conflicts. The report's insights are drawn from a survey of approximately 1,500 experts, industry leaders, and policymakers.

Key Highlights of the Global Risk Report 2024



- **Deteriorating Global Outlook:** Events in 2023, including conflicts, extreme weather, and societal discontent, contribute to a predominantly negative global outlook.
- **AI Powered Misinformation and Disinformation:** Rapid technological advances, particularly in Generative AI chatbots like ChatGPT, elevate the risks of AI-powered misinformation and disinformation. Concerns arise as synthetic content manipulation becomes accessible to a wider audience, impacting elections in various countries in 2024.
- **Structural Forces Shaping Global Risks:** Four forces shaping global risks: Climate change, Demographic Bifurcation, Technological Acceleration, and Geostrategic shifts. Interactions between these forces contribute to uncertainty and volatility.
- **Environmental Risks at the Forefront:** Environmental risks, especially extreme weather, dominate the risk landscape with concerns about climate change, biodiversity loss, and irreversible consequences.
- **Economic Strains and Inequality:** Cost-of-living crisis, inflation, and economic downturn pose significant concerns for 2024. Economic uncertainty may disproportionately affect low- and middle-income countries, leading to potential digital isolation and societal impacts.
- **Security Risks and Technological Advances:** Interstate armed conflict enters the top risk rankings. Technological advances, particularly in artificial intelligence, pose security risks, enabling non-state actors to access disruptive tools.
- **Geopolitical Shifts and Governance Challenges:** A deeper divide between global powers, especially North and South, may challenge international governance. Growing influence of Global South states, combined with geopolitical tensions, may reshape security dynamics and impact global risks.

Global Risk
Global risk is defined as the possibility of an event or condition negatively impacting a significant proportion of global GDP, population, or natural resources.



Recommendations

Localized Strategies

Investment and regulation at local levels can reduce the impact of foreseeable risks.

Research and Development

Prioritizing future-oriented breakthrough endeavors through research and development efforts can enhance global safety.

Collective Actions

Collective actions by citizens, companies, and countries, when at a critical mass, can significantly contribute to global risk reduction.

Cross-Border Collaboration

Despite a fragmented world, cross-border collaboration remains crucial for addressing risks decisive for human security and prosperity.

World Economic Forum (WEF) Overview

About WEF	Swiss nonprofit foundation established in 1971, based in Geneva, Switzerland.
Mission	<ul style="list-style-type: none"> Committed to improving the state of the world by engaging leaders to shape global, regional, and industry agendas. Founder and Executive Chairman: Klaus Schwab.
Major Reports	<ul style="list-style-type: none"> Energy Transition Index. Global Competitiveness Report. Global IT Report. Global Gender Gap Report. Global Travel and Tourism Report (in collaboration with INSEAD and Cornell University).

Global Surgery: Why Access To Essential Surgery Is Important?

Context: Lancet Commission on Global Surgery (LCoGS) reports that over 70% of the global population lacks timely access to safe and affordable surgical care.

What is Global Surgery?

- Focuses on equitable access to emergency and essential surgery, primarily targeting low and middle-income countries (LMICs).
- Addresses access disparities in high-income countries and includes surgeries, obstetrics, trauma, and anesthesia (SOTA).

Historical Background

- Recognized globally in 2015 as a critical component of healthcare.
- Traces its roots to earlier decades with knowledge sharing and training under surgical missions in humanitarian settings.

Developments in 2015

- World Bank-sponsored Disease Control Priorities Network (DCPN) identifies emergency and essential surgical care as cost-effective.

- Lancet Commission on Global Surgery formed to assess global surgical care, develop indicators, and propose implementable strategies like the national surgical, obstetrics, and anesthesia plan (NSOAP).
- WHO Resolution 68.15 - Declaration on Safe Surgery passed, recognizing the importance of emergency and essential surgical systems for universal health coverage.

Challenges Faced

Global Disparity

Disease Burden

Economic Burden

- **Global Disparity:** Over 70% (5 billion) lack timely access, with 99% and 96% facing access gaps in low and lower-middle-income countries.
 - South Asia, with 1.6 billion affected, highlights a significant lack of access to safe and affordable SOTA care.
- **Disease Burden:** In 2010, surgically treatable conditions caused 17 million deaths, surpassing combined mortality from HIV/AIDS, tuberculosis, and malaria.
 - Peri-operative mortality identified as the third most common cause of death, linked to factors like lack of timely care and limited surgical system capacity.
 - South Asia carries a high disease burden in various categories.
- **Economic Burden:** Projected cumulative GDP loss of \$20.7 trillion by 2030 due to the absence of surgical care scale-up in 128 countries.
 - Annual loss in societal welfare of about \$14.5 trillion, with South Asia contributing 7% to the global lost welfare.

Neglect of the Sector

- **In Policy Formulation:** Globally, surgery contributes to less than 1% of indicators in World Bank, WHO, UNICEF, and other reports.
 - National Health Strategic Plans in 43 African countries show neglect, with 19% not mentioning surgery, and 63% mentioning it five times or less.
 - In India, National Health Policy (2017) and new NCD guidelines exhibit a lack of focus on surgery.
- **In Funding:** Developmental Assistance for Health (DAH) contributions reveal inadequate funding for surgery compared to other health areas.
 - Philanthropic funds mainly support infrastructure and training for local surgical providers.
- **In Research:** Only 1.5% of global health titles in the Pubmed database are related to global surgery.
 - Limited funding, with just \$22 million of \$750 million NIH projects related to surgery.

Surgical Care in India: Status

- In 2019-2020, India recorded over 14 million minor surgeries, insufficient according to LCoGS requirements.
- Low rate of surgeries per 1 lakh people, ranging from 166 to 3,646, compared to HICs like New Zealand with 5,000 surgeries per 1 lakh people.

Challenges

Lack of Access

Neglect in Policymaking

Resource Crunch

- **Lack of Access**
 - Over 90% of rural Indians lack access to surgery when needed.
 - Factors such as location and income impact access to surgical care.
- **Neglect in Policymaking**
 - National Health Policy shows limited attention to surgical care.

- Absence of NSOAP despite its importance according to LCoGS.
- **Resource Crunch**
 - Insufficient facilities, including transport and road infrastructure, and inadequate resources like manpower and equipment.
 - Lack of investment affecting monitoring and evaluation of surgical care indicators.
 - Increased financial burden on patients due to the absence of universal health coverage.

Way Forward

- **Scaling Up at District Level**
 - DCPN suggests scaling up surgical services at district hospitals to alleviate the disease burden in LMICs.
- **Implementation of NSOAPs**
 - Countries should adopt NSOAPs, similar to African nations, to provide surgical care.
 - Examples include India's Pradhan Mantri Jan Arogya Yojana, providing surgeries at minimal or zero cost.
- **Data Collection**
 - Subnational data collection on surgical care indicators is crucial for policy development and action.
 - India, among at least 30 LMICs, accumulates such data.
- **Support to Research and Innovation**
 - Boost research, innovation, financing, and policy focus to address global surgery challenges.

Global neglect of surgical care, despite its crucial role, poses challenges, especially for LMICs. Urgent attention to policy, funding, and research is needed to handle the significant disease and economic burdens. Implementation of national plans, data collection, and fostering innovation are essential for equitable access to surgical care.

Annual Status of Education Report 2023

Context: The NGO Pratham recently released the 18th Annual Status of Education Report (ASER) 2023, titled 'Beyond Basics,' discussing students' activities, basic and applied reading and math abilities, and digital awareness and skills.

Annual Status of Education Report (ASER)

ASER is an annual citizen-led household survey focusing on understanding the enrollment and learning status of children in rural India. Conducted annually since 2005, it is the largest citizen-led survey in India, providing representative estimates at the national, state, and district levels. Surveys cover children aged 3-16, assessing enrollment and basic reading and arithmetic levels of those aged 5-16.

Key Highlights of ASER 2023

- **Enrollment Rates:** Overall, 86.8% of 14-18-year-olds are enrolled, with differences noted by age and gender. Notable variations include 3.9% of 14-year-olds and 32.6% of 18-year-olds not enrolled.
- **Vocational Training:** Only 5.6% are undergoing vocational training, more prevalent among college-level students (16.2%).
- **Basic Abilities:** Approximately 25% of youth struggle with reading Class II level text fluently in their regional language. Over half face challenges with division problems (3-digit by 1-digit).
- **Language and Arithmetic Skills:** Females outperform males in reading; males excel in arithmetic and English reading. 57.3% can read sentences in English, and almost three-quarters understand their meanings.
- **Digital Awareness and Skills:** Close to 90% have smartphones; males (43.7%) more likely to own one compared to females (19.8%). Males outperform females in digital tasks; boys more familiar with online safety settings.
- **Foundational Numeracy Skills:** Over 50% face difficulties with elementary division; 45% struggle with calculating hours slept based on bedtime and wake-up time.

Recommendations

- Government efforts needed to bridge foundational literacy and numeracy gaps for the 14-18 age group.
- NEP 2020 recognizes the need for 'catch-up' programs.
- Emphasis on initiatives improving foundational literacy and numeracy for practical use.

Digital Education

- Almost 90% have smartphone access, indicating widespread digital connectivity.
- Gender gap in digital literacy; boys more likely to own smartphones and outperform girls in digital tasks.
- Boys more familiar with online safety; a need for targeted efforts to educate and empower girls.

Issues Faced by Elementary Education in India

School Infrastructure

- Despite improvements, concerns about amenities; over 10% lack electricity.
- More than 60% of schools lack computers; 90% without internet facilities.

Shift Towards Private Schools

- Momentum shift towards private schools; government school share decreased from 87% in 2006 to 62% in March 2020.

Teacher Shortage and Quality

- Shortage of teachers; high student-teacher ratio.
- Quality varies; social divides impact education quality.

How Can India Enhance Basic Education?

- Increase funding to 6% of GDP, focusing on infrastructure, teacher training, and amenities.
- Recruit and train qualified teachers, addressing dropout causes, and promoting infrastructure development.
- Emphasize quality education, child-centered teaching, and technology integration.

Multidimensional Poverty Index: NITI Ayog

Context: NITI Aayog has recently released a Discussion Paper titled 'Multidimensional Poverty in India since 2005-06,' revealing that 24.82 crore people escaped Multidimensional Poverty in the last nine years.

National Multidimensional Poverty Index

The National Multidimensional Poverty Index measures deprivations in Health, Education, and Standard of Living using 12 Sustainable Development Goals-aligned indicators.

- Indicators include

Nutrition	Child and Adolescent mortality	Maternal Health	Years of schooling	School Attendance	Cooking fuel
Sanitation	Drinking water	Electricity	Housing	Assets	Bank Accounts

- Based on the Alkire and Foster method, it offers a perspective beyond monetary poverty measures, covering two more indicators than the global MPI.

Key Highlights of the Multidimensional Poverty Index in India Since 2005-2006

- **Overall Decline in Multidimensional Poverty**
 - India experienced a substantial reduction in multidimensional poverty from 29.17% in 2013-14 to 11.28% in 2022-23, marking a 17.89% decrease.
 - Approximately 24.82 crore people escaped multidimensional poverty in the last nine years.
- **State-wise Decline**



- Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan recorded the sharpest decline in the number of people classified as poor based on the MPI.
- Uttar Pradesh witnessed the largest decline, with 5.94 crore people escaping multidimensional poverty.
- **Improvement in All Indicators**
 - All 12 MPI indicators showed significant improvement, reflecting progress in Health, Education, and Standard of Living dimensions.
- **Severity of Deprivation**
 - The Severity of Deprivation (SoD) declined at a slightly lower rate between 2015-16 and 2019-21 compared to 2005-06 and 2013-14.
 - Reduction of deprivation was faster after 2015-16, indicating progress.
- **SDG Target Achievement**
 - India is likely to achieve SDG Target 1.2 well before 2030, as indicators related to the standard of living dimension showed significant improvements.
- **Drivers Helped in Declining MPI**
 - Initiatives like Poshan Abhiyan and Anemia Mukht Bharat enhanced healthcare access.
 - Food Security programs, like the Targeted Public Distribution System, covered 81.35 crore beneficiaries.
 - Decisions, such as extending free food grain distribution under Pradhan Mantri Garib Kalyan Anna Yojana, demonstrate the government's commitment.
 - Programs addressing maternal health, Ujjwala Yojana for clean cooking fuel, Saubhagya for improved electricity coverage, and campaigns like Swachh Bharat Mission and Jal Jeevan Mission collectively improved living conditions.
 - Flagship programs like Pradhan Mantri Jan Dhan Yojana and PM Awas Yojana played pivotal roles in financial inclusion and safe housing.

What is NITI Aayog?

- NITI Aayog, replacing the Planning Commission, was established on January 1, 2015, with a 'Bottom-Up' approach and a focus on 'Cooperative Federalism.'
- It comprises two hubs: Team India Hub acts as an interface between States and the Centre, and the Knowledge and Innovation Hub builds the think-tank acumen of NITI Aayog.

All India Survey on Higher Education

Context: The total enrolment in higher education for the academic year 2021-22 increased to nearly 4.33 crore from 4.14 crore in the previous session. Female enrolments in the science stream surpassed male enrolments, as per the All India Survey on Higher Education (AISHE) 2021-22.

About AISHE

- The Ministry of Education has conducted the All India Survey on Higher Education (AISHE) annually since 2010-11.
- The survey encompasses all institutions across the country involved in providing higher education.
- Data is collected on various parameters, including teachers, student enrolment, programs, examination results, education finance, and infrastructure.
- Indicators of educational development, such as Institution Density, Gross Enrolment Ratio, Pupil-teacher ratio, Gender Parity Index, and Per Student Expenditure, are calculated based on AISHE data.

Findings of the Survey

- Overall female enrolment increased to 2.07 crore in 2021-22 from 2.01 crore in 2020-21.
- The total enrolment in higher education increased to almost 4.33 crore in 2021-22 from 4.14 crore in 2020-21, marking an increase of approximately 91 lakh since 2014-15.
- Female Ph.D. enrolment doubled to 0.99 lakh in 2021-22 from 0.48 lakh in 2014-15.
- In 2021-22, out of the total enrolment in science at various levels, 57.2 lakh students were enrolled, with female students (29.8 lakh) outnumbering male students (27.4 lakh).

- The enrolment of ST students increased to 27.1 lakh in 2021-22 from 16.41 lakh in 2014-15, reflecting a 65.2% increase.
- The total student enrolment in northeast States rose to 12.02 lakh in 2021-22 from 9.36 lakh in 2014-15, with female enrolment surpassing male enrolment.
- OBC student enrolment increased by 45% in 2021-22 (1.63 crore) compared to 2014-15 (1.13 crore).
- Among postgraduate streams, the majority of students are enrolled in social science (21.1%), followed by science (14.7%).
- Ph.D. enrolment increased by 81.2% to 2.12 lakh in 2021-22 compared to 1.17 lakh in 2014-15.

Data Collection in AISHE

Basic details of institutions	Teacher's details	Details of non-teaching staff
Programs conducted under various faculties, schools, departments, and centers	Student enrolment in these programs	Examination results of the terminal year of each program
Financial information, including receipts and expenditures under various heads	Availability of infrastructure	Scholarships, loans, and accreditation.

Important Days

Tableaux on the Republic Day

Context: The Ministry of Defence has proposed a rollover plan for States and Union Territories to present their tableaux in the Republic Day Parade, addressing concerns raised by some state governments about exclusion from the 2024 Republic Day Parade.

Selected States and Union Territories for 2024 Republic Day Parade

16 States and Union Territories have been chosen for the 2024 Republic Day Parade, including Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Gujarat, Haryana, Jharkhand, Ladakh, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Odisha, Rajasthan, Tamil Nadu, Telangana, and Uttar Pradesh.

Bharat Parv as an Alternative Event

- States and Union Territories not selected for the Republic Day Parade can showcase their tableaux at Bharat Parv.
- Bharat Parv, a six-day event from January 26-31, is organized by the Government of India at the historic Red Fort, as part of Republic Day celebrations.
- A rotational plan for 2024-2026 ensures that every State and Union Territory gets a chance to present their tableaux in the Republic Day parade within a three-year cycle, promoting fairness and inclusivity.

Selection Process of Tableaux

Ministry Responsible for Conducting Parade

- The Ministry of Defence (MoD) oversees the parade arrangements and coordinates with States.
- The Ministry of Culture collaborates in the selection process due to the cultural and artistic nature of the tableaux.

Preparation and Selection

- States, UTs, and departments submit sketches or designs for tableaux months before the event.
- The theme for 2024 is 'Viksit Bharat' (Developed India) and 'Bharat-Loktantra ki Matraka' (India-Mother of Democracy).

- Designs must be simple, colorful, and avoid unnecessary details or statistical data.
- Eco-friendly material and technology usage are encouraged, while logos, except for the State/UT name, are not allowed.

Committee of Experts

- MoD forms a committee of experts from various fields to screen proposals.
- This expert committee, recommended by IGNCA and ICCR, selects the tableaux after four rounds of meetings.
- Initial evaluations lead to modifications in the designs, and shortlisted candidates present three-dimensional models for final selection.
- Only the shortlisted candidates progress to the subsequent rounds.

Republic Day Significance

- Republic Day marks India becoming a republic with a written Constitution on January 26, 1950.
- Independence Day is celebrated on August 15, 1947.
- The term 'Republic' signifies an elected head, the President, as per the Indian Constitution adopted on November 26, 1949.
- January 26 was chosen as Republic Day to commemorate the 1930 declaration of Purna Swaraj (complete independence) during the INC's Lahore session.

Thiruvalluvar Day

Context: On Thiruvalluvar Day, Tamil Nadu Governor R.N. Ravi stirred controversy by offering floral tributes to a portrait of Tamil poet-saint Thiruvalluvar in saffron robes.

Thiruvalluvar

- **About:** Thiruvalluvar, also known as Valluvar, is a debated figure regarding his existence and religious identity.
- **Time Period:** The period of his existence is uncertain, with conflicting theories placing him between the 3rd-4th or 8th-9th century.
- **Linked to:** Linked to Jainism, with claims from Hindus asserting his association with Hinduism.
- **Diverse Recognition as a Saint:** Dravidian groups recognize Thiruvalluvar as a saint due to his outspoken dismissal of the caste system. Varied religious affiliations attributed to him reflect the cultural diversity surrounding his legacy.
- **Tirukkural:** Thiruvalluvar's significant contribution to Sangam literature is the Tirukkural or 'Kural.'

Sangam Literature

- **Origin:** The term 'Sangam' in Tamil has its roots in the Sanskrit word 'Sangha,' denoting a group or association. The Tamil Sangam refers to an academy of poets thriving in distinct periods and locations under the patronage of Pandyan kings.
- **Historical Timeline:** The historical timeline of Tamil Sangam spans from the 3rd century BC to the 3rd century CE. Poetic compositions within Sangam literature are richly themed around subjects such as love and war.

Other Important Days

Date	Event	Details and Significance
1 January	Global Family Day	It is celebrated as a day of peace and sharing. Its aim is to unite and spread a message of peace by considering and promoting the idea that Earth is one Global Family so as to make the world a better place to live for everyone.
3 January	International Mind Body Wellness Day	On January 3, it's International Mind-Body Wellness Day, a time to recommit to loving both our bodies and minds by putting new strategies for development and wellness into action.
4 January	World Braille Day	In remembrance of the birth of Louis Braille, the inventor of Braille, January 4 is marked as World Braille Day. The day also recognizes that people with visual impairments should have the same access to human rights as everyone else.
5 January	National Bird Day	On January 5, National Bird Day is celebrated to raise awareness of the value of tiny tweets in the ecosystem. The Avian Welfare Coalition, which works hard to promote awareness for birds that are captured or produced in captivity for either financial gain or for human amusement, is behind this initiative.
6 January	World Day of War Orphans	On 6 January every year, World Day of War Orphans is celebrated to create awareness about the plight of war orphans and to address the traumatic conditions faced by them.
8 January	Earth Rotation Day	Every year, January 8 is recognized as Earth Rotation Day. Today marks the anniversary of French physicist Leon Foucault's 1851 proof that the Earth revolves on its axis.
9 January	NRI (Non-Resident Indian) Day or Pravasi Bharatiya Divas	NRI or Pravasi Bharatiya Divas is observed every year on 9 January to mark the contribution of the overseas Indian community towards the development of India. This day also commemorates the return of Mahatma Gandhi from South Africa to Mumbai on 9 January 1915.
10 January	Vishwa Hindi Diwas	Vishwa Hindi Diwas is an annual event observed on January 10. World Hindi Day was created to mark the occasion when Hindi was first spoken at the UNGA in 1949. With nearly 600 million speakers worldwide, Hindi is the third most widely spoken language in the world after Mandarin Chinese and English.
11 January	Death anniversary of Lal Bahadur Shastri	He was the second Prime Minister of Independent India. He popularised the slogan 'Jai Jawan Jai Kisan' He actively participated in India's freedom struggle. Due to cardiac arrest, he died on 11 January 1966. And he was also known as the 'Man of Peace' globally.
11 January	National Human Trafficking Awareness Day	It is observed on 11 January to spread awareness about the persistent issue of human trafficking. This day aims is to raise awareness about the plight of human trafficking victims, as well as to promote and protect their rights.

Date	Event	Details and Significance
12 January	National Youth Day	The birth anniversary of Swami Vivekananda also called Swami Vivekananda Jayanti is celebrated every year on 12 January. He was born on 12 January 1863. The government had decided to observe it as Rashtriya Yuva Diwas because the philosophy of Swamiji and the ideals for which he lived and worked could be a great source of inspiration for the Indian Youth. He had given a speech at the Parliament of the World's Religions in Chicago and glorified India's name.
15 January	Indian Army Day	Every year 15 January is observed as Indian Army Day because on this day in 1949 field Marshal Kodandera M Cariappa took over as the first Commander-in-Chief of the Indian Army from General Sir Francis Butcher, the last British Commander-in-Chief.
16 January	National Startup Day	Prime Minister Narendra Modi declared January 16 as National Startup Day in the year 2021. Since then various programs and events are organized by government and non-government organizations to applaud and promote the Indian startup ecosystem.
19 January	Kokborok Day	On January 19th, the Indian State of Tripura observes Kokborok Day, also known as Tripuri Language Day, to foster the Kokborok language. This day honours the year 1979 when Kokborok became officially recognized for the first time.
20 January	Penguin Awareness Day	Every year on January 20, Penguin Awareness Day is observed. Because humans typically don't live in penguins' natural habitats, the species' annual population decline goes largely unnoticed. This day is a fantastic effort to increase awareness of this important issue.
21 January	Tripura, Manipur, and Meghalaya Foundation Day	On 21 January 1972, the states of Tripura, Manipur, and Meghalaya became full-fledged states under the North Eastern Region (Re-organisation) Act, of 1971. Therefore, Tripura, Manipur, and Meghalaya celebrate their Statehood Day on 21 January.
24 January	National Girl Child Day	On 24 January every year, National Girl Child Day is celebrated to highlight the inequalities faced by a majority of the girls in India, the importance of education, nutrition, legal rights, medical care and safety of girl children, etc.
24 January	International Day of Education	International Day of Education is observed on 24 January every year to support transformative actions for inclusive, equitable, and quality education for all.
25 January	National Voters Day	Every year on 25 January National Voter's Day or Rashtriya Matdata Diwas is celebrated to encourage young voters to participate in the political process. In 2011 the first time this day was celebrated to mark Election Commission's Foundation Day.

Date	Event	Details and Significance
25 January	National Tourism Day	Every year on 25 January National Tourism Day is celebrated in India to raise awareness and educate people about the importance of tourism and the role it plays in the Indian economy.
26 January	Republic Day	On 26 November, 1949 the Indian Constituent Assembly adopted the Constitution the supreme law of the land and replaced the Government of India Act 1935. It came into effect on 26 January 1950 with a democratic government system. This day marks the largest parade that took place at Rajpath, Delhi every year.
26 January	International Customs Day	International Customs Day (ICD) is celebrated every year on 26 January by Customs Organisation to recognize the role of customs officials and agencies in maintaining border security. It also focuses on the working conditions and challenges that customs officers face in their jobs.
27 January	National Geographic Day	Every year on January 27, National Geographic Day is observed all across the country. It is a day set aside to honour the "National Geographic Magazine," which has been published continuously for more than a century.
29 January	Indian Newspaper Day	A day set aside to honour the beginning of newspapers in India is known as Indian Newspaper Day. This day is intended to raise awareness of Indian newspapers. Indian Newspaper Day, which is observed on January 29th each year, is today. However, there is no theme to observe this important occasion.
30 January	Martyrs Day or Shaheed Diwas	30 January is celebrated as Martyr's Day or Shaheed Diwas every year in memory of Mahatma Gandhi and the sacrifice of three revolutionaries of India. As, on 30 January 1948, the 'Father of Nation' was assassinated. And on 23rd March 3 heroes namely Bhagat Singh, Shivaram Rajguru, and Sukhdev Thapar of the nation were hanged to death by the British.
30 January	World Leprosy Day	World Leprosy Day is observed on the last Sunday of January to focus on the target of zero cases of leprosy-related disabilities in children. As we know disabilities do not occur overnight but happen after a prolonged period of undiagnosed disease.
31 January	International Zebra Day	Every January 31, people around the world celebrate International Zebra Day. The purpose of the day is to spread knowledge about how you can support the conservation of this animal.

Important Editorials of the Month

Bilkis Bano Case and Remission

Why in News?

Recently, the Supreme Court has nullified the Gujarat government's decision to grant Remission to 11 convicts involved in the gangrape of Bilkis Bano and the murder of seven of her family members during the 2002 Riots in the state.

Key Highlights

- The exceptional nature of injustice that pervades Bilkis Bano's struggle, the Supreme Court is rightfully being lauded for upholding the rule of law.
- As the decision reads, "rule of law and equality before the law would be empty words if their violation is not a matter of judicial scrutiny."
- Significantly, the firm tone of the decision in calling out the illegalities and the collusion of the Gujarat government with the petitioners is likely to be a soothing balm in Bilkis Bano's fight for justice. Justice Nagarathna's words come as solace in light of the disturbing memory of the celebrations that followed the release of the 11 convicts in August 2022.
- Prison is a State subject. As a result, prison rules of each State identify certain reformatory and rehabilitative activities that the prisoners can undertake in order to earn remission in the form of days.
- The total number of days earned in remission is deducted from the actual sentence imposed by the court. Remission is rooted in the logic that, ultimately, prisons are meant to be rehabilitative spaces rather than simply being an instrument to carry out retributive punishment.
- In the context of life convicts, they necessarily have to serve a minimum of 14 years in prison before they can become eligible to apply for remission.
- An application does not guarantee remission and the setting off the earned remission against the punishment imposed by the courts.
- Each application has to be individually considered by a committee based on factors laid down by the Supreme Court in *Laxman Naskar vs State of West Bengal (2000)*.
- These include examining whether the offence is an individual act of crime without affecting the society at large; chance of recurrence of crime; whether the convict has lost their potentiality in committing crime; whether there is any fruitful purpose of confining the convict any more; and socio-economic condition of the convict's family. Naturally, given the individualised nature of the inquiry, these factors are subjective. This makes the reasons guiding these decisions extremely crucial.



Summary of Bilkis Bano Case

Injustice and Collusion

The Bilkis Bano case highlights an "injustice of exceptionalism," wherein 11 individuals convicted of gang-rape and murder were granted remission without proper consideration. The Supreme Court's ruling exposes collusion involving a petitioner, a previous bench, and the Government of Gujarat, leading to the unlawful granting of remission.

Remission Application Jurisdiction

Contrary to established legal precedent, the Gujarat government, in violation of the law, assumed control over remission applications, bypassing the Government of Maharashtra. The Supreme Court deemed the earlier decision, designating Gujarat as the appropriate authority, illegal and revoked the remission orders for the 11 convicts.

Praise for Upholding the Rule of Law

The Supreme Court is commended for maintaining the rule of law in the face of extraordinary injustice, underscoring the crucial role of judicial scrutiny in upholding equality before the law. The decision's assertive tone exposes illegalities and collusion, providing comfort to Bilkis Bano in her quest for justice.

Resilience of Bilkis Bano

Bilkis Bano's unwavering determination in seeking justice is recognized and celebrated, particularly in light of the troubling celebrations that ensued following the release of the 11 convicts. The decision is viewed as a positive stride, offering solace and support to Bilkis Bano while acknowledging the contributions of women's rights advocates.





- However, the reality is that there is both a lack of transparency on how these committees are formed to decide individual applications and reasons guiding the decisions. Such a state of affairs makes remission a potent site for exercise of arbitrary power.
- The current case is one such example of unchecked discretion. Besides, the Supreme Court in *Epuru Sudhakar vs State of Andhra Pradesh* (2006) has held that judicial review of an order of remission is only available when there is a non-application of mind; relevant materials have not been considered, the order is mala fide, or based on irrelevant considerations or suffers from arbitrariness.
- In the absence of reasons guiding the decisions, there is little scope to challenge them on these grounds. This concern of non-application of mind is writ large in the case of the 11 convicts in Bilkis Bano's case because the orders of the Gujarat government for each of them are exact copies.
- In the Bilkis Bano case on remission, the Supreme Court found illegalities and injustices that spoke to 'fraud' and 'usurpation of power' by the government, and, therefore, did not need to go into difficult normative questions.
- Certain remission policies of States present the question more starkly. States in India today have remission policies that completely deny remission opportunities to certain categories of offenders or have significantly longer periods of incarceration for certain offences before consideration of remission.

Background of Bilkis Bano Case

- Bilkis Bano, pregnant during the 2002 Gujarat riots, suffered gangrape, and seven family members, including her three-year-old daughter, were killed.
- Central Bureau of Investigation (CBI) conducted extensive legal proceedings into the case.
- In 2004, the Supreme Court (SC) moved the trial from Gujarat to Mumbai due to death threats against Bilkis and directed the central government to appoint a special public prosecutor.
- In 2008, a Mumbai court convicted 11 individuals for gangrape and murder, a crucial step towards justice for Bilkis Bano.
- In August 2022, the Gujarat government granted remission to the 11 convicts, leading to their release.
- Controversy and legal challenges arose due to concerns about the authority and jurisdiction responsible for granting such remissions.

What is Remission?

Remission refers to the complete termination of a sentence at a reduced point. It differs from both furlough and parole as it involves a reduction in the sentence rather than a temporary break from prison life. In remission, the nature of the sentence remains unchanged, but the duration is shortened, allowing the individual to be released on a specified date.

Effect of Remission	Upon remission, the individual is granted a specific release date, marking their legal status as a free person. However, any breach of the remission conditions results in its cancellation, compelling the offender to serve the entire original sentence.
Constitutional Provisions	<ul style="list-style-type: none">• Both the President and the Governor hold sovereign powers of pardon as per the Constitution.• Article 72 empowers the President to grant pardons, reprieves, respites, or remissions of punishment, especially in cases involving court-martial or offenses under laws related to the Union government's executive power, including death sentences.• Similarly, Article 161 grants the Governor similar powers for offenses under laws within the State's executive authority.

Statutory Power of Remission

- The Code of Criminal Procedure (CrPC) outlines the provision for remission of prison sentences. Section 432 allows the "appropriate government" to suspend or remit a sentence, wholly or partly, with or without conditions.
- Section 433 permits the commutation of any sentence to a lesser one by the appropriate government. State governments use this power to release prisoners before completing their full terms.

Arguments in favor of the provision of remission

The concept of remission in India comes with several advantages, benefiting both individuals serving sentences and the overall criminal justice system. Here are some potential advantages:



Rehabilitation and Reintegration

- Granting remission acknowledges positive changes in convicted individuals, promoting the ideals of rehabilitation and successful reintegration into society.

Humanitarian Approach to Reformation

- Remission is grounded in humanitarian considerations, taking into account factors such as old age, health conditions, and other compassionate reasons.

Preventing Prison Overcrowding

- Remission helps alleviate prison overcrowding by reducing the number of individuals serving sentences. This contributes to improved living conditions for prisoners and enhances the overall management of correctional facilities.

Development of Prisoners' Good Behavior



ISSUES IN GRANTING REMISSION

ELIGIBILITY FOR REMISSION AND APPLICATION PROCESS

- Life convicts require a minimum of 14 years before remission eligibility.
- One-size-fits-all approach hinders individualized reformatory processes.
- Committee assesses applications based on crime nature, recurrence chances, and socio-economic factors.
- Lack of explicit mention regarding committee composition and representation.

LACK OF TRANSPARENCY IN REMISSION PROCESS

- Concerns about arbitrary power due to opaque formation of remission committees.
- Absence of transparent reasons guiding decision-making.
- Bilkis Bano's case illustrates unchecked discretion with identical orders from Gujarat government.

JUDICIAL REVIEW OF REMISSION ORDERS

- Epuru Sudhakar vs State of Andhra Pradesh (2006) establishes limited judicial review, focusing on non-application of mind.
- Bilkis Bano case reveals concerns about non-application of mind, evidenced by identical orders for each convict.

CHALLENGES IN REMISSION POLICIES

- Varying state remission policies create disparities in opportunities for certain offender categories.
- Debates on whether specific offenders should be ineligible for remission, prompting discussions on retributive versus conditions-based punishment frameworks.

- The possibility of remission acts as an incentive for prisoners to exhibit good behavior, adhere to prison rules, and actively participate in rehabilitation programs. This fosters a positive environment within correctional facilities.

Improving Judicial and Correctional System Efficiency

- Remission allows authorities to allocate resources more efficiently, concentrating on cases where incarceration is deemed necessary. Simultaneously, it provides a mechanism for releasing individuals who may no longer pose a significant threat.

Cost Savings

- Remission leads to cost savings related to the maintenance and management of prisons, offering an economic benefit to the criminal justice system.

Arguments Against the Provision of Remission

While remission in India presents certain advantages, it also brings forth potential drawbacks and challenges. Critics, therefore, present arguments against the provision of remission.

Concerns About Public Safety

- Critics express concerns that, in certain instances, the emphasis on rehabilitation and good behavior may not adequately address the risk to public safety associated with offenders involved in heinous crimes.

Controversial Cases and Public Outcry

- Decisions related to remission, particularly in high-profile or controversial cases, can lead to public outcry. For example, the remission granted to convicts in the Rajiv Gandhi Murder case by Karunanidhi stirred public controversy.

Inconsistency in Application

- The discretionary nature of remission may result in inconsistencies in its application. Similar cases with comparable circumstances might be treated differently, raising concerns about fairness and equality before the law.

Potential for Political Influence

- There is a perceived risk of political interference or influence in the remission decision-making process. Politically motivated decisions could compromise the principles of justice and the integrity of the legal system, as seen in alleged political influence in the Bilkis Bano Case.

Undermines Deterrence

- Critics argue that the availability of remission may undermine the deterrent effect of criminal penalties. The belief that individuals can be released early for good behavior might reduce the perceived severity of consequences for criminal actions.

Victim and Survivor Concerns

- In cases where remission is granted, the concerns and rights of victims or their survivors may be overlooked. Victims might feel that the legal system inadequately addresses their needs, especially if the release of an offender causes distress or fear.

Lack of Transparency

- The decision-making process for remission lacks transparency, fostering skepticism about the criteria considered by authorities. This lack of transparency can erode public trust in the criminal justice system.

Landmark Cases of Remission

Case	Key Points
Maru Ram v. Union of India (1980)	Modern trend emphasizes punishment with a focus on reformation rather than mere confinement in jail.
Laxman Naskar v. State of West Bengal (2000)	Stipulated factors for remission grant: <ul style="list-style-type: none"> • Individual nature of the crime • Likelihood of future recurrence • Convict's potentiality • Purpose of further confinement • Socio-economic condition of the convict's family.
Epuru Sudhakar v. State of AP (2006)	Judicial review of remission order available on grounds of: <ul style="list-style-type: none"> • Non-application of mind • Mala fide intent • Extraneous or irrelevant considerations • Exclusion of relevant materials • Arbitrariness.
Union of India vs V. Sriharan (2015)	<ul style="list-style-type: none"> • Appropriate government for remission is the State where the convicts are sentenced. • Gujarat government "usurped" power from Maharashtra in granting remission.
Rajiv Gandhi Assassination Case	<ul style="list-style-type: none"> • In 2018, the Tamil Nadu government recommended the release of A.G. Perarivalan, a convict in the Rajiv Gandhi assassination case, based on good behavior. • The recommendation was forwarded to the governor for consideration.
Assassination of Beant Singh	<ul style="list-style-type: none"> • In 2014, the Punjab government, under Chief Minister Parkash Singh Badal, decided to release certain convicts involved in the assassination of Chief Minister Beant Singh. • The rationale was their good behavior and conduct during imprisonment, sparking debates on justice and victims' rights.
Jessica Lal Murder Case	<ul style="list-style-type: none"> • Manu Sharma, convicted in the high-profile Jessica Lal murder case, received a life sentence. • In 2011, the Delhi government recommended premature release for Sharma, citing good conduct. • However, this decision was later overturned, leading to the rejection of Sharma's release.

Ram Mandir Architecture

Why in News?

On 22nd January 2024, the Ram temple in Ayodhya was inaugurated, marking the completion of a 200-year-old saga that profoundly impacted India's socio-political landscape.

Uniqueness of Ram Temple

Traditional Architecture and Construction



- 3-storey temple, built in the traditional Nagara style with pink sandstone from Mirzapur and the hills of Banshi-Paharpur (Rajasthan).
- Spans 71 acres, showcasing architectural marvel.

Temple Dimensions

- Main temple area spans 235 feet in width and 161 feet in height.
- Encompasses 2.77 acres with 390 pillars, 46 doorways, and 5 mandaps.

Unique Features Inside

- Main Garbh Griha holds idols of Ram Lalla.
- Multiple mandaps, including Rang Mandap & Nritya Mandap.

Innovative Anointment Tradition

- On every Ram Navami at noon, mirrors and lenses focus the sun's rays on Ram Lalla's idol.
- Unique anointment requires no electricity, utilizing brass instead of iron or steel.

Sculptor's Contribution

- Idol of five-year-old Ram Lalla crafted by Mysuru sculptor Arun Yogiraj.
- Stands at 51 inches and consecrated in a special ceremony.

Durability and Symbolism

- No iron used in the temple's construction.
- Designed to endure for at least a millennium.

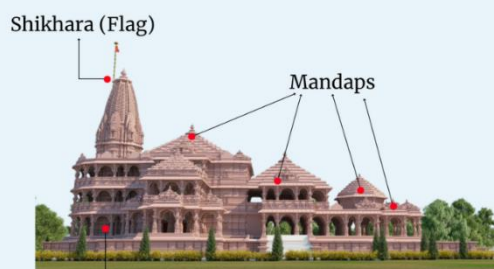


Key Features of Ram Janmabhoomi Mandir in Ayodhya

- Constructed in the traditional Nagara style.
- Houses childhood form of Bhagwan Shri Ram (Shri Ram Lalla) in the main sanctum sanctorum and a Shri Ram Darbar on the first floor.

- Includes five mandaps: Nritya Mandap, Rang Mandap, Sabha Mandap, Prathana Mandap, and Kirtan Mandap.
- Four Mandirs dedicated to Surya Dev, Devi Bhagwati, Ganesh Bhagwan, and Bhagwan Shiv, along with Mandirs for Maa Annapurna and Hanuman ji.
- Surrounded by a Parkota (Rectangular compound wall) with a length of 732 meters and a width of 14 feet.
- Features a historic Well (Sita koop) and a restored ancient Mandir of Bhagwan Shiv at Kuber Tila.
- Utilizes traditional construction materials, avoiding the use of steel or iron.
- Main temple structure built with Bansi Paharpur Pink Sandstone, granite stones in the plinths, and white Makrana marble and colored marble for inlay work.
- Incorporates special bricks known as “Ram Shilas” with the inscription “Shri Ram” for symbolic significance.
- Constructed entirely using traditional and indigenous technology, emphasizing environmental conservation, with 70% of the area left green.

Ram temple at Ayodhya



Shikhara (Flag)

Mandaps

Garbh Griha (Temple sanctum)

- Ram Darbar comprises **statues of Ram, Sita, Lakshman, & Hanuman**

- Temple can accommodate **1500** people at a time
- Expected daily footfall: **1-2 lakh**
- Expected footfall on special days: **upto 5 lakh**



Pradhakshin patha

16 ft.

32 steps

THE HINDU

Timeline of Ram Mandir

Year	Event
1751	Marathas appeal to Nawab of Awadh for control of Ayodhya, Kashi, and Mathura.
1822	Judicial records mention a mosque on the birthplace of Lord Ram.
1855	Violent clash near Babri Masjid, leading to the capture of Janmasthan by Hindus.
1949	Placement of the idol of Ram Lalla in the mosque.
1980s	Vishwa Hindu Parishad (VHP) initiates a movement for the 'liberation' of Ram Janmabhoomi.
1986	Locks of Babri Masjid opened, allowing Hindus to offer prayers.
1989	Foundation-laying ceremony for the Ram temple.
1990	Rath Yatra led by LK Advani, leading to widespread riots.

1992	Demolition of Babri Masjid on December 6 th .
1993	Parliament passes Acquisition of Certain Area at Ayodhya Act.
2009	Liberhan Commission highlights premeditated nature of events in 1992.
2010	Allahabad High Court judgment divides land in a 2:1 ratio, giving two-thirds to Ram temple litigants.
2019	Supreme Court awards entire disputed land to Hindu petitioners for a Ram temple.
2020	August 5th - Indian Prime Minister performs Shilanyas of the Ram temple, establishing Shri Ram Janmabhoomi Teerth Kshetra Trust.
2024	January 22nd - Ram temple in Ayodhya, built in Nagara Style, inaugurated.

Ram Mandir's Significance

Religious Significance

Fulfilment of a long-standing religious and spiritual aspiration of Hindus.

Cultural Heritage

Ayodhya's deep historical and cultural connection to the ancient Indian epic, the Ramayana. The temple's construction viewed as a symbol of preserving and celebrating India's cultural heritage.

Economic Value

Potential to stimulate economic growth, create jobs, and boost tourism in the region. Provides opportunities for local development.

Religious Peace

Potential to halt decades of religious clashes between Hindus and Muslims after resolving the Ayodhya dispute.

Growth of Charity

The temple could serve as a nucleus for the growth of charitable institutions like schools and hospitals.

Development of Basic Infrastructure

Construction of the temple could lead to the development of basic infrastructure, including roads, to accommodate pilgrims.

What is Nagara Style of Temple Architecture

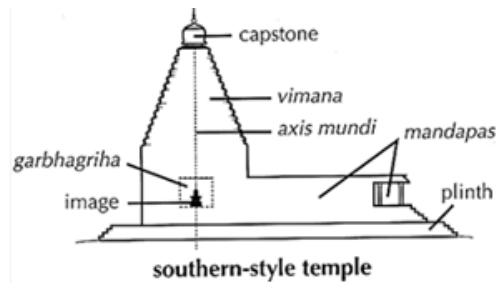
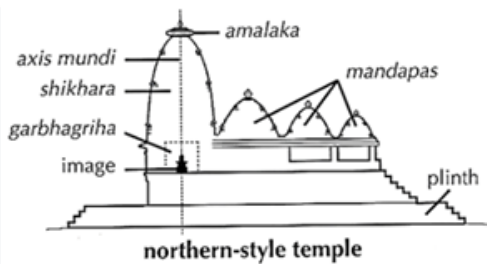
Emergence

- Emerged in the 5th century CE during the late Gupta period in northern India.
- Juxtaposed with the Dravida style of southern India, which also emerged in the same period.

Distinctive Features

- Nagara temples built on a raised plinth.
- Garbha Griha (sanctum sanctorum) is the most sacred part.
- Towering shikhara (literally 'mountain peak') over the Garbha Griha.
- Shikharas represent the natural and cosmological order in Hindu tradition.

- Typically includes a circumambulatory passage around the garbha griha and one or more mandapas (halls) on the same axis.
- Elaborate murals and reliefs often adorn the walls.



Five Modes of Nagara Architecture

Valabhi

- Masonry rendering of the barrel-roofed wooden structure.
- Formalization of multi-eave towers.

Phamsana

- Shikhara characterized by a piling up of slabs.
- Associated with the Early Nagara Style, progressing from Valabhi mode.

Latina

- The Latina is a shikhara that is a single, slightly curved tower with four sides of equal length.
- Emerged in the Gupta heartland and spread across northern India for three centuries.

Shekhari

- Shikhara with attached sub-spires or spirelets echoing the main shape.
- Sub-spires may run up most of the face and can be of different sizes.

Bhumija

- Involves miniature spires arranged in horizontal and vertical rows, creating a grid-like effect.
- Actual shikhara often approaches a pyramidal shape, with the curve of the Latina less visible.
- Emerged from composite Latinas in the tenth century onwards.

Nagara Style of Temple Architecture



- Emerged in the 5th century CE during the late Gupta period in northern India.
- Nagara temples built on a raised plinth.
- Garbha Griha (sanctum sanctorum) is the most sacred part.
- Towering shikhara (literally 'mountain peak') over the Garbha Griha.
- Shikharas represent the natural and cosmological order in Hindu tradition.
- Typically includes a circumambulatory passage around the garbha griha and one or more mandapas (halls) on the same axis.
- Elaborate murals and reliefs often adorn the walls.

Five Modes of Nagara Architecture

1.	Valabhi
2.	Phamsana
3.	Latina
4.	Shekhari
5.	Bhumija

Temple Architecture in India

Temple Architecture in Ancient India

- High-standard temple architecture developed in various regions of ancient India.
- Distinct styles resulted from geographical, climatic, ethnic, racial, historical, and linguistic diversities.
- Three main styles: Nagara (Northern), Dravida (Southern), and Vesara (Mixed), with regional styles in Bengal, Kerala, and the Himalayan areas.

Decoration and Components of Indian Temples	<ul style="list-style-type: none"> • Decoration reflected in figured sculpture and architectural elements. • Garbha-griha (womb chamber) houses the deity, with a circumambulation passage. • Subsidiary shrines common in South Indian temples.
Design Philosophy of Hindu Temples	<ul style="list-style-type: none"> • Essence derived from the belief in the oneness of all things. • Four principles: artha (wealth), kama (pleasure), dharma (virtues), and moksha (self-knowledge). • Mathematically structured spaces, intricate artworks, and carved pillars illustrate and revere these philosophies.
Temple Site Selection	<ul style="list-style-type: none"> • Temple sites usually near water bodies, in the lap of nature. • Suggested sites exhibit peace and tranquility, with Gods believed to reside in such places. • Temples can be constructed even in the absence of natural water bodies, with suggestions for water features in the vicinity.
Layout of Hindu Temples	<ul style="list-style-type: none"> • Follows a geometrical design known as vastu-purusha-mandala. • 8x8 (64) grid Manduka Hindu Temple Floor Plan is a typical template. • Symmetrical and self-repeating model based on primary convictions, traditions, myths, and mathematical standards.
Significance of Vastupurushamandala Layout	<ul style="list-style-type: none"> • Layout symbolizes the Purusha, with a vivid saffron center. • Axis created by the four significant directions, forming a perfect square around the axis. • Each square within the main square symbolizes specific elements like deities, apsaras, or spirits.
Circumambulation and Padas Significance	<ul style="list-style-type: none"> • Devotees circumambulate clockwise in Manusha Padas, Devika Padas, and Paishachika Padas. • Illustrations of artha, kama, dharma, and moksha found in carvings and images. • Pillared outdoor halls called Mandapa for public rituals, with spires symmetrically aligned above the central core.
Fractal-Like Design and Mathematical Perfection	<ul style="list-style-type: none"> • Repetition and mirroring of fractal-like design structure. • Compounds of larger temples house smaller temples and shrines following fundamental aspects of grids and symmetry. • Manuals elucidate plans with squares from 1 to 1024, each having individual significance. • Hinduism welcomes flexibility, creativity, and aesthetic independence in temple design.

Components of the Hindu Temple

Sanctum (Garbhagriha)

Entrance

Spire in Freestanding Temples

Vahan (Mount) and Standard Pillar (Dhvaj)

Sanctum (Garbhagriha)

- Small cubicle with a single entrance.
- Grew into a larger chamber over time.
- Houses the main icon, the focus of ritual attention.

Entrance

- May be a portico or colonnaded hall.
- Known as a mandapa.
- Provides space for a large number of worshippers.

Components of the Hindu Temple

Spire in Freestanding Temples

- Mountain-like spire.
- In North India, it takes the shape of a curving shikhar.
- In South India, it is a pyramidal tower called a vimana.

Vahan (Mount) and Standard Pillar (Dhvaj)

- Positioned axially before the sanctum.
- The Vahan represents the mount or vehicle of the temple's main deity.
- A standard pillar or dhvaj is also placed in this area.

Different Temple Styles

The different styles of Temple architecture present in India are listed below in the table

Temple Style	Explanation
Nagara (North Indian)	Temples in North India, built on stone platforms with steps, having varying shapes of shikharas such as latina, phamsana, and valabhi. Example: Lakshmana temple in Khajuraho.
Dravida (South Indian)	Temples in South India, enclosed within compound walls, with vimana towers resembling stepped pyramids. Example: Rajarajeswara temple in Thanjavur.
Vesara	An independent style formed by selectively blending elements of Nagara and Dravida orders.
Latina Shikhara	Square base with inward-sloping walls, typical in some Nagara temples. Example: Siddheshvara Mahadeva Temple in Barakar.
Phamsana	Broader and shorter shikhara type in Nagara architecture, with roofs composed of several slabs rising to a single point.
Valabhi	Rectangular buildings with a vaulted chamber in Nagara style.
Kuta (Dravida)	Square shape of Dravida temples.
Shala (Dravida)	Rectangular shape of Dravida temples.
Gaja-Prishta (Dravida)	Elliptical shape of Dravida temples, resembling an elephant's back.
Vritta (Dravida)	Circular shape of Dravida temples.
Ashta (Dravida)	Octagonal shape of Dravida temples.

Temple Style	Explanation
Pala Style (Bengal)	Sculptural style in Bengal between the 9th and 11th centuries, influenced by the Pala dynasty. Example: Siddheshvara Mahadeva Temple in Barakar.
Ahom Style (Assam)	A distinct regional style in Assam resulting from the mix of Tais from Upper Burma and the Pala style of Bengal. Example: Kamakhya temple.
Hoysala Style (Karnataka)	Characterized by intricate carving in dark schist stone, as seen in the Hoysaleswara temple in Halebid.
Vijayanagara Style	Synthesis of Dravidian temple architecture with Islamic styles in the Vijayanagara Empire. Example: Virupaksha temple in Hampi.
Jain Style	Jain temples found across India, including in Ellora, Aihole, Deogarh, Khajuraho, Mount Abu, and Palitana.
Buddhist Style	Examples include the Mahabodhi Temple in Bodhgaya and Nalanda University, reflecting Buddhist architectural traditions.

Difference Between Nagara, Dravidian and Vesara Style of Architecture

Feature	Nagara Style Architecture	Dravidian Style Architecture	Vesara Temple Style Architecture
Geographical Origin	North India, between Himalayas and Vindhyas	South India, between Krishna and Kaveri rivers	Dharwad region, Hybrid of South and North Indian styles
Temple Complex Accessibility	Open to the public	Enclosed by a compound wall	Hybrid of both, combines accessibility and enclosure
Temple Components	Four Chambers: Garbhagriha, Jagmohan, Natyamandir, Bhogamandir	Compound wall, auxiliary hall, Gopuram, Garbhagriha, Vimana, Mandapa	Spire-Shaped Shikhara, Mandapa, Antarala, Pradakshina walkway
Shikhara Shape	Curvilinear-shaped, bell-shaped structure	Pyramidal tower, square in design	Spire-Shaped, inspired by Nagara style
Temple Tank	-	Present within the walled construction	-

Feature	Nagara Style Architecture	Dravidian Style Architecture	Vesara Temple Style Architecture
Separation of Garbhagriha and Vimana	Adjacent to each other	Separated by a Mandapa, pillared wall	Connected by Pradakshina walkway, no ambulatory path
Sculptures	River goddesses, mithuna images	Dwarpalas, Vimana stories, Pillar sculptures	-
Gopuram	-	Located in the center of the front wall	-
Height Evolution	-	Height of Gopurams continues to rise	-
Architectural Fusion	Not applicable	Not applicable	Hybrid, combining features of both styles

Floods and Preventive Measure

Why in News?

After the landfall of Cyclone Michuung, there is a need to take preventive measures to avoid urban flooding in India.

- It has been many days since Cyclone Michuung passed, but every resident of Chennai still experiences the consequences of a slew of decisions taken for them, or on behalf of them, by an army of people.
- All these choices had consequences. And so these decisions should be accounted for. Some consequences were visible and obvious, while others were hidden and subtle.
- In the rains in 2015, many believed that the choice to hold off the release of water from a nearly full reservoir — until later events forced an urgent decision to do it without due warning or precautions — was what led to the most tragic outcomes of the flooding then.

Dangers In A Home Without Power

- The choice to stop electricity supply to areas where cyclonic winds can damage power cables and cause live wires to drop into flooded streets appears logical and sensible.
- But there is another side to this, especially when the practice is carried out as a ‘preventive measure’, extended across a wide area, and continued well after the natural event has passed or an accident has been reported. Homes and neighbourhoods plunged in darkness can be dangerous by themselves.
- That an elderly relative can trip, fall, and break a hip is a worry as it can be as life-threatening as suffering a heart attack.
- In 2021, Tamil Nadu had 13.8 crore people over the age of 60 years. Of Chennai metropolitan area’s estimated 12 million-plus million population, 5,00,000 people are above this age, and over 50,000 are aged 80 or above. Many live alone or with limited assistance. An area-wide power disruption is a significant hazard.
- There are also the security and safety concerns of having no electricity in domestic households. Accidents and injuries are more likely to happen in the dark.

- Simple tasks become fraught and even dangerous. Reptiles and insects could crawl into the house. So could miscreants.
- The choice to turn off the electricity supply during a cyclone, and to keep it that way even after the rain stops, has to be looked at in the backdrop of the facts given above.
- There is no objectively “safe” choice here. It is a constantly evolving, dynamic balance. And, that is why decision-makers should be held accountable for the choices they make.
- Decision-making in any crisis can be emotionally challenging and psychologically stressful.
- When the scale of these decisions is large, and the nature of a disaster is cataclysmic, the process also becomes an extreme test of intellectual and analytical judgement, as well as that of personal strength and confidence.
- The potential cost of mistakes looms large in a decision-maker’s mind, which tends more often towards conservative options being preferred. And, yet, the dangers from inadequately considering the ‘flip side’ can lead to equally serious (even if less dramatic) complications due to inaction.
- Shutting off the electric supply in the event of a storm can be life-saving. But, restoring supply promptly afterwards is also vital to save lives and safeguard against terrible individual consequences.

The Yardstick Must Be Justification

- A bureaucrat or government employee who has been granted executive power to decide to turn off the electricity supply power to a region, neighbourhood, street, or small area/home should be able to justify the decision and document the reasons, in real-time, in the event of a review.
- Just as premature restoration of power to areas with damaged cables carries the risks of electrocution and infrastructure damage, the unjustifiable extension of a power cut also has a real, and significant mortality risk for thousands of people in their own homes. However, this is not a reductionist argument.
- Making tough choices in a phenomenally complex, poly-dimensional, multivariable scenario such as a natural disaster is a challenge that can be mind-numbing. And the experts tasked with making them deserve unstinted appreciation, gratitude and respect.
- Some people make the disingenuous argument for more public transparency to these complicated decision-making processes.
- But clearly, in view of their specialised (and even confidential) nature, any such review should remain in the realm of specialists and subject-matter experts.
- A complex calculus should not ever be allowed to become a contest of cheap populism. The consequences of going that route during the floods in 2015 are still fresh in our memories.

Think Of Shared Responsibility

- And yet, this is not a case for elitist exclusivity either, where all decisions are from the top. In a healthy democratic system, no individual or group ought to have unfettered, unquestioned power over such choices, or be permitted to make them based on little more than a whim and fancy.
- It is time to hold the decision-makers accountable for their choices, especially when their choices impact the lives of millions. An ‘ideal solution’ may never be feasible, but we should strive towards one.
- A hierarchy-based approach, with scaled levels of responsibility based on impact area or ‘target population size’, may work.
- The decision-making cell should be more granular and definitely faster, quickly developed, and implemented to meet rapidly changing circumstances.
- Perhaps more than one person should be involved when it comes to making major decisions. In an evolving crisis, periodic review, done every few hours, by an oversight team, might help challenge and reverse questionable choices.

- Regardless of the specifics, the principle at play is that a decision-maker's rationale and evidence in support of a choice or preference should be subject to review.
- If found indefensible or unsupported, such decisions must be overturned or modified at the earliest. And, responsibility is fixed squarely on the individual(s) who make such sub-optimal moves, even banning them from such decision-making positions in the future.

Factors Contributing to the Rise in Floods

Natural Causes

Climate Change

- The International Panel for Climate Change highlights that future projections anticipate an increase in rainfall intensity, duration, and frequency.
- Climate change is also linked to a rise in cyclonic circulations and cloud bursts, leading to flash floods.

Skewed Rainfall Pattern

- Approximately 80% of precipitation occurs during the monsoon months from June to September.
- During this period, rivers carry a heavy sediment load from catchments.
- Insufficient river carrying capacity, coupled with drainage congestion and erosion of riverbanks, contributes to flooding.

Trans-National Rivers

- The origin of some rivers (e.g., Brahmaputra and many Ganga tributaries) in neighboring countries adds a complex dimension to the problem.
- Additionally, abrupt topographical changes from high mountains to plain areas contribute to floods in northern India.

Earthquakes

- The Earthquake Disaster Risk Index (EDRI) from the National Disaster Management Authority (NDMA) indicates that around 56% of India is susceptible to moderate to major earthquakes.
- River basins in earthquake-prone regions experience instability, leading to flooding.

Human Causes

Unplanned Development

Urban Flooding

Neglect of Pre-Disaster Planning

- **Unplanned Development:** Factors such as unplanned development, encroachments in riparian zones, failure of flood control structures, haphazard reservoir operations, inadequate drainage infrastructure, deforestation, land-use changes, and sedimentation in riverbeds worsen floods. Heavy rainfall can breach embankments, destroying settlements along riverbanks and sandbars.
- **Urban Flooding:** Recent urban flooding results from intensified heavy rainfall in short periods.
 - This issue is exacerbated by unchecked encroachment on waterways and wetlands, insufficient drain capacity, and poor maintenance of drainage infrastructure.
 - Inadequate waste management further compounds the problem by blocking drains, canals, and lakes, while poorly planned road projects disrupt flood flows.

- **Neglect of Pre-Disaster Planning:** Historical flood management has primarily focused on post-flood recovery and relief.
 - Many reservoirs and hydroelectric plants lack sufficient gauging stations for measuring flood levels, a crucial element in flood prediction and forecasting.

What precautions do we take during floods in urban areas?



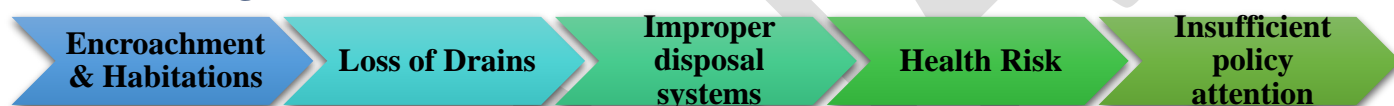
Impacts of Floods in India



- **Loss of Life:** Floods in India can lead to fatalities resulting from drowning, injuries, infections, or electrocution.
 - The National Disaster Management Authority (NDMA) identifies floods as one of the most frequent and lethal natural disasters in the country.
 - On average, 1,600 lives are lost annually due to floods.
 - By mid-2023, North India alone has confirmed at least 60 deaths caused by floods, though the actual toll might be higher.
- **Damage to Property:** Floods have the potential to damage or destroy various infrastructures, including houses, buildings, roads, bridges, railways, power lines, and communication networks.
 - Additionally, floods can harm or wash away crops, livestock, vehicles, and other assets.
 - NDMA reports that floods affect approximately 75 lakh hectares of land, causing damage amounting to Rs 1,805 crore to crops, houses, and public utilities each year in India.
 - In 2023, floods have extensively damaged prominent landmarks in Delhi, such as the Red Fort and the Supreme Court.
- **Displacement of People:** Floods force people to evacuate their homes, seeking shelter in safer locations, disrupting their normal lives and livelihoods.
 - This displacement can lead to humanitarian crises, affecting access to food, water, sanitation, healthcare, and education.
 - According to the Internal Displacement Monitoring Centre, floods displaced about 5.4 million people in India in 2020.

- In 2023, floods have displaced thousands of individuals in North India, particularly in Himachal Pradesh and Punjab.
- **Environmental Degradation:** Floods can have adverse effects on the environment by eroding soil, altering natural habitats for flora and fauna, polluting water sources, and increasing the risk of landslides and epidemics.
 - Additionally, floods can impact the ecological balance of rivers and wetlands, changing their hydrology and biodiversity.
 - For instance, floods can pose a threat to the survival of endangered species like the Gangetic dolphin and the gharial in the Yamuna River.
- **Economic Losses:** Floods can significantly impact India's economic growth and development by reducing agricultural output, disrupting industrial production, affecting trade and commerce, and increasing expenditures on relief and rehabilitation.
 - The tourism sector is also susceptible to damage, with floods harming cultural heritage and natural attractions. According to a World Bank study, floods cost India approximately \$14 billion annually in direct losses.

Urban Challenges & Floods in India



- **Encroachment & Habitations:** The issue of encroachment is prevalent in numerous cities and towns. Over thousands of years, natural streams and watercourses have evolved in their respective watersheds due to the forces of flowing water.
- **Loss of Drains:** Ideally, the natural drains should have been expanded, similar to widening roads for increased traffic, to accommodate higher flows of stormwater.
- **Improper disposal systems:** A significant contribution to the reduction of drain capacities comes from improper disposal of solid waste, encompassing domestic, commercial, and industrial waste. Dumping construction debris into the drains also plays a significant role.
- **Health Risk:** Floods heighten the potential for infectious disease outbreaks. Areas affected by floods become more susceptible to disease outbreaks, particularly after the floodwater recedes. The surge in diseases occurs as floodwater mixes with sewage water and various contaminants.
- **Insufficient policy attention:** Despite decades of experiencing urban flooding in India, there has been a lack of adequate attention to planning specific efforts to address this issue.

Decision-Making

Importance of decision-making during natural disasters was highlighted by the aftermath of the 2015 floods in Chennai. Delayed release of water without adequate warning exacerbated flooding. Need for a meticulous evaluation of preventive measures to avoid repeating past mistakes. Vulnerabilities in communication and preparedness exposed, emphasizing the importance of a comprehensive and proactive strategy. Continuous learning process required for effective crisis management.

Unintended Consequences of Power Disruption

- Decision to cut electricity in cyclone-prone areas seems reasonable but raises concerns when extended as a preventive measure.
- Prolonged power outages pose significant risks beyond immediate safety.

- Considerable elderly population in Tamil Nadu, making power disruptions hazardous.
- Potential for accidents, injuries, and security concerns necessitates a nuanced decision-making process.
- Addressing mental health aspects associated with disrupted daily life integral to overall community well-being.

Balancing the Need for Safety

- Decision-making during a crisis demands a delicate balancing act between safety measures and timely restoration of essential services.
- Striking a balance crucial for effective crisis management.
- Pressure to make decisions under extreme circumstances requires consideration of immediate and long-term repercussions.
- Decision-making process evolves with changing dynamics of a crisis.
- Importance of adaptability, openness to feedback, and adjustment of strategies in real-time.

Accountability in Decision-Making

- Bureaucrats or government officials granted executive power should justify and document decisions in real-time.
- Accountability extends beyond individual decision-makers to organizational structures and systems.
- Regular audits, transparent reporting mechanisms, and public disclosure contribute to a culture of accountability.
- Lessons learned from past events inform continuous improvement initiatives.
- Accountability integral to decision-making processes reinforces public trust.

Challenges in Decision-Making

- Decision-making in crisis situations is emotionally and psychologically challenging.
- Striking a balance between caution and necessary action imperative.
- Communication, coordination, and resource allocation present additional complexities.
- Public expectations add pressure on decision-makers.
- Training programs, psychological support mechanisms, and collaborative efforts crucial for robust decision-making framework.

Transparency vs. Specialized Decision-Making

- Calls for transparency met with resistance due to the specialized and confidential nature of crisis management.
- Balance between public transparency and expert judgment crucial to prevent decision-making from devolving into cheap populism.
- Clear guidelines and communication strategies required for maintaining the right balance.
- Transparency viewed as a tool for accountability and public understanding.
- Safeguarding integrity of the decision-making process while providing accurate and timely information.

Shared Responsibility and Democratic Accountability

- Decision-making process should involve collaboration and shared responsibility.
- Inclusivity, periodic reviews by oversight teams, and accountability mechanisms integral to the decision-making process.
- Involvement of local communities, NGOs, and government agencies enhances effectiveness of preventive measures and response strategies.
- Democratic accountability requires a balance between expert judgment and community involvement.

- Collaborative decision-making framework establishes democratic process as a driving force for resilience and inclusivity in crisis management.

Way Forward



Disaster Preparedness Plan

- Comprehensive flood management plan incorporating disaster preparedness needed.
- Strengthening components like Flood Hotspot Mapping at local and regional scales.
- Managing and regulating riparian zones to prevent spilling and erosion.
- Implementing river flood modeling for incidents like reservoir breach and emergency water release.
- Utilizing advanced techniques such as satellite imagery and Geographic Information Systems for flood early warning systems.

Integrated Approach

- Implementing watershed management through an integrated approach.
- Combining hard engineering solutions (dams, culverts, dykes, channel widening) with ecologically sustainable soft solutions.
- Hard solutions involving civil engineering constructions to store and divert water, increasing lag time downstream.
- Ecological soft solutions including riparian zone restoration and afforestation along river channels to retain rainwater and reduce river discharge.
- Understanding river patterns, especially during monsoon, for an integrated flood management approach.

Prioritising Buffers, Flexibility, and Adaptability

- Reviewing safety criteria of dams and canals.
- Rebuilding with higher safety factors and creating new intermediate storages.
- Introducing dynamic reservoir management for improved flood control.
- Reducing Disaster Risk Reduction:
- Efficient implementation of Sendai Framework for Disaster Risk Reduction.
- Aiming to reduce vulnerability to disasters through strategic planning and action.

Focusing on Urban Flood Management

- Addressing the increasing severity of urban flooding and escalating losses annually.
- Exclusive attention to the subject of urban flooding is crucial.
- Proper implementation of NDMA guidelines on Urban Flooding 2016 is essential for effective urban flood management.

India-Korea

Why in News?

In the intricate tapestry of global geopolitics, defence collaboration emerges as a foundational imperative, crucial for the preservation of international peace and stability. The recent diplomatic overture during the visit of General Manoj Pande, Chief of the Army Staff of India, in 2023, to the Republic of Korea, signifies a critical juncture in the trajectory of India-Korea defence relations.

- Despite recent high-level engagements, a challenge that persists is the absence of a shared vision for a new comprehensive defence framework, one that can provide a robust structure under which both nations can operate and align their policies to construct a novel and sustainable emerging regional order.
- The imperative for India and Korea is to transcend the confines of bilateral cooperation, and embrace a paradigm shift that cultivates a more profound understanding of their roles in the swiftly evolving global scenario.

Korean View Of India's Regional Role

- A hurdle lies in the resistance on the Korean government side to reassess India's role in the region. It is incumbent upon Korea to comprehend that India is not merely the largest consumer of defence products.
- Rather, it stands as a regional power capable of substantial contributions to peace and stability in the Indo-Pacific.
- A departure from Cold War mentalities, where the Korean government perceived India as standing in the opposite Soviet bloc, is imperative for Korea to forge a deeper, more meaningful partnership with India.
- This paradigm shift in Korean government strategic thinking is indispensable for any meaningful engagement between the two nations.
- Further, the prevailing overemphasis by the Indian government side on weapons acquisition and technology transfer from Korea, while undeniably pivotal, has tended to overshadow broader strategic considerations.
- Similarly, the unwavering focus of the Korean defence establishment on profit-driven weapons sales to India, devoid of strategic considerations, may prove shortsighted in the face of fast-changing geopolitical dynamics.
- Powerful arms lobbies in India and Korea pose a potential roadblock, emphasising the necessity to prioritise long-term strategic goals over short-term gains.
- The emerging coalition of North Korea, China, and Russia poses a new serious challenge to collaborative efforts between the two nations.
- Divergent stances may arise, necessitating a nuanced appraisal of each party's strategic imperatives.
- The high-level interactions of Gen. Pande with the top Korean military leadership and his engagements with the leadership of top Korean defence institutions, such as the Defense Acquisition Program Administration (DAPA)





and the Agency of Defence Development (ADD), are anticipated to further unite the defence communities of both countries.

Explore Technological Collaborations

- Leveraging their technological capabilities, India and South Korea are aiming to collaborate in developing advanced defence systems and equipment.
- Given their shared understanding of the pivotal role technology will play in future conflicts, the scope for cooperation in this sector is limitless.
- Such synergy can lead to a mutually beneficial defence technology and industry partnership, propelling both countries to the forefront of innovation and self-reliance.
- In an era where defence against space warfare, information warfare, and cybersecurity is paramount, both nations can further explore opportunities for cooperation.
- Given Korea’s status as an advanced high-tech digital superpower, vast opportunities exist in the development of robust security measures in these areas to effectively counter emerging threats in the digital domain, ensuring the security of critical infrastructure and information.
- Strengthening coordinated efforts to counter terrorism aligns seamlessly with the shared concerns of India and South Korea.
- There is potential for collaboration in maritime security, including joint patrolling and information sharing, given the significant maritime interests both countries have in the Indian Ocean.

Peacekeeping and Exercises

- India and South Korea can leverage their United Nations peacekeeping expertise for collaborative efforts. Sharing insights and resources in peacekeeping operations can enhance regional and global stability, underscoring their joint commitment to peace and security.
- Additionally, joint exercises and the exchange of best practices in Humanitarian Assistance and Disaster Relief (HADR) demonstrate the shared responsibility of both nations in addressing vulnerabilities to natural disasters.
- Lastly, mutual growth is found in enhancing joint army exercises, fostering interoperability, and strengthening the capabilities of both armies for effective collaboration in diverse scenarios. Gen. Pande’s visit to Seoul has spurred the extension of cooperation beyond naval focus to other branches of India’s armed forces.
- While the recent visit of Gen. Pande has reignited the flame of India-Korea defence cooperation, the path forward necessitates meticulous navigation through the challenges and the wholehearted embrace of opportunities.
- A strategic, balanced approach, coupled with adaptability to the evolving geopolitical landscape is key to unlocking a robust and enduring defence collaboration, in turn creating a partnership that fosters peace, stability, and prosperity in the Indo-Pacific region. United, both nations stand ready to navigate the complexities and uncertainties of the future, forging a path toward a stronger and more resilient partnership.

India-South Korea Relations

Historical Ties	<ul style="list-style-type: none"> • Ancient Connections: The "Heritage History of the Three Kingdoms" narrates the ancient ties between India and Korea, dating back to 48 AD. • Introduction of Buddhism: Maritime routes may have facilitated the introduction of Buddhism to Korea during the arrival of Princess Suriratna.
Political Aspects	<ul style="list-style-type: none"> • Korea War Role: India's significant contribution to the ceasefire agreement during the Korean War helped ease tensions between North and South Korea. • CEPA Initiation: The Comprehensive Economic Partnership Agreement in 2010 elevated the India-South Korea relationship to a 'special strategic partnership.'



	<ul style="list-style-type: none"> • Common Interests: Both countries share interests in regional stability, especially given tensions in South Asia between India and China. • Concerns and Alignments: South Korea's concerns about North Korea's nuclear program align with India's interests in East Asian economic and regional stability.
Economic Relations	<ul style="list-style-type: none"> • Bilateral Trade: Trade between India and South Korea in 2022 stands at \$27.8 billion, with a target of \$50 billion by 2030. • CEPA Impact: The Comprehensive Economic Partnership Agreement, signed in 2010, has boosted trade relations.
Diplomatic Efforts	<ul style="list-style-type: none"> • Regional Security: South Korea seeks a stronger diplomatic stance on regional issues beyond traditional alliances. • Cultural Exchange: Notable cultural exchanges include the visit of Korean Buddhist Monk Hyecho to India and Rabindranath Tagore's poem 'Lamp of the East.'
Indian Diaspora	<ul style="list-style-type: none"> • Academic Presence: Many Indian scholars in South Korea are involved in post-graduate and doctoral studies, primarily in pure sciences. • Professional Migration: A significant number of Indian professionals, especially in IT, shipping, and automotive sectors, have moved to South Korea. • Multilateral Platforms: Both countries are part of various global platforms, including the United Nations, World Trade Organisation, ASEAN Plus, East Asia Summit, and G-20.

Way Forward



- **Revitalizing Defense Cooperation:** The recent visit rekindles defense collaboration, emphasizing the need for a strategic and balanced approach adaptable to changing geopolitical circumstances.
- **Long-term Vision:** Fostering a partnership for peace, stability, and prosperity in the Indo-Pacific region requires a strong and lasting defense partnership.
- **Mutually Advantageous Collaboration:** India and South Korea can position themselves as leaders in innovation and self-sufficiency through mutual collaboration in defense technology and industry.
- **Crucial Partnership:** South Korea views India as a crucial partner amid its evolving strategy with China, and India sees South Korea as a significant ally in its Act East Policy.
- **Growing Relations:** India-South Korea relations have grown multidimensionally, driven by mutual interests and high-level exchanges.

India Maldives

Why in News?

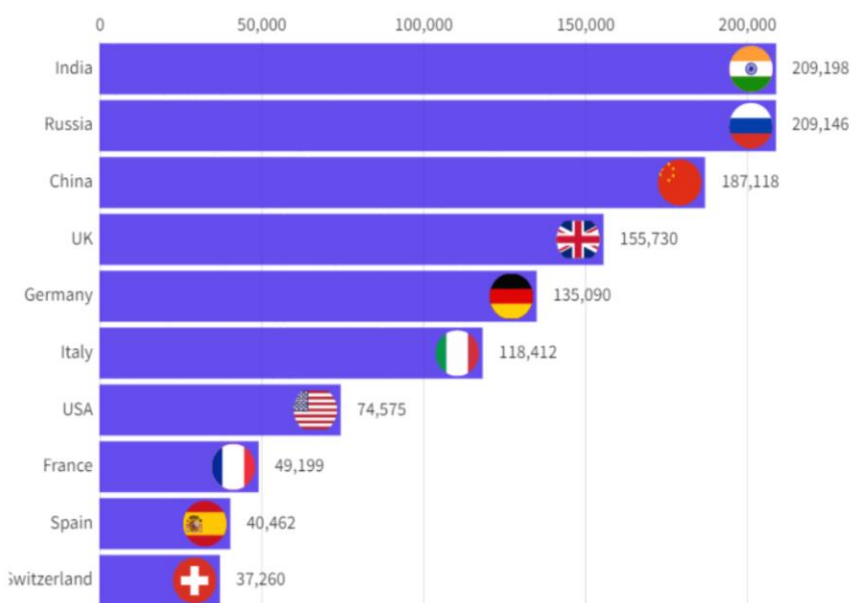
The rapid decline in ties between India and the Maldives, just a month after Prime Minister Narendra Modi met with the newly elected Maldivian President Mohamed Muizzu, should set alarm bells ringing.

Key Highlights

- The trigger undiplomatic words used by three Maldivian Ministers, attacking Mr. Modi for promoting the Lakshadweep islands during his recent sojourn there at a perceived cost to the Maldives and for his close ties with Israel; the Ministers also made derogatory remarks about Indians.
- The tweets have been deleted, the Ministers suspended, and the Maldivian government has distanced itself from them, but the damage has been done.
- The respective Ambassadors were summoned. Hurt Indians have crowded social media sites calling for an economic “boycott” of the Maldives — Indian tourists make up the most arrivals post-COVID-19.
- However, the underlying reasons run deeper, and could have a broader impact on India-Maldives relations and the neighbourhood, accruing to the change in government in Male. Mr. Muizzu rode to power on the back of the PPM’s “India Out” campaign.
- Despite its disappointment with the win of ‘anti-Indian forces’, given the warm relationship it shared with his predecessor Ibrahim Solih, the Modi government sent a Minister to his swearing in, and there was a Modi-Muizzu meet at the COP28.
- However, Mr. Muizzu chose Turkey as his first bilateral destination, and is now visiting China — becoming the first President not to make India his first priority. Even President Yameen, who began the “India Out” movement and cozied up to Beijing, visited Delhi first in 2014.
- Mr. Muizzu has continued to press India on the withdrawal of its military personnel, even though India has clarified their role.
- With the calls for boycotts and rising hypernationalistic rhetoric, Delhi and Male need to take a step back and reassess their responses.
- Mr. Muizzu can ill-afford to antagonise India, given its proximity, economic might and historical position as a net security provider in the Indian Ocean, something Maldives has relied on. India too must see the futility of muscling in a much smaller neighbour,

Tourist arrivals in Maldives in 2023

In 2023, Maldives saw the highest number of tourists from India



Source: Maldives Tourism Ministry
The Hindu Granhirc

however egregious the provocation.

- The last few years of ties between the Solih government and Delhi show the benefits of a stronger relationship: India's infrastructure forays and development projects in the islands, an intense strategic partnership, support during the COVID-19 pandemic, and cooperation on the international stage.
- For India, in a region that sees several elections this year, it is paramount to ensure that domestic political changes in the neighbourhood do not change the basic structure of bilateral ties, or affect regional stability.

Evolution of India and Maldives Relations

Early Diplomatic Ties (1965-1978)

- Maldives got independence from the British in 1965.
- Established diplomatic relations with India.
- India was quick to recognize Maldives as an independent nation.

Strategic Partnership (1978-1988)

- Maritime Boundary Agreement in 1979 defined sea borders.

Political Turbulence (1988-2008)

- 1988 coup attempt led to Indian military intervention (Operation Cactus).
- Aimed to stop the coup and maintain political stability.
- Caused a temporary strain in relations but got resolved.

Normalization and Economic Cooperation (2008-2013)

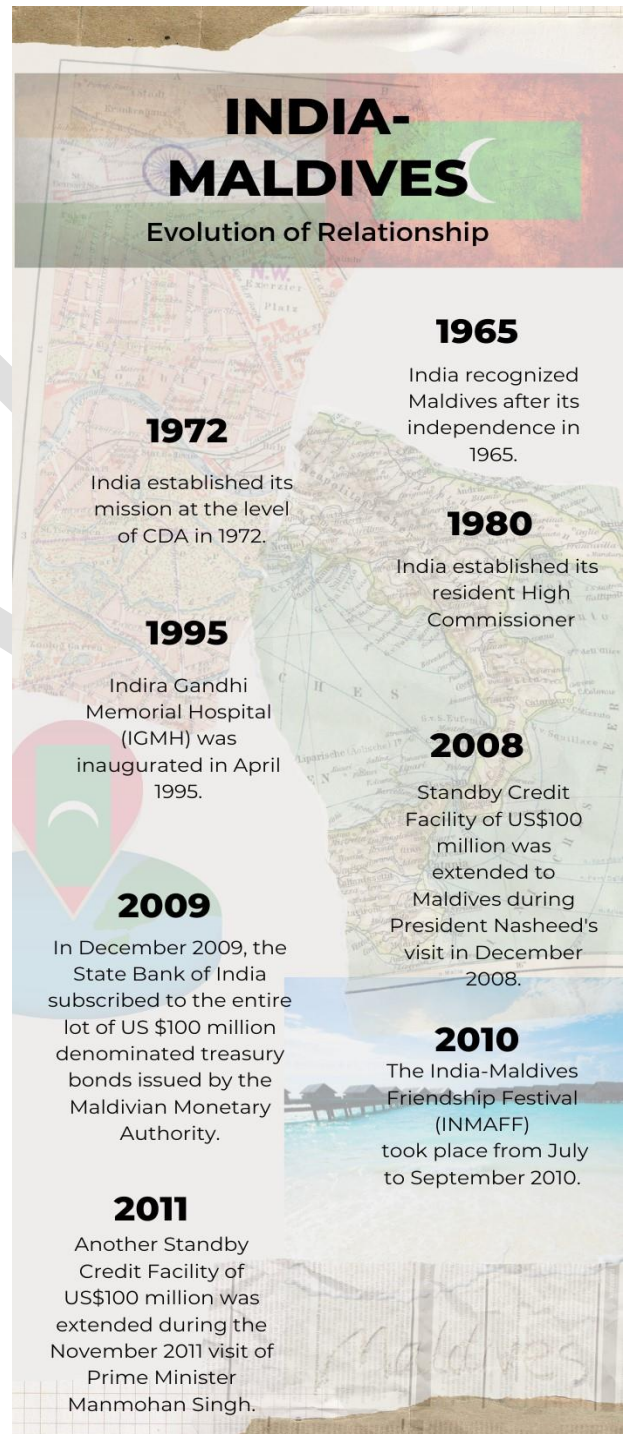
- 2008: Peaceful political transition in the Maldives.
- Improved relations with a focus on economic cooperation, trade, and people-to-people ties.
- India provided developmental aid for infrastructure projects and capacity building.

Period of Strain (2013-2018)

- Concerns during Abdulla Yameen's presidency: democratic issues, human rights, perceived alignment with China.
- Growing Maldives-China engagement, including Belt and Road Initiative projects, worried India.

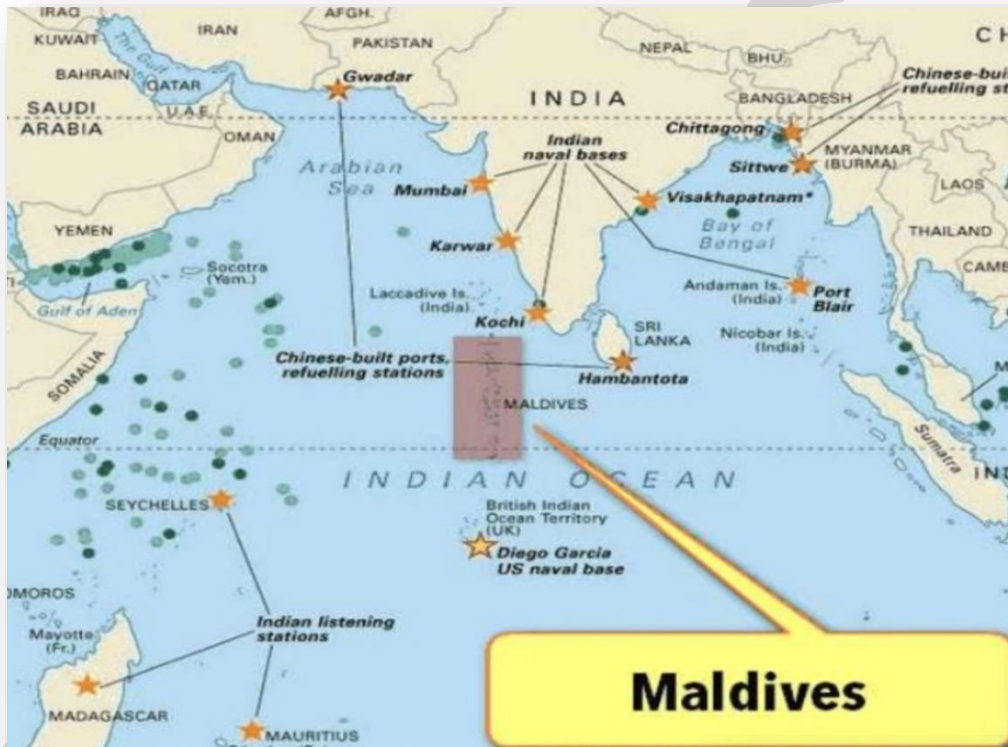
Renewed Engagement (2018 Onward)

- Ibrahim Mohamed Solih became the President, shifting bilateral relations.
- Renewed emphasis on ties with India.
- Both countries committed to democratic values; India assisted in various developmental projects.



Geography of Maldives

Maldives, strategically positioned in the Indian Ocean, serves as a crucial toll gate with two vital sea lanes of communication at its northern and southern ends. These sea routes are essential for maritime trade connecting the Gulf of Aden, Gulf of Hormuz in West Asia, and the Strait of Malacca in Southeast Asia. The physical landscape of Maldives is characterized by coral reefs and atolls, largely falling under Exclusive Economic Zones (EEZs). Threatened by the impact of rising sea levels, the archipelago faces challenges. Additionally, the Eight Degree Channel acts as a separation between the Indian Minicoy and the Maldives.



Significance of India-Maldives Relationship

Strategic Importance

- Focal point of India's "Neighbourhood First Policy."
- Proximity to India's west coast and central position in Indian Ocean sea lanes.

India as a First Responder

- Swift response during the 1988 coup attempt with Operation Cactus.
- Aid during the 2004 Tsunami, water crisis in Malé (Dec 2014), and Covid-19 pandemic.

Net Security Provider

- Comprehensive Action Plan for Defence signed in 2016.
- Joint exercises like "Ekuverin," "Dosti," "Ekatha," and "Operation Shield."



Economic and Trade Engagements

- India's role in Maldives' tourism, being the largest source of visitors in 2023.
- Bilateral trade surpassing USD 300 million in 2021.
- Bilateral USD Currency Swap Agreement signed in July 2019.

Development and Capacity Building

- Infrastructure projects like the Greater Male Connectivity Project.
- Healthcare support, including investments in Indira Gandhi Memorial Hospital.
- Educational initiatives and vocational training projects.

Cultural Connectivity

- Deep-rooted ethnic, linguistic, and cultural ties.
- Maldivian language, Dhivehi, traced back to Sanskrit and Pali.
- Indian expatriate community of around 27,000, contributing notably in education.

Key Issues in the India-Maldives Relationship



Ongoing Lakshadweep Issue

- Controversy sparked by derogatory comments from Maldivian deputy ministers after the Indian Prime Minister's Lakshadweep visit.
- Allegations of India challenging Maldivian tourism, impacting Indian tourist bookings.
- Indian government raised concerns, leading to the suspension of the Maldivian ministers.

India Out Campaign In Maldives

- 'India Out' initiative amplifying animosity, casting doubts on India's investments, defense partnerships, and regional security provisions.
- Maldivian government's opposition to the 'India First' policy, raising concerns about Indian troop withdrawal.

10 REASONS WHY MALDIVES IS IMPORTANT FOR INDIA

- 1 Strategically located in the Indian Ocean, Maldives archipelago comprising 1200 coral islands lies next to key shipping lanes which ensure uninterrupted energy supplies to countries like China, Japan and India
- 2 Since China started to send naval ships to Indian Ocean roughly 10 years ago – and right up to Gulf of Aden for anti-piracy operations – Maldives' significance has steadily grown and now its at the heart of international geopolitics
- 3 As the pre-eminent South Asian power and a 'net security provider' in the Indian Ocean region, India needs to cooperate with Maldives in security and defence sectors.
- 4 China's massive economic presence in Maldives is a major concern for India. With the country now said to owe 70% of its external aid to China, India had to push back. The current political crisis might just have offered India the right opportunity.
- 5 A large section of population which supports the opposition parties like Nasheed's MDP wants India to act against Yameen.
- 6 Maldives is also a member of SAARC. It is important for India to have Maldives on board to maintain its leadership in the region. Maldives was the only SAARC country which seemed reluctant to follow India's call for boycott of SAARC summit in Pakistan after the Uri attack
- 7 Under Yameen, radicalization grew rapidly and it was often said that the archipelago accounted for one of the highest numbers of foreign fighters in Syria in terms of per capita. India can ill-afford a neighbor which fails to check Islamic radicalization.
- 8 India and Maldives share ethnic, linguistic, cultural, religious and commercial links. India was among the first to recognize Maldives after its independence in 1965 and later established its mission at Male in 1972.
- 9 There are 25,000 Indian nationals living in Maldives (second largest expatriate community), Indian tourists also account for close to 6% of tourists Maldives receives every year.
- 10 India is also preferred destination for Maldivians for education, medical treatment, recreation and business. According to MEA, more and more Maldivians are seeking long term visa for pursuing higher studies/medical treatment in India.



Sovereignty and Security Dilemma

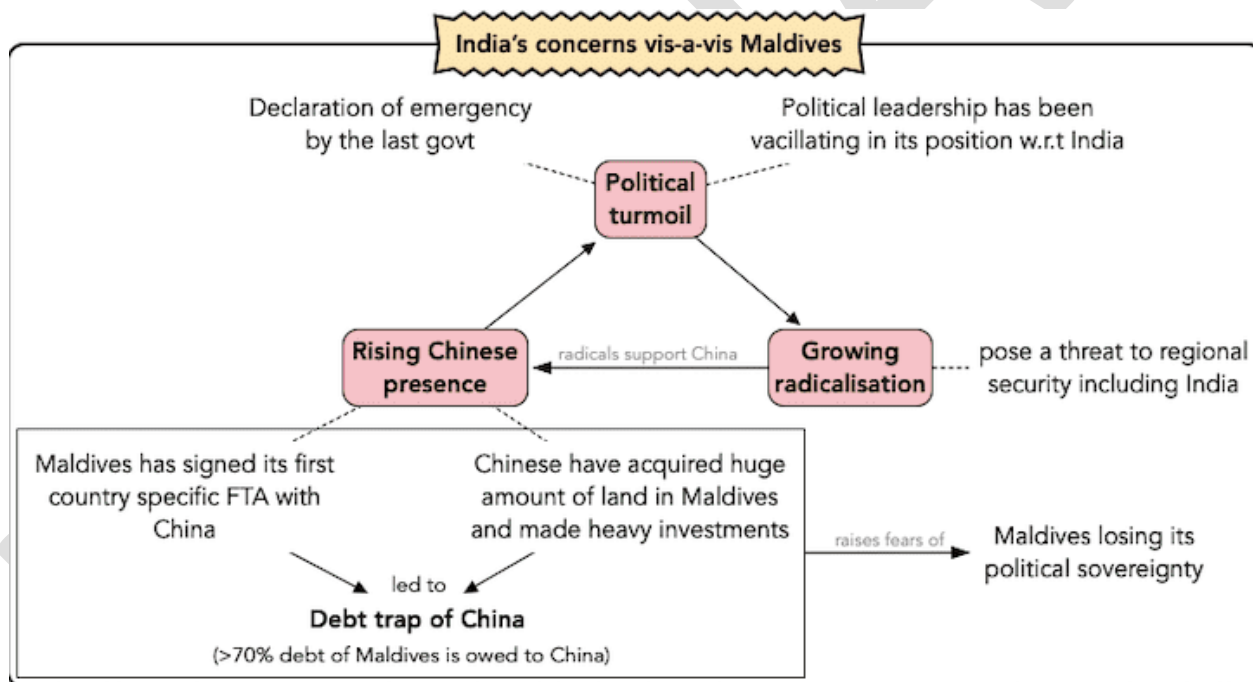
- Maldives' democratic system in early stages, facing socio-political instability influenced by global players.
- Opposition sees Indian military presence as a threat to national security and sovereignty.
- Government emphasizes the India Out campaign as a potential threat to national security.

Revocation of Hydrographic Survey Agreement

- Hydrographic data's dual nature raises concerns in Maldives about intelligence collection.
- Recent decision to revoke the joint hydrographic survey agreement with India causes concerns in Indian strategic circles.

China Factor in the Indian Ocean Region

- Maldives as a key 'pearl' in China's "String of Pearls" in South Asia.
- Massive Chinese investments and participation in the Belt and Road Initiative (BRI).
- Setback in India-Maldives relationship with the Free-Trade Agreement (FTA) between Maldives and China in 2017.
- Speculation about a Chinese naval base in the Maldives, raising concerns about potential military applications.
- China's oceanographic surveys pose conflict points with Indian hydrographic presence in the region.



Strengthening China and Maldives Relations

Presidents Xi Jinping and Mohamed Muizzu signed 20 bilateral agreements during Muizzu's state visit to China. Elevation of diplomatic ties to a Comprehensive Strategic Cooperative Partnership. Focus on enhancing diplomatic ties, political guidance, practical cooperation, collaboration on international affairs, and well-being of their people.

Action Plan and Cooperation Areas

- Formulation of an "action plan" for the China-Maldives Comprehensive Strategic Cooperative Partnership (2024-2028).

- Cooperation areas include the blue economy, digital economy, Belt and Road Initiative infrastructure, and disaster and risk mitigation.

Financial Assistance and Grant Agreement

- China's considerable financial support for cooperation plans.
- An 'Agreement on Grant Assistance' signed, though the exact financial quantum remains undisclosed.

India-Maldives Relations

- Historical context and assistance from India, contributing to projects like the Greater Male Connectivity Project.
- Bilateral trade rise from \$156 million in 2013 to \$501 million in 2022.
- Ongoing cooperation programs in community development and disaster management.

Key Points from Recent Talks

- Diplomatic talks and ceremonial gestures during President Muizzu's state visit to China.
- Commitment to respecting national development paths and sovereignty.
- Elevation to a Comprehensive Strategic Cooperative Partnership signifies a significant milestone.

Signed Agreements and Infrastructure Projects

- Agreements cover various sectors, including tourism, disaster risk reduction, blue economy, and digital economy.
- China commits to infrastructure projects like social housing, fisheries processing factories, and road development.

Diplomatic Challenges and Governance Exchange

- Diplomatic challenges with India involve derogatory remarks and anti-India sentiments.
- President Xi expresses readiness for governance exchange and Belt and Road cooperation.

Appeal for Chinese Tourists and Economic Impact

- President Muizzu appeals to China to boost tourism amid Indian cancellations.
- Economic repercussions highlight the need for alternative economic partnerships.

Economic and Trade Relations

- Bilateral trade between China and the Maldives reaches \$451.29 million in 2022.
- Seeking Chinese investments for 11 projects, signaling a shift in the Maldives' strategic policy.

Concerns Related to China's role in Maldives

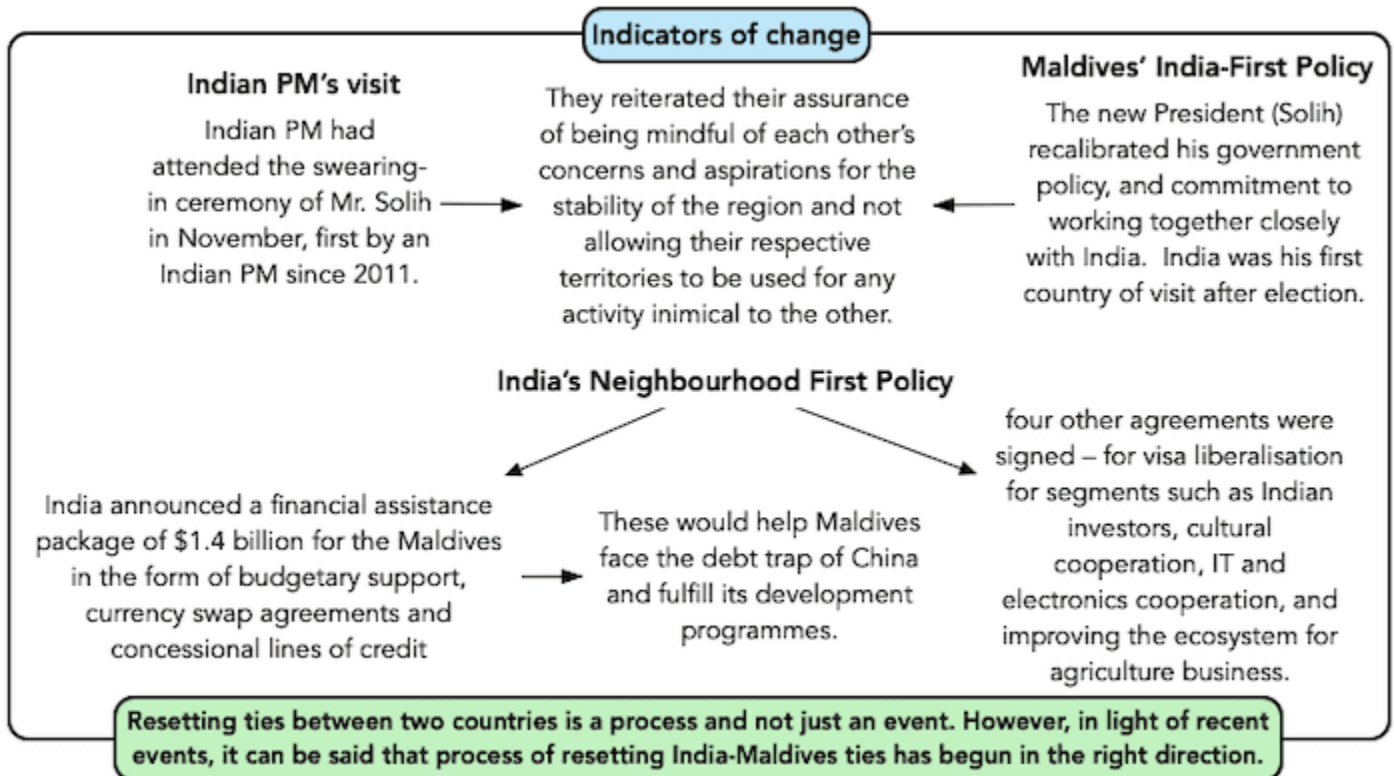
China's economic engagement in Maldives raises concerns about debt traps and influence. Massive Chinese investment and participation in the Belt and Road Initiative (BRI). China-funded projects, including ports, airports, and bridges, contribute to the "String of Pearls" initiative. China's hegemonic ambitions in the Indian Ocean region pose a threat to democracy in the Maldives. Apprehensions in India about China's influence due to the pro-China stance of the new Maldivian President.

India's Security Concerns

- India expresses concerns about China's growing presence in the Indian Ocean region.
- Development of Chinese-controlled ports and military facilities seen as a challenge to India's strategic interests.
- India responds with intensified diplomatic and strategic engagement, economic assistance, infrastructure projects, and expanded defense cooperation.
- "Neighborhood First" policy aims to counterbalance China's increasing presence.

Perspective of India in Their Relationship with Maldives

- India demonstrates commitment to building strong relations with comprehensive cooperation, security, and infrastructure development.
- Despite challenges like the 'India out campaign' and pro-China policies, India remains dedicated to the partnership.
- Maldives seen as a crucial part of India's 'SAGAR Policy' for regional security and growth.



Way Forward

- Opportunities for India lie in emphasizing a development-oriented approach in the face of changing dynamics.
- Focus on addressing pressing issues like high youth unemployment through impactful community development projects.
- Prioritize the completion of infrastructure projects, such as the Greater Male Connectivity Project, to strengthen influence.
- Encourage a balanced relationship between India and China for the Maldives' developmental gains.
- Strengthen Indo-Pacific security space to ensure regional security in South Asia and surrounding maritime boundaries.
- Uphold historical ties and prioritize the larger interests of the Maldivian people in future actions.

India-U.K. Defence Ties

Why in News?

Defence Minister Rajnath Singh's recent visit to the United Kingdom (U.K.) came after a hiatus of 22 years. Opportunities have grown significantly in the past few years as opposed to two decades ago. The growth of Chinese military power and in particular, its expansion into the Indian Ocean which threatens India and also Sea Lines of Communications (SLOCs), on which the U.K. depends, have given the British an opportunity to reorient their strategic priorities.

Key Highlights

- The Indian Navy has several capability-related needs to make up for the shortfalls the service faces vis-à-vis the People's Liberation Army Navy (PLAN). Securing key technologies has been an integral part of Mr. Singh's visit to the U.K.
- The U.K. is in a position to help redress the Indian Navy's technological gaps against the Chinese.
- One key area where London and New Delhi are cementing cooperation is in electrical propulsion to power aircraft carriers. The Indian Navy's carriers, at present, are not powered by electric propulsion technology.
- The Queen Elizabeth Class aircraft carriers of the Royal Navy (RN) use electric propulsion and the RN has mastered this technology.
- In the run-up to Mr. Singh's visit, there were already preliminary engagements between the Indian and U.K. governments regarding the Indian Navy securing electric propulsion technology.
- Though the PLAN for its part struggled to overcome the technical challenges associated with electric propulsion, there is increasing yet anecdotal evidence emerging that it is in the process of integrating electric propulsion into its warships such as the Type 054B frigates.
- The Indian Navy cannot sit idly and allow the Chinese navy to steal a march on a key piece of maritime technology for its advanced surface combatants in the future.
- The advantage of using electric propulsion is that warships integrated with this capability produce a low acoustic signature by removing the link between the principal mover and propulsion.
- There is also the added advantage of enhanced electrical power generation for subsystems in major warships of the Indian Navy's surface fleet.
- The establishment of a joint working group dubbed the "India-UK electric propulsion capability partnership" first met in February 2023 and thereafter a delegation-level discussion was held on the Royal Navy frigate HMS Lancaster, which made a port visit to Kochi in March last year.
- Extensive discussion took place the following month on the transfer of technical know-how and the Royal Navy's experience in maritime electric propulsion for the Indian Navy's major surface combatants in the future.
- In November 2023, the India-U.K. electric propulsion capability partnership again met to discuss the possibility of the Indian Navy's future warships to be integrated with electric propulsion technology.
- The British have agreed to train, equip and help establish the infrastructure necessary to develop an electric propulsion system.
- Initially, the technology is expected to be tested on landing platforms docks and thereafter on surface vessels such as guided missile destroyers belonging to the next generation with a displacement of over 6,000 tonnes.
- While there are considerable opportunities in the India-U.K. defence relationship, challenges remain.
- A key challenge relates to legacy issues, especially in London's effort to balance its ties between India and Pakistan.
- Successive U.K. governments have simultaneously supplied India and Pakistan with weapons or curbed weapons exports, leaving many in India frustrated with British motives and objectives in the Subcontinent.
- Nettlesome issues surrounding Khalistan and Sikh separatism will cloud the relationship.

- But today strategic realities have shifted with the emergence of the Peoples Republic of China (PRC) as a major naval power whose deployments in the Indian Ocean Region (IOR) are expanding rapidly, creating a very strong rationale for forging closer defence ties between the U.K. and India.
- Several joint military exercises have already taken place between the two countries with deeper defence industrial cooperation on the anvil and during Mr. Singh's visit, the British officially declared that they will be deploying a littoral response group, a specialised amphibious warfare group in 2024 and carrier strike group in 2025 to train and increase interoperability with the Indian Navy.
- With Mr. Singh's visit to the U.K., London is both rediscovering and bolstering its military involvement and presence East of Suez, which it had considerably until the late 1960s.

Recent Developments in India and UK Relationship

India and the UK share a rich historical connection that has evolved into a robust and mutually beneficial relationship. This transformation was emphasized during the virtual India-UK Summit on May 4, 2021, where Prime Minister Narendra Modi and then-UK Prime Minister Boris Johnson announced a 'Comprehensive Strategic Partnership' and a 2030 roadmap for cooperation.

Key VVIP Engagements

- Prime Minister Rishi Sunak met with Prime Minister Modi at various international summits, fostering discussions on trade, cooperation, and diplomatic relations.
- The Young Professionals Scheme was introduced after a meeting between Prime Ministers Modi and Sunak, aiming to enhance trade and collaboration.

High-Level Engagements

- Several ministerial and delegation visits, both from India to the UK and vice versa, underscored the commitment to deepen ties in areas like law, commerce, agriculture, and innovation.
- The G20 Summit and COP26 provided platforms for leaders to discuss trade agreements, climate initiatives, and global cooperation.

Economic, Trade, and Financial Cooperation

- Bilateral trade between India and the UK witnessed significant growth, reaching £36.3 billion in the fiscal year 2022/23.
- Investments flowed in both directions, with India being the UK's second-largest source of foreign direct investment.

Institutional Mechanisms

- The Joint Economic and Trade Committee (JETCO) and Economic and Finance Dialogue (EFD) serve as platforms for strategic economic discussions and collaboration.
- Initiatives like the India-UK Infrastructure Finance Bridge were launched to leverage expertise and investments for India's National Infrastructure Pipeline.

Defence and Security Cooperation

- High-profile visits, joint exercises, and institutional mechanisms such as the Defence Consultative Group meeting strengthened defence ties.



- Dialogues on counter-terrorism and cybersecurity reflected the shared commitment to addressing global security challenges.

Science & Technology, Research & Innovation

- The Science and Innovation Council and collaborations in areas like quantum technology and clean energy showcased advancements in bilateral scientific cooperation.
- Educational partnerships, such as the Mutual Recognition of Academic Qualifications, aimed to enhance collaboration in the education sector.

Health

- Collaborative efforts in the development and distribution of COVID-19 vaccines highlighted the depth of bilateral cooperation in addressing global health challenges.

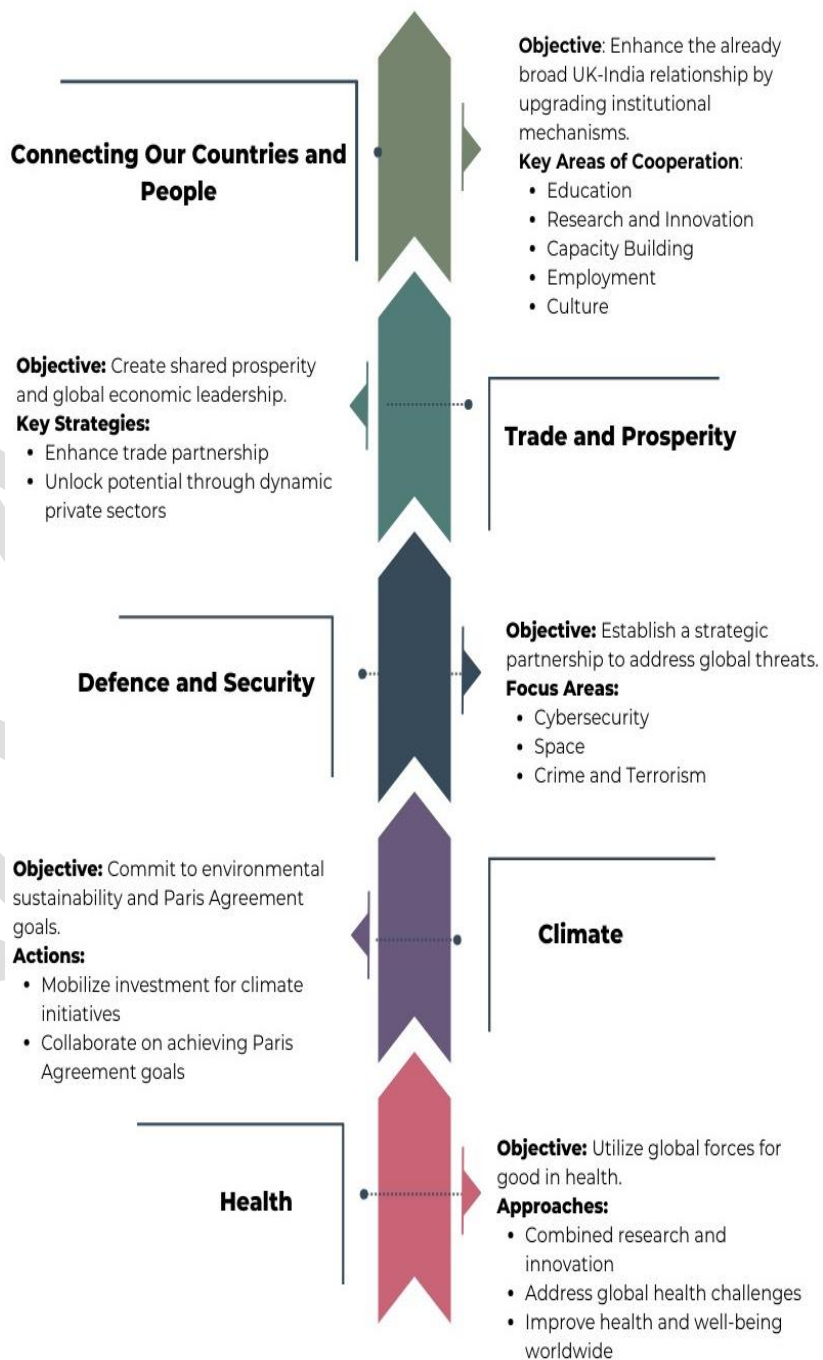
People-to-People Exchanges

- The Migration and Mobility Partnership Agreement and the Young Professional Scheme demonstrated efforts to facilitate movement between the two countries.
- The Indian diaspora in the UK played a significant role in various fields, contributing to the economy, culture, and public institutions.
- This comprehensive summary reflects the diverse facets of the India-UK relationship, spanning diplomacy, trade, defense, science, and people-to-people connections.

Importance of Indo-UK Partnership

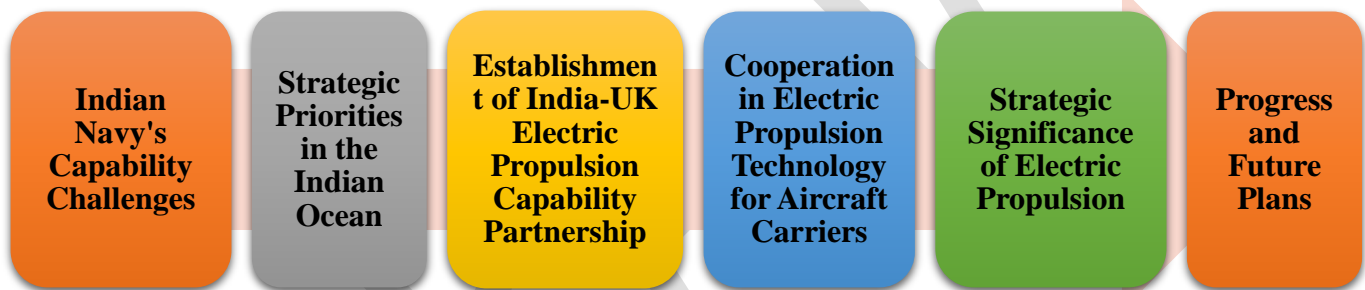
The Indo-UK partnership is pivotal for fostering economic growth, strategic collaborations, and shared initiatives in areas such as defense, trade, and renewable energy.

2030 Roadmap: Strengthening UK-India Relations



For India	For the UK
<ul style="list-style-type: none"> • The UK holds regional power in the Indo-Pacific with naval facilities in Oman, Singapore, Bahrain, Kenya, and the British Indian Ocean Territory. • Confirmed USD 70 million of British International Investment funding supports India's renewable energy initiatives, contributing to the development of solar power and renewable infrastructure. • India aims for easy market access for fisheries, pharmaceuticals, and agricultural products in the UK, alongside seeking duty concessions for labor-intensive exports. 	<ul style="list-style-type: none"> • India is a key strategic partner for the UK in the Indo-Pacific, both in terms of market share and defense, highlighted by the 2015 Defence and International Security Partnership. • A successful Free Trade Agreement (FTA) with India would boost the UK's 'Global Britain' ambitions post-Brexit, expanding markets beyond Europe. • Seeking opportunities in the Indo-Pacific economies is integral to the UK's goal of being a significant global actor. Good bilateral relations with India facilitate the achievement of this objective.

How Can The Indian Navy Benefit From Defence Ties With The UK?



Indian Navy's Capability Challenges

- The Indian Navy faces challenges in capabilities compared to the Chinese People's Liberation Army Navy.
- The Defence Minister's visit aimed at addressing these shortfalls, focusing on securing key technologies from the UK.

Strategic Priorities in the Indian Ocean

- The evolving strategic landscape in the Indian Ocean prompts a reassessment of priorities for both India and the UK.

Establishment of India-UK Electric Propulsion Capability Partnership

- In February 2023, the "India-UK electric propulsion capability partnership" was formed.
- Discussions centered around transferring technical know-how and sharing the Royal Navy's expertise in maritime electric propulsion.

Cooperation in Electric Propulsion Technology for Aircraft Carriers

- Collaboration includes a focus on electrical propulsion technology for aircraft carriers.
- The Indian Navy lacks this technology, and the partnership aims to leverage British expertise to enhance capabilities.

Strategic Significance of Electric Propulsion

- Recognizing the importance, the Indian Navy aims not to fall behind in acquiring Electric Propulsion Technology (EPT).
- Warships equipped with EPT offer a lower acoustic signature and enhanced electrical power generation, providing a strategic edge.

Progress and Future Plans

- Progress in November 2023 involved discussions on integrating EPT into the Indian Navy's future warships.
- The British committed to training, equipping, and assisting in establishing necessary infrastructure.
- Initial testing is expected on landing platform docks, followed by surface vessels with a displacement of over 6,000 tonnes.

Issues Affecting India-UK Relations



BREXIT Impact on India-UK Relations

- **Diaspora Concerns:** Many Indian Diaspora members in the UK opposed BREXIT due to potential tough competition for Indian IT professionals in an open-border scenario.
- **Corporate Impact:** A hard Brexit could affect over 800 Indian companies in crucial UK sectors, but data shows increased investments and job creation, indicating India's continued support for Britain.

Impact on India-EU Relations and Trade

- **Strategic Partnership Challenge:** BREXIT poses a challenge to the India-EU strategic partnership, requiring India to manage relations with the EU without the UK.
- **Trade Dynamics:** With significant India-EU and India-UK trade at stake, careful consideration in the business context is necessary. Post-Brexit, India should seize the opportunity to address the trade gap in the UK.

Visas and Immigration Dynamics

- **Illegal Migration Concerns:** Pressure from the UK on India to repatriate over 1 lakh illegal Indian immigrants.
- **Post-Brexit Measures:** A post-Brexit white paper on visas and immigration aims to benefit Indian students and professionals by focusing on skills rather than country of origin, removing the annual cap of 20,700 skilled work visas.

Terrorism and Bilateral Relations

- **Persistent Hyphenation:** Despite efforts by India, the UK's outlook continues to hyphenate India with Pakistan in the context of Brexit, neglecting the broader aspects of security and terrorism in bilateral relations.

Totalization Agreement and Healthcare Surcharge

- **Healthcare Surcharge Mandate:** The UK mandates a healthcare surcharge as part of immigration applications.
- **Totalization Agreement Urgency:** Urgent need for India and the UK to sign the totalization agreement to exempt Indian professionals from paying social security taxes in the UK if already paying in India, preventing the loss of their hard-earned money.

Way Forward



Current Relationship Dynamics

- **Mutual Value:** The relationship is valued beyond trade, with the UK recognizing India's importance in world politics and development.
- **Shared Values:** Both countries endorse a rule-based international order and support each other's interests, including India's bid for a permanent UNSC seat.

Post-Brexit Relationship Reset

- **Need for Adaptation:** With the UK leaving the EU, there is an acknowledgment of the need to reset the relationship and not rely solely on historical connections.
- **Importance of External Allies:** Recognizing the UK's departure from Europe, the importance of strong friends outside, including India, is emphasized.

Areas of Potential Cooperation

- **Security and Defence:** Collaboration in security and defense, joint military exercises, and joint efforts to reform international bodies like the UN and WTO are highlighted.
- **Trade and International Engagement:** Growing partnership factors include trade, security, and a commitment to a rules-based international system.

Leveraging Historical Ties

- **Strategic Imperative:** Acknowledging the historical ties, there's an emphasis on the importance of Britain leveraging these connections for mutual strategic benefit.
- **Post-Brexit Opportunities:** A post-Brexit Britain, seeking partners, sees a rising India as a crucial political and economic priority.

Evolving Indian Confidence

- **Changing Dynamics:** India is becoming more self-assured in its dealings with the UK, especially as its economy surpasses Britain's.
- **Proactive Engagement:** India is encouraged to engage with Britain more confidently and capitalize on its strengths for strategic benefits.

Upcoming British Prime Minister's Visit

- **Symbolic Importance:** The visit signifies India's role in the changing global order and the importance attached to India's G20 presidency in 2023.
- **Focus on FTA Negotiations:** The forthcoming visit should prioritize advancing negotiations on the India-UK Free Trade Agreement.

Diversifying Cooperation Areas

- **Emerging Frontiers:** Areas like fintech, market regulation, sustainable finance, green finance, and cybersecurity are identified as new potential frontiers for engagement.
- **Adapting to Changing Realities:** Both countries should adapt to changing global dynamics by exploring cooperation in these evolving sectors.

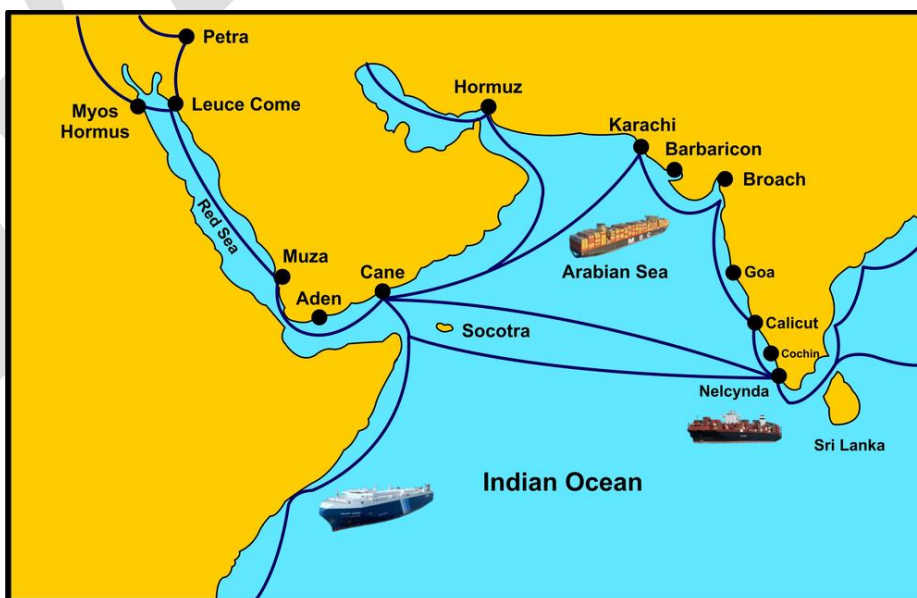
The Red Sea Crisis

Why in News?

The arrival of the Indo-Pacific marked India's great break out from the unfriendly continental theatre, hemmed in by China and Pakistan and constrained by the vagaries of geopolitics on most of the remaining land borders.

Key Highlights

- The Houthi terror attacks on MV Chem Pluto, an oil and chemical tanker, on its way to the New Mangalore port from the Al Jubail port in Saudi Arabia, and MV Sai Baba, a Gabon-owned, Indian-flagged crude oil tanker, with predominantly Indian crew forced India's External Affairs Minister S. Jaishankar to rush to Tehran to persuade the principal Houthi sponsor to help cease the attacks.
- India's military response to the Red sea situation has also been swift: the Indian Navy deployed the guided missile destroyers, INS Mormugao, INS Kochi and INS Kolkata in the broader region.
- The Houthi attack on commercial ships in the Red Sea and the fragility of order and stability in the Indo-Pacific, a direct result of Hamas's attack on Israel on October 7, is also a reminder of the rough weather ahead in the Indo-Pacific in general and India's maritime space in particular.
- For India, the Houthi challenge may soon pass, given New Delhi's ties with Tehran. And yet, beyond the action-reaction mode, there is a larger question we must ponder.
- Does India have a maritime grand strategy that goes beyond occasional fire-fighting, naval exercises with friendly nations and a snail-pace increase of the budget allocation for the Indian Navy? What indeed is India's long-term vision for the Indo-Pacific?
- New Delhi for sure has made a big, and welcome, shift in its grand strategy — from its continental obsession to maritime theatre.
- This is India's opening to the world at a time when its land borders are becoming increasingly testy allowing little access for the country to trade with and transit to the rest of the world. But, New Delhi's maritime turn also presents a major challenge, elements of which are becoming increasingly apparent.
- India's new two front challenge is not Pakistan and China posing a nutcracker situation for India, but a combination of its continental and maritime challenges.
- Having an aggressive and rising China attempting to contain India on its continental and maritime fronts is a classic two-front situation.



- While India has been allowing itself to be obsessed with the Line of Control with Pakistan in the west, defending the Line of Actual Control with China in the north, and picking needless quarrels with its neighbours, Beijing was quietly building its empire of influence in the eastern, southern and western oceanic planks.
- For decades, Beijing (by arming Pakistan) ensured that India is boxed in in South Asia, ignoring the China challenge. By the time New Delhi put its unresolved conflicts with Pakistan in cold storage and shifted gears to the China challenge on the LAC, the game had already gotten bigger.
- While the People's Liberation Army keeps up the pressure on the LAC, the People's Liberation Army Navy (PLAN) has been increasing its presence in the Indian Ocean Region (IOR) at an alarming rate.
- To begin with, the stupendous growth of the Chinese Navy which is perhaps the largest in the world today: according to one account, it has "an overall battle force of over 370 ships and submarines, including more than 140 major surface combatants". This number is expected to jump to 435 ships by 2030. By way of comparison, the Indian Navy today has 132 warships.
- China's push for overseas military bases. Beijing today has a military base in Djibouti.
- Growing Chinese activities in Pakistan's Gwadar and Sri Lanka's Hambantota should worry Indian strategists, even if they are not yet military bases.
- In Myanmar, the Kyaukpyu port which China is constructing will enable PLAN to inch closer to the Indian Navy in the Bay of Bengal — a maritime space India hereto enjoyed unrivalled.
- Beijing is reportedly expanding an artificial island in Maldives and the China-Maldives strategic partnership is bound to increase due to tensions between Male and New Delhi.
- One had the visit of the anti-India Maldivian President to China recently. China is also exploring strategic investment options in the Seychelles, and is also building a naval base in Ream, Cambodia. The small Indian Ocean island nation of Comoros is the latest to join China's fan club in the Indo-Pacific.
- The emerging picture is this: from the Horn of Africa (Djibouti) to Myanmar, Sri Lanka, the Seychelles, the Maldives in the Indian Ocean to Gwadar in the Arabian Sea, China's actions will amount to a containment of India in the Indo-Pacific.
- Two things stand out. First, India's assessment about China's strategy to contain India in the continental space in South Asia is not a misplaced one, but is definitely an insufficient one. China is parallelly attempting to contain India in the larger maritime theatre as well.
- Second, Beijing's attempt is to influence, among others, those spaces and countries that India has historically engaged with. While the IOR was India's traditional sphere of influence until the Chinese came in with goodies, the far-off regions such as Africa had historical, cultural and political links with India. In that sense, it appears to be a zero sum game — China's gain is India's loss.
- India should use the growing global attention on the Indo-Pacific which is easily the most consequential geopolitical construct of our times.
- The good news is that the Indian Ocean is too important for the rest of the world to let China take over.
- If China poses a challenge to India's regional security and interests in the broader IOR, it also poses a challenge to the commercial and security interests of the United States and its allies.

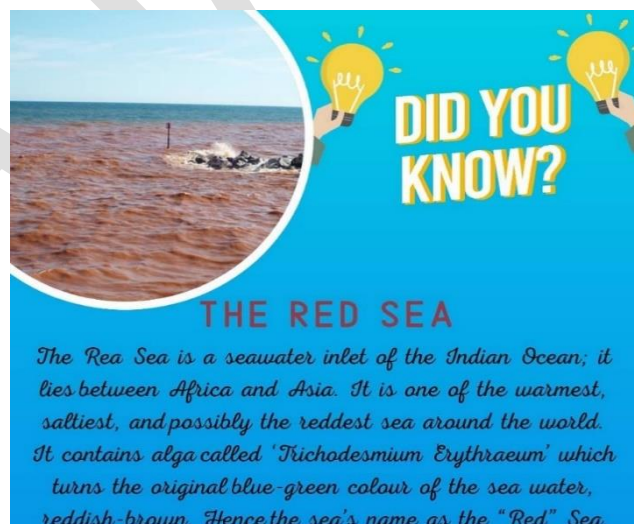
Alternative shipping route avoiding Red Sea



- Every major country is today interested in the Indo-Pacific and its future trajectory as is India, which provides an opportunity for New Delhi to make coalitions with like-minded countries especially at a time Beijing has little great power backing in the maritime theatre.
- Second, India cannot balance against the growing Chinese power in the Indian Ocean all by itself. India occupies a pivotal location in the Indo-Pacific moment just as it is the heart of the Chinese attempts to create an empire of influence. Creating, and enhancing, partnerships with like-minded countries is perhaps an important way forward.
- Even more importantly, perhaps, New Delhi must invest in a cohesive and well thought-out Indo-Pacific strategy that goes beyond noble intentions and nobler declarations.
- While Quad and Malabar are useful initiatives, they are at best a modest response to a grand futuristic challenge that is unfolding quickly.
- For sure, New Delhi already has several pieces of what could constitute the elements of a maritime grand strategy, but they need to be put together in a purposeful and cohesive manner.
- The Red Sea situation will fade away eventually, but India's new two-front situation will become more and more apparent in the years to come.
- In that sense, New Delhi's decision not to join the U.S.-led 'Operation Prosperity Guardian' may have been the right choice for now, but in the longer run, its ability to meet the China challenge without being part of collective efforts would be limited.

About the Red Sea

- The Red Sea, one of the world's saltiest bodies of water, serves as an entrance to the Indian Ocean between Africa and Asia.
- The basin is long and thin, extending from the Mediterranean Sea to the northwest to the Indian Ocean in the southeast.
- At its northern end, it splits into the Gulf of Aqaba and the Gulf of Suez, connecting to the Mediterranean Sea through the Suez Canal.
- The Strait of Bab-el-Mandeb links it to the Gulf of Aden and the outer Indian Ocean at its southern extremity.
- Surrounded by desert or semi-arid regions, it receives no significant freshwater input.
- Six countries share borders with the Red Sea: Egypt, Saudi Arabia, Yemen, Sudan, Eritrea, and Djibouti.



Importance of Red Sea

Global Shipping

Ecology

Important Minerals

Economy

- **Global Shipping:** Links the Indian Ocean with the Mediterranean Sea via the Suez Canal. Significant route for international trade and oil transport.
- **Ecology:** Home to diverse marine life, including over 1,200 fish species and extensive coral reefs.
- **Important Minerals:** The Red Sea region has five important types of mineral resources: petroleum deposits, evaporite deposits (sediments formed by evaporation, such as halite, sylvite, gypsum, and dolomite), sulphur, phosphates, and heavy-metal deposits.

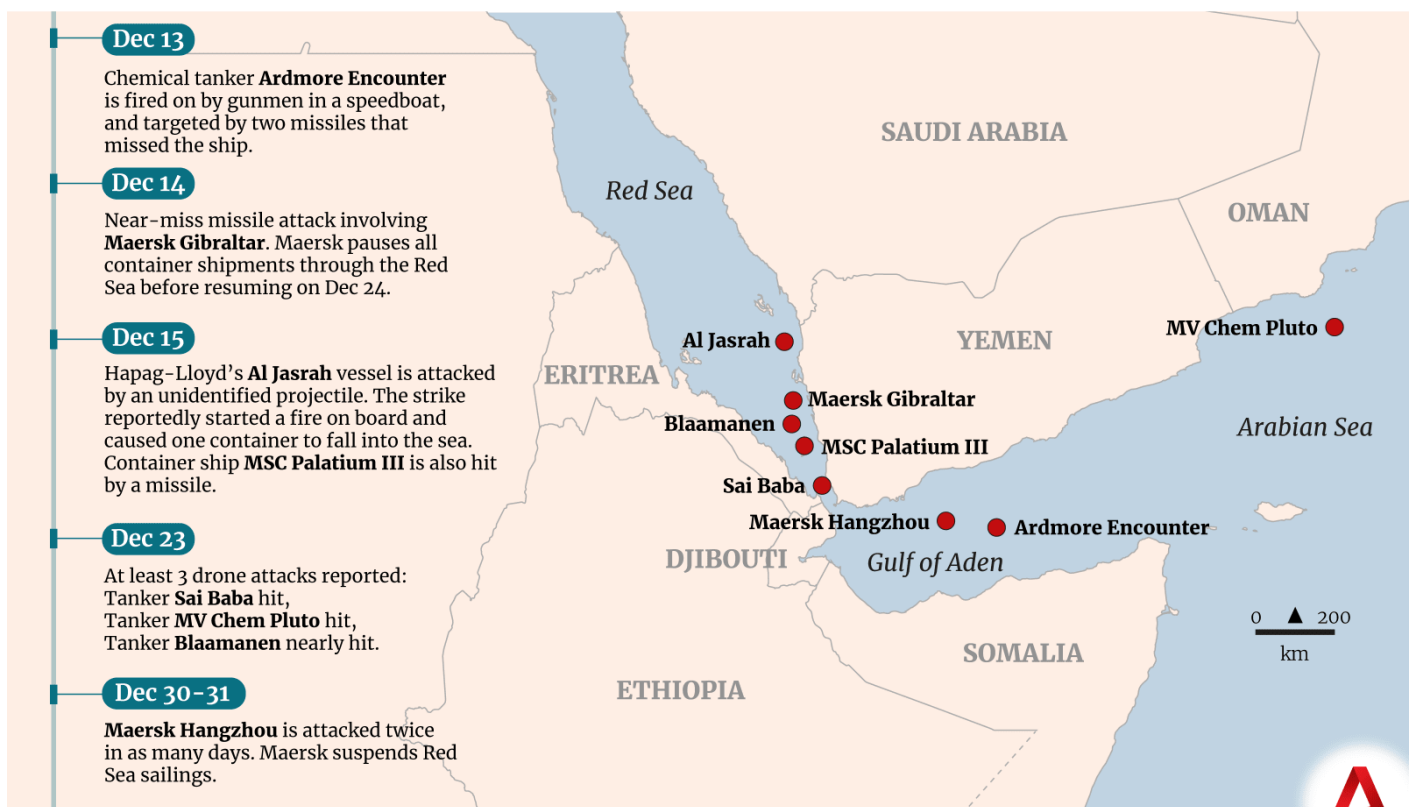
- **Economy:** Supports fishing, tourism, and natural resource exploration industries in surrounding countries.

What makes the Red Sea Unique?

High Salinity	• One of the world's saltiest seas due to high evaporation and low precipitation.
Marine Biodiversity	• Rich in coral reefs and has a high proportion of endemic marine species.
Geographical Features	• Unique physical characteristics, such as its depth and the surrounding desert landscape.

Attacks on ships in the Red Sea

Since Nov 19, there have been more than 20 attacks on merchant ships by Houthi militants in the Red Sea. Here are some of the major attacks:



Infographic: Rafa Estrada Sources: AFP, Reuters





Why Trade Across the Red Sea is Important?

Historical Significance

Evidences of Indian diaspora in the Middle East during the time of Meluha (the Indus Valley Civilisation, c. 3300-1300 BCE). In the 1st and 2nd century CE, a maritime highway linked the Roman Empire and India through the Red Sea, witnessing hundreds of ships traveling in both directions annually.

Economic Significance

The Suez Canal, opened in 1869, has become the busiest trade route. It significantly reduced the distance between Europe and Asia by 7000km.

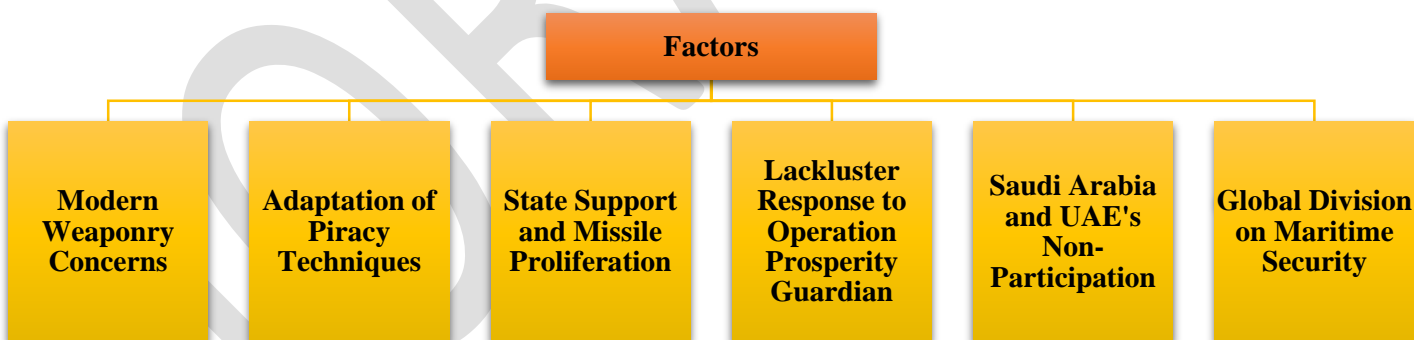
Geopolitical Significance

The narrow Suez Canal is strategically located, connecting the west and east.

Issues in the Red Sea

- Chemical tanker MV Chem Pluto struck by a drone attack, about 200 nautical miles off Gujarat's coast.
- MV Chem Pluto is a Liberia-flagged, Japanese-owned, and Netherlands-operated chemical tanker, journeying from Al Jubail, Saudi Arabia, to New Mangalore, India.
- Believed to be carried out by Houthi rebels based in Yemen, protesting against Israel's actions in Gaza.
- Houthi rebels are involved in a decade-long civil conflict with Yemen's government.

Factors Contributing to the Present Crisis



Modern Weaponry Concerns

- The Red Sea situation is becoming complex, impacting both stability and trade.
- The use of advanced weaponry raises questions about the effectiveness of joint defense efforts among nations, leading to concerns about trade disruption and claims of high interoperability.

Adaptation of Piracy Techniques

- Similar to past piracy challenges, delayed international responses have allowed rebels to adapt to modern technologies.
- This has led to tactics such as hijacking ships and using them as mother ships, expanding the 'High-Risk Area' and affecting maritime trade through rerouting and increased insurance costs.

State Support and Missile Proliferation

- The involvement of Houthi rebels using drones and Anti-Ship Ballistic Missiles (ASBMS), along with potential state support from Iran and China, raises concerns about missile technology proliferation.
- The supply of ASBMS, directly or indirectly, is linked to China, adding complexity to the situation.

Lackluster Response to Operation Prosperity Guardian

- The U.S.-launched Operation Prosperity Guardian, intended to operate under the Combined Maritime Force, has seen a tepid response from allies and partners.
- NATO allies like France, Italy, and Spain operate independently, indicating doubts about the U.S.'s ability to drive international cooperative mechanisms.

Saudi Arabia and UAE's Non-Participation

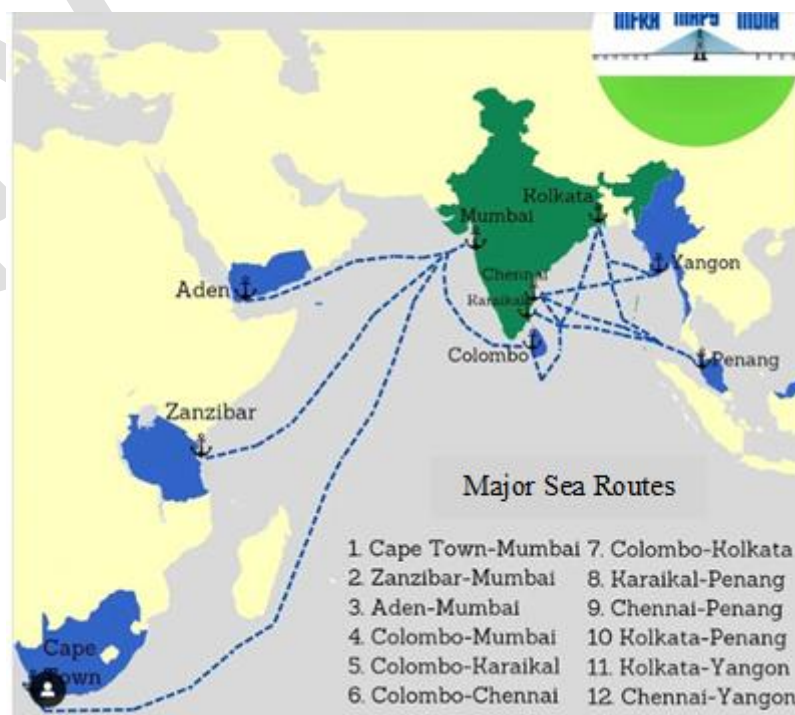
- Saudi Arabia's absence from the operation, likely to avoid negative impacts on Yemen negotiations and relations with Iran, reveals complexities.
- The UAE's reluctance may stem from avoiding perceived support for Israel.
- India, despite being a full member, operates independently, possibly due to its relations with Iran.

Global Division on Maritime Security

- Operation Prosperity Guardian's inability to function as a coalition highlights divisions among like-minded nations supporting freedom of navigation as mandated by United Nations Convention on the Law of the Sea (UNCLOS).
- Even U.S. allies such as Japan and Australia are yet to join, emphasizing the lack of convergence on maritime security and a rule-based world order.

Impact of Red Sea Crisis on Indian Trade

- **Stopping Vessel Movements**
 - Major cargo shipping lines decided not to operate on this route.
 - Even small feeder vessels have recently stopped plying in these waters.
- **Re-routing of Ships**
 - Almost 90% of western hemisphere cargo, both inbound and shipped from India, is now getting re-routed through the Cape of Good Hope.
 - The remaining 10% of Indian import or export cargo is either



not moving or using a transit facility.

- **Higher Transit Time**
 - Trade with Europe, the U.S. east coast, and North Africa is taking the longer route, elongating both export and import cycles.
- **Holding Back the Consignment**
 - Roughly 20-25% of consignments are being held up.
- **Increase in Freight Costs**
 - May affect all consignments by up to 6-fold in some cases.
 - This increase could also be due to peak season surcharge and contingency surcharge.
- **Increased Insurance Costs**
 - Uncertainty about what will happen to the ships as more escorts are needed.
- **Higher Fuel Burning**
 - Long route ships could burn a million dollars' worth of fuel per trip.
- **Costlier Imports**
 - Final products could turn dearer, affecting plans to reduce pump prices of petrol and diesel.
 - Gross imports of crude oil and petroleum products as a share of India's gross imports in value terms was 25.8% in 2022-23, and 22.6% in the 1st half of the current fiscal.
- **Affects Commodity Sectors**
 - The worst-affected sectors are chemicals, plastic, petrochemicals, as margins are not there to absorb the hike in freight.

Measures Taken by India

Enhanced Maritime Surveillance Efforts

- Substantial enhancement in maritime surveillance efforts in the central/north Arabian Sea.
- Augmented force levels to strengthen maritime security.

Deployment of Task Groups

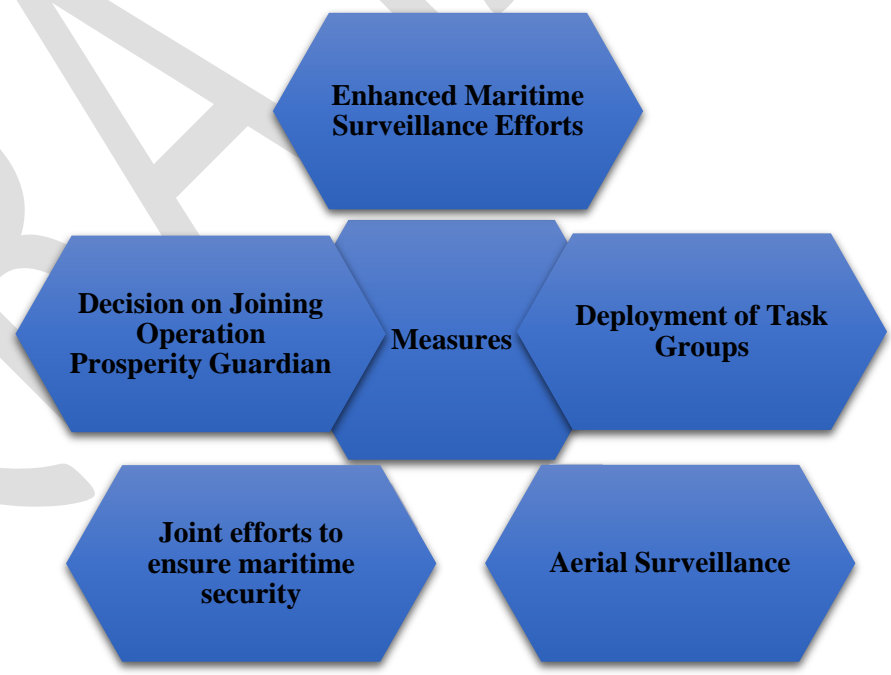
- Task Groups comprising destroyers and frigates deployed for maritime security operations.
- Ready to render assistance to merchant vessels in case of any incident.

Aerial Surveillance

- Enhanced aerial surveillance using long-range maritime patrol aircraft.
- Utilizing RPAs (Remotely Piloted Aircraft) for comprehensive maritime domain awareness.

Joint efforts to ensure maritime security

- Monitoring Overall Situation
- The Indian Navy is actively monitoring the overall situation.
- Coordination with national maritime agencies for a comprehensive understanding.





Decision on Joining Operation Prosperity Guardian

- US Defense Secretary Lloyd Austin announced Operation Prosperity Guardian to protect Red Sea commerce.
- India is yet to decide on joining the operation, assessing the situation and potential contributions.

Way Forward

Joint Maritime Security Initiative

- Propose a collaborative security framework with key Red Sea stakeholders (Egypt, Saudi Arabia, UAE, Yemen).
- Involves intelligence sharing, coordinated patrols, and joint exercises.

Deploy Advanced Surveillance Systems

- Install integrated radar and drone surveillance systems along India's western coastline.
- Enhance early threat detection and response capabilities.

Negotiate Preferential Access

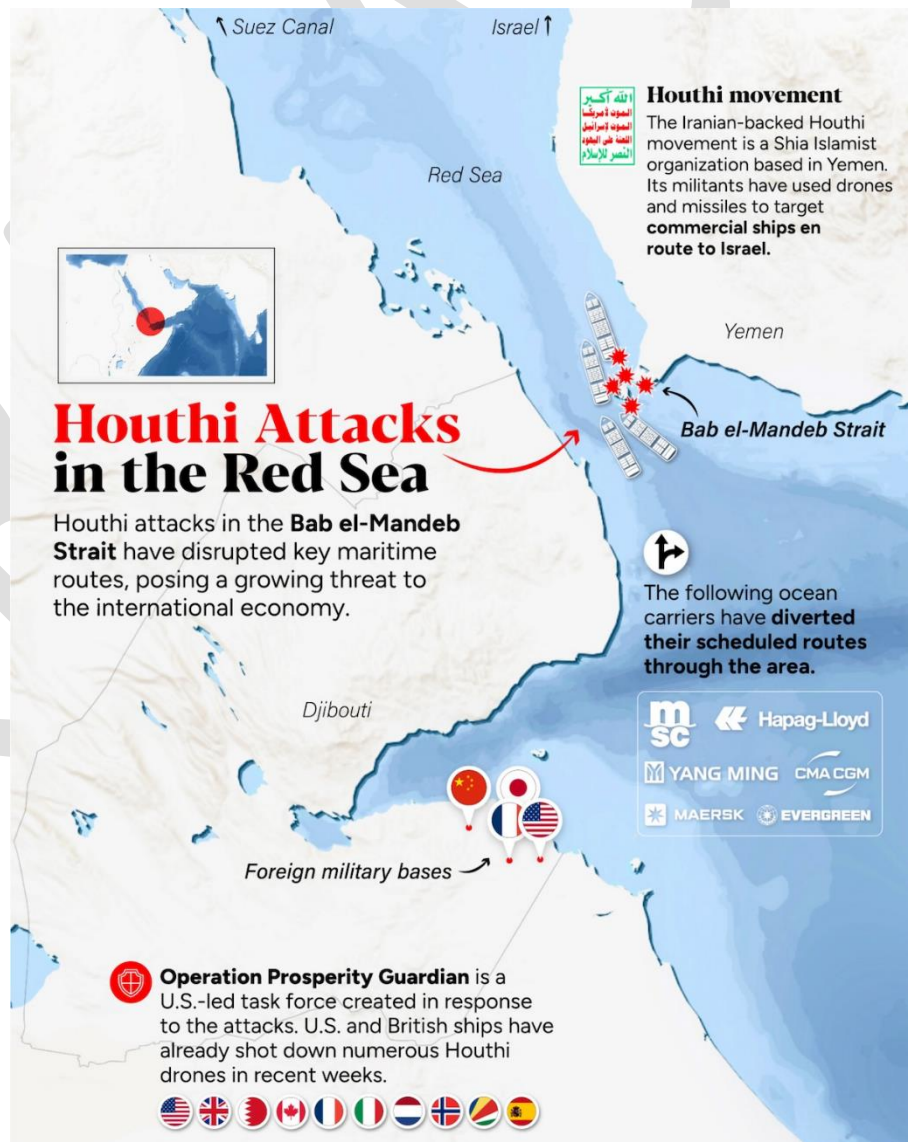
- Engage with Panama Canal authorities to explore preferential passage for Indian vessels.
- Consider potential toll discounts for specific routes.
- Alternate Trade Routes Under Consideration
- Recently renewed interest in the Ben Gurion Canal Project.
- Proposed 160-mile-long sea-level canal connecting the Mediterranean Sea with the Gulf of Aqaba.
- Bypassing the Suez Canal.

Designation of Houthis as Global Terrorists

- Starting mid-February, the U.S. will label the Houthis as a specially designated global terrorist group.
- Potential blocking of their access to the global financial system.
- India can join hands with like-minded countries to ward off such threats.

Calibrated and Cooperative Approach

- Houthi rebels exploit the division among nations and question the U.S.'s global dominance.





- Similar to piracy solutions, addressing the supply of weaponry becomes crucial.
- The situation in Yemen differs, and actions need to be calibrated to prevent a state-on-state confrontation and maintain stability.

Avoiding Yemen as a Battleground

- There is a need for an achievable end state by preventing the legitimization of the Houthis as a state actor.
- Emphasize the importance of avoiding turning Yemen into a battleground like Lebanon.

Facilitating Export Credit

- The Ministry of Commerce and Industry (MoCI) instructs DFS to ensure a continuous credit flow to exporters.
- Concerned about the hold on consignments due to high freight costs and surcharges.

Maintaining Buffer Stocks

- The Ministry of Chemicals and Fertilizers assures that tensions in the Red Sea region would not result in a fertilizer shortage in India.
- The country possesses abundant stocks to meet the upcoming kharif season's requirements.

Tourism Potential and Policy

Why in News?

Union Tourism and Culture Minister G Kishan Reddy said another strategic objective of the draft National Tourism Policy, 2023 is to create jobs and entrepreneurial opportunities in the tourism sector.

Potential of Tourism Sector In India

Employment Generation

- Tourism and Hospitality sector is a major employment generator in India.
- Contributes significantly to Foreign Exchange Earning (FEE).

Experiential Destination

- India offers a diverse and experiential destination.
- Rich cultural heritage, ancient healing systems, natural beauty (70% Himalayas, 7500 km coastline), flora and fauna.

Medical Tourism Growth

- Increasing trend in Foreign Tourist Arrivals for Medical Treatment.
- Rapid growth observed in this sector.

Economic Growth Projection

- Estimated 7%-9% compounded annual growth rate by 2030.
- Anticipated \$250 billion GDP contribution from tourism.
- Expected creation of 140 million jobs in the tourism sector.

Foreign Exchange Earnings

- Projected \$56 billion in foreign exchange earnings.
- Anticipated increase with more than 25 million foreign arrivals.

Enabling Policy Framework

Potential of Tourism Sector In India

Employment Generation

Experiential Destination

Medical Tourism Growth

Economic Growth Projection

Foreign Exchange Earnings

Enabling Policy Framework

- Expected role in achieving economic targets.
- Facilitating growth in the tourism sector.

Importance of Tourism

Tourism plays a pivotal role in shaping and sustaining a nation's cultural and economic landscape. Importantly, tourism aids in fundraising efforts for monument preservation and spotlights biodiversity, playing a crucial role in global wildlife conservation endeavors. Some of the important points that illustrate the importance of tourism in India are listed below:

Preserving Heritage	Regional Growth Driver
Promoting Equality	Global Awareness and Socio-economic Issues
Boosting Service Industry	Infrastructure Development
Support for Various Sectors	Opportunities for Foreign Investments
Job Creation	Cultural Diplomacy and Soft Power
Global Fundraising for Preservation	Promoting Biodiversity
Advocacy for Wildlife Issues	

Tourism

Important Facts

- Tourism in India is a significant contributor to income and employment generation.
- Contributes 6.23% to the national GDP and employs 8.78% of the total workforce.
- Nearly 20 million people are employed in India's tourism industry.



- Tourism is a crucial source of foreign exchange earnings.
- Contributed about US\$100 billion in 2008, expected to reach US\$275.5 billion by 2018 (9.4% annual growth).

According to the World Tourism Organisation:

- Provides 10% of the world's GDP.
- Represents 7% of global trade.
- Creates one in every 11 jobs worldwide.



- Government plans to develop 10 tourist destinations under the Amrut programme.
- Allocation of Rs 1,48,528 crore for modern facilities in the Indian Railways to boost domestic tourism, positively impacting the hotel and aviation sector.

- The travel and tourism sector in India has the potential to support 46 million jobs by 2025.



Preserving Heritage

- Recognizes and preserves India's historical and cultural sites.

Regional Growth Driver

- Acts as a catalyst for regional development by bringing in significant money from tourists.

Promoting Equality

- Fosters social equality by encouraging inclusive growth in areas lacking growth-promoting industries.

Global Awareness and Socio-economic Issues

- Raises global awareness about the region.
- Highlights socio-economic issues within the region.

Boosting Service Industry

- Drives the expansion of the service industry.
- Benefits numerous companies in the service sector.

Infrastructure Development

- Necessitates infrastructure development as a driving force for overall progress.
- Example: Mobile tourism caravans in Uttarakhand.

Support for Various Sectors

- Supports railroad, aviation, and real estate sectors.

Opportunities for Foreign Investments

- Attracts foreign hotel and tourism groups, benefiting small companies in tourist areas.

Job Creation

- Generates employment for tour operators and the hospitality industry.

Cultural Diplomacy and Soft Power

- Builds connections with other nations through India's attractions.
- Contributes to India's soft power.

Global Fundraising for Preservation

- Facilitates global fundraising for the protection and repair of monuments and areas.

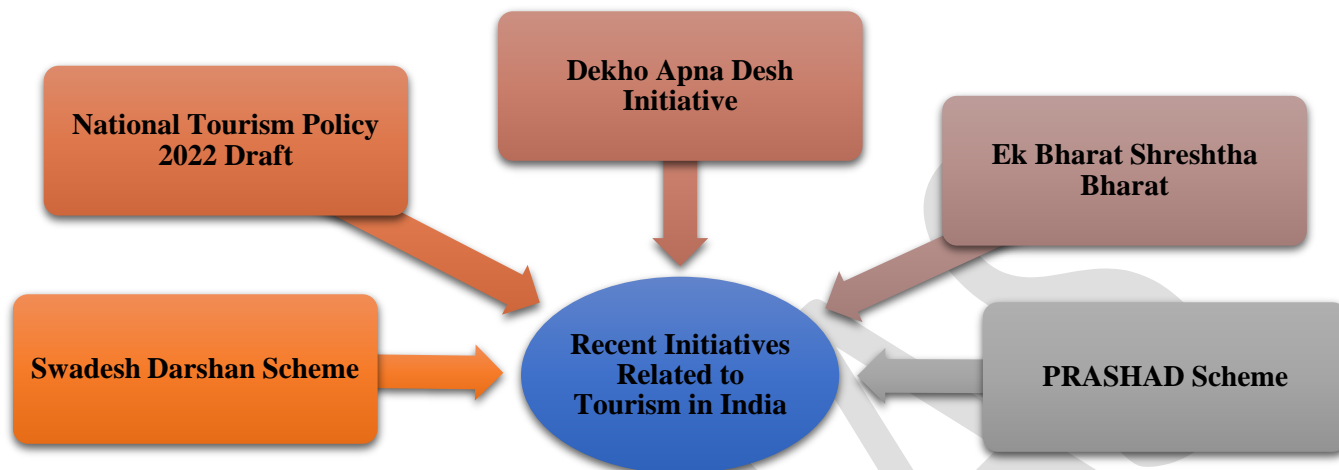
Promoting Biodiversity

- Enables the promotion of India's biodiversity.
- Highlights the importance of animals like tigers, red pandas, and wild asses.

Advocacy for Wildlife Issues

- Draws worldwide attention to Indian wildlife issues.
- Contributes to global efforts to raise funds for wildlife protection.

Recent Initiatives Related to Tourism in India



Swadesh Darshan Scheme

About

- Launched in 2014-15 for integrated development of theme-based tourist circuits.
- Circuits include Buddhist, Coastal, Desert, Eco, Heritage, Northeast, Himalayan, Sufi, Krishna, Ramayana, Rural, Spiritual, Tirthankar, Wildlife, and Tribal Circuits.
- 100% centrally funded, aims for convergence with other government schemes, and leverages voluntary funding for CSR initiatives.

Objectives

- Position tourism as a major driver of economic growth and job creation.
- Develop circuits with tourist potential in a planned and prioritized manner.
- Promote cultural and heritage value to generate livelihoods.
- Enhance tourist attractiveness sustainably with world-class infrastructure.
- Follow a community-based development and pro-poor tourism approach.
- Create awareness among local communities about the benefits of tourism.

Swadesh Darshan Scheme 2.0

About

- Aims to realize India's tourism potential with the mantra of 'vocal for local'.

Did You Know?

- ✓ India ranks 10th globally in Tourism's contribution to the World GDP (World Travel and Tourism Council, 2019).
- ✓ Travel & Tourism contributed 6.8% to India's GDP in 2019.
- Total contribution: ~Rs. 13,68,100 crore (USD 194.30 billion).
- India has 40 sites on the 'World Heritage List,' ranking 6th globally.
- ✓ Categories: 32 cultural, 7 natural, and 1 mixed site.
- Latest additions: Dholavira and Ramappa Temple (Telangana).
- ✓ Tourism sector accounted for 8.0% of total employment in India in FY20.
- Jobs generated: 39 million.



- Represents a generational shift, focusing on sustainable and responsible tourism.
- Develops destinations with a tourist and destination-centric approach.
- Establishes benchmarks and standards for tourism destination development.

Major Themes

- Culture and Heritage
- Adventure Tourism
- Eco-Tourism
- Wellness Tourism
- MICE Tourism
- Rural Tourism
- Beach Tourism
- Cruises – Ocean & Inland

Significance

- Aims to boost tourism's contribution to local economies.
- Targets job creation, skill enhancement for local youth, increased private sector investment, and preservation of local cultural and natural resources.

Government's Draft National Tourism Policy, 2022

Draft National Tourism Policy focuses on Green and Digital Tourism.

- Shared with industry partners, state governments, and allied ministries for feedback.

Objectives of the National Tourism Policy



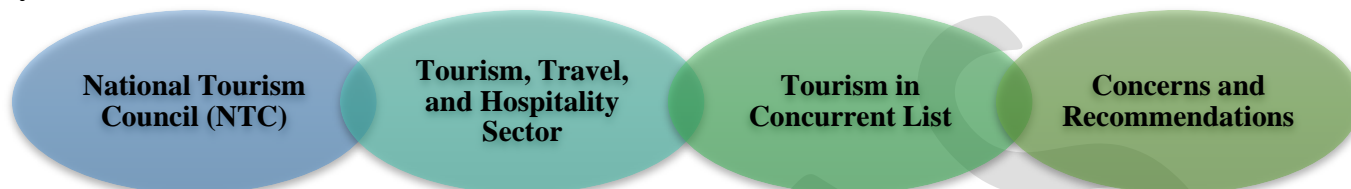
Key Points of the Draft Policy

Industry Status	<ul style="list-style-type: none"> • Proposes granting industry status to the tourism sector. • Formal infrastructure status for hotels is also suggested to encourage investment.
Focus Areas for the Next Decade	<p>Identifies five key areas for significant focus in the next 10 years</p> <ul style="list-style-type: none"> • Green Tourism • Digital Tourism • Destination Management • Skilling the Hospitality Sector • Support for Tourism-related MSMEs
Relief Measures and Taxation Breaks	<ul style="list-style-type: none"> • Acknowledges the industry's challenges during the pandemic. • Recognizes the need for relief measures and taxation breaks.

Framework Conditions

- While not addressing specific operational issues, the draft policy offers framework conditions.
- Aims to assist the tourism sector, particularly in light of the challenges posed by the pandemic.

Key Recommendations of the Committee



- **National Tourism Council (NTC)**
 - Proposal to create a National Tourism Council (NTC), modeled after the GST council.
 - **Aim:** Provide recommendations to both Central and State governments on various tourism sector issues and concerns.
- **Tourism, Travel, and Hospitality Sector**
 - Suggested a spending capex above Rs. 25 crores.
 - Benefits include reduced operating costs for hospitality players through subsidized rates for utilities (electricity, water), property tax, and development tax.
 - Aims to attract investments in the sector.
 - Commends eight states (Maharashtra, Gujarat, Madhya Pradesh, Kerala, Karnataka, Punjab, Rajasthan, and Uttarakhand) for granting industry status to hospitality projects.
- **Tourism in Concurrent List**
 - Recommends including Tourism in the concurrent list of subjects.
 - Simplifies handling issues in the pandemic-affected Indian tourism sector due to its multi-sectoral nature.
- **Concerns and Recommendations**
 - Raises concerns about delays in final Utilization Certificate (UC) submission for projects.
 - Highlights specific pending projects like the PRASHAD Scheme's "Infrastructure Development at Puri, Shree Jagannath Dham-Ramachandi-Prachi River front at Deuli under Mega Circuit" and Integrated Development of tourist circuits under SWADESH DARSHAN since 2015.
 - Urges the Ministry to identify issues causing delays in the payment of various expenditure items with the India Trade Development Corporation (ITDC).

Bharat Parv 2021

Virtual Pavilions	<ul style="list-style-type: none"> • Dedicated three virtual pavilions - Dekho Apna Desh, Statue of Unity, and Incredible India.
About Bharat Parv	<ul style="list-style-type: none"> • Aims to generate patriotic fervor and showcase the rich cultural diversity of India. • Organized by the Ministry of Tourism since 2016 during Republic Day Celebrations.
Highlights of Bharat Parv 2021	<ul style="list-style-type: none"> • Showcased pavilions of Central Ministries, State Theme Pavilions, Handicrafts, and Folk performances.
'Dekho Apna Desh' Campaign	<ul style="list-style-type: none"> • Launched in 2020 to encourage domestic travel and explore India's wonders. • Initiative aims to develop tourist facilities and infrastructure in various tourism spots.

	<ul style="list-style-type: none"> Series of webinars organized on cities, states, cultures, heritage, wildlife, adventure, etc.
Statue of Unity	<ul style="list-style-type: none"> Monument in Narmada district, Gujarat, dedicated to Sardar Vallabhbhai Patel. World's tallest statue, designed by sculptor Ram V. Sutar, with a height of 182 meters. Pavilion exhibited the 'Ek Bharat Shreshtha Bharat' concept, fostering understanding and cultural connections between different States/UTs.
Incredible India Pavilion	<ul style="list-style-type: none"> Showcased information on UNESCO World Heritage Sites. India has 38 world heritage sites, including cultural, natural, and mixed properties. Latest addition: Jaipur city, Rajasthan.

Ek Bharat Shreshtha Bharat

Initiated in 2015 to foster engagement among people from different States/Union Territories (UTs). Aims to enhance mutual understanding and strengthen bonds between diverse cultures, promoting unity and integrity in India.

- **Ministry Involved:** An initiative of the Ministry of Education.
- **Activities Under the Scheme:** Each State/UT is paired with another for a specified time. Structured engagement includes activities in language, literature, cuisine, festivals, cultural events, and tourism.

Objectives

- Foster Unity in Diversity and uphold traditional emotional bonds across the nation.
- Promote the Spirit of National Integration through deep and structured engagements between all Indian States and Union Territories.
- Showcase the rich Heritage, Culture, Customs, and Traditions to enhance understanding and appreciation of India's diversity.
- Establish long-term engagements to create a sense of common identity.
- Create an environment that encourages learning between States by sharing best practices and experiences.

National Mission on Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD) Scheme

Scheme focus on identifying and developing pilgrim sites across the country to promote religious tourism.

- **Launch:** The 'National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD)' was launched by the Ministry of Tourism in the year 2014-15 with the objective of holistic development of identified pilgrimage destinations.
 - The name of the scheme was changed from PRASAD to "National Mission on Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD)" in October 2017.
- **Implementing Agency:** The projects identified under this scheme shall be implemented through the identified agencies by the respective State/ Union Territory Government.
- **Objective:** Rejuvenation and spiritual augmentation of important national/ global pilgrimage and heritage sites.
 - Follow community-based development and create awareness among the local communities.
 - Integrated tourism development of heritage city, local arts, culture, handicrafts, cuisine, etc., to generate livelihood.
 - Strengthen the mechanism for bridging the infrastructural gaps.
- **Funding:** Under it, the Ministry of Tourism provides Central Financial Assistance (CFA) to State Governments for promoting tourism at identified destinations.
 - For components within public funding under this scheme, the Central Government will provide a 100% fund.

- For improved sustainability of the project, it also seeks to involve Public Private Partnership (PPP) and Corporate Social Responsibility (CSR) as well.

Challenges Faced by the Tourism Sector



- **Seasonal Dependency:** The industry's reliance on specific seasons results in regions generating no revenue for a significant part of the year, impeding growth rates.
- **Exchange Rate Volatility:** Fluctuations in exchange rates can lead to a weaker rupee and lower-than-expected foreign exchange reserves.
- **Limited Acceptance of International Credit Cards:** The absence of acceptance of international credit cards in many locations adversely affects tourism.
- **High Taxes and Expenses:** India is perceived as an expensive destination due to high taxes on travel and tourism.
- **Lack of English-Speaking Professionals:** Insufficient skilled professionals, tour operators, and guides proficient in English pose a challenge.
- **Inadequate Infrastructure:** Many places lack basic conveniences like tourist-friendly restrooms and urinals.
- **Natural Disasters:** Landslides and cloudbursts in the Himalayas and the North East pose risks to travelers, as seen in the 2013 Kedarnath Cloud Burst.
- **Wildlife Tourism Impact:** Wildlife tourism strains vulnerable species and raises the risk of forest fires.
- **Environmental Concerns:** Indiscriminate garbage dumping and landmark degradation by tourists harm the environment and contaminate water sources.
- **Visa Requirements and Paperwork:** Visa requirements, inner line permissions, and paperwork contribute to traveler delays.
- **Regional Imbalances:** Fewer states experience a higher concentration of tourists, while many attractions in northern India's interior need more promotion.
- **Competitiveness Rankings:** Despite positive rankings, India stands 34th overall for tourist competitiveness, indicating challenges in monetizing and marketing the industry effectively.

Way Forward



Job Creation in the Tertiary Sector

- Tourism is a significant job creator in the tertiary sector.
- Working towards its betterment can attract more foreign tourists and promote cultural awareness.

Boosting Travel Startups

- The Startup India initiative has spurred entrepreneurship.
- Greater support is needed for travel and tourism startups, encouraging innovation.

- Government backing for ideation and access to finance is essential.

Workforce Training

- Workforce training is crucial to equip workers with skills for the travel and tourism sector.

Multiplier Effects on Income

- The sector's growth has multiplier effects on income generation.
- It is employment-intensive with relatively low capital investment.

Public-Private Partnership

- Emphasizing the importance of public-private partnerships is vital.
- Collaboration can enhance infrastructure and address connectivity issues impacting international travelers' experiences.