

PERFECT

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>> SPECIAL FEATURES

Power Packed News One Liners UPSC Prelims based MCQs

A Historic Gathering and Its Crowd Management challenges

Message



An officer with a right mindset is an officer that a nation aspires for. A right mindset doesn't necessarily comprise unlimited jargon of knowledge rather a right amount of knowledge and its appropriate execution. Especially, when it comes to UPSC and State PSCs preparation, the crux is not to accumulate the knowledge but its effective implementation and utilization in tackling any situation. The situation here can be anything from UPSC CSE Prelims to the major issues that need to be addressed. The journey is hard but it is worth.

Perfect 7 has been part of many UPSC and State PSCs aspirants in their journey of becoming well reputed officers serving nationally and internationally. The magazine itself had gone through constant ebb and flows of change and improvements. Now, that the magazine is in its monthly era, I hope it becomes your perfect preparation partner and guides you through this ever learning endeavor of Civil Services Preparation.

With Best wishes.

Vinay Singh Founder Dhyeya IAS

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In This Issue

1. Indian	Society	& Art	and
Culture	•••••	•••••	05-16

- ☑ The Mahakumbh Mela: A Historic Gathering and Its Crowd Management Challenges
- ☑ Minority Welfare in India: Ensuring Inclusive Growth
- ☑ Financial Assistance for Rare Diseases
- ☑ Corruption Perceptions Index
- ☑ NITI Aayog Report on Higher Education
- ☑ India sees over 30% decline in suicide death rates from 1990 to 2021: Lancet Study
- ☑ Skill India Programme
- ☑ Supreme Court Directive on Domestic Workers'
 Protection
- ☑ Manual Scavenging
- ✓ Saras Aajeevika Mela

2. Polity & Governance 17-41

- ☑ Digital Free Speech, Obscenity, and the Ethics of Online Influence
- ☑ Uniform Civil Code in Uttarakhand: An Indepth Analysis
- ☑ The Immigration and Foreigners Bill, 2025: A Comprehensive Legislative Framework
- ☑ The Freebies Culture in India: Supreme Court Concerns and Multifaceted Dimensions
- ☑ Chhattisgarh HC's Ruling on Marital Rape and Section 377
- ☑ Bail under PMLA Cases
- ☑ Supreme Court on Death Penalty
- ✓ New Chief Election Commissioner (CEC) of India
- ☑ India's New Draft Regulations on Predatory Pricing
- ☑ NAKSHA Project

- ☑ Removal Process of a High Court Judge in India
- ☑ President's Rule in Manipur
- ☑ Freebies Culture in India
- ☑ Supreme Court Ruling on Alimony and Maintenance in Void Marriages
- ☑ PAC on Toll Tax Reduction and Better Highway Management
- ☑ Proposed Immigration Bill, 2025
- ☑ TN Govt-Governor Dispute Case
- ☑ Supreme Court Decision on Arrest
- ☑ Supreme Court direction on Forest Act
- ☑ Centre-State dispute on National Education Policy

3. International Relations... 42-60

- ☑ India-Qatar Strategic Partnership: Strengthening Bilateral Ties amid Geopolitical Shifts
- ✓ India's Neighbourhood First and Act East Policies: Connectivity in the Northeast amid Regional Instability
- ☑ Deportation of Indian Migrants from the United States: Analyzing the Implications
- ☑ The Cook Islands-China Agreement
- ☑ The Eighth Indian Ocean Conference (IOC)
- **☑** India-US TRUST Initiative
- ☑ Crisis in the Democratic Republic of Congo
- ☑ Indian PM's Visit to France
- ☑ AI Action Summit 2025
- ☑ Bilateral Investment Treaty with India
- ☑ India and U.K. Strengthen Defence Cooperation at Aero India 2025
- ☑ Baltic Nations Cut Ties to Russian Power Grid
- ☑ Trump's Memo on Chabahar Port
- **☑** US withdrawal from UN Organisations

 ✓ India's Tiger Population: Growth, Challenges and Conservation Strategies ✓ India's Milestone in Solar Energy: Achieving 100 GW Capacity ✓ Melting Glaciers and Rising Sea Levels ✓ The Growing Crisis on Peatlands ✓ Delhi's Seismic Risk and Shallow Earthquake ✓ India's Strategic Role in the Future Concerns over Moving African Cheetahs to India ✓ Microfinance in India: Evolution, Challenges ✓ Pension Policy for Gig Workers ✓ Income-Tax Bill, 2025 	
 ✓ India's Milestone in Solar Energy: Achieving 100 GW Capacity ✓ Melting Glaciers and Rising Sea Levels ✓ The Growing Crisis on Peatlands ✓ Delhi's Seismic Risk and Shallow Earthquake ✓ India's Strategic Role in the Future Chapter of Labour Market ✓ Microfinance in India: Evolution, Chall and the Way Forward ✓ Pension Policy for Gig Workers 	Global
100 GW Capacity ✓ India's Strategic Role in the Future C ✓ Melting Glaciers and Rising Sea Levels ✓ The Growing Crisis on Peatlands ✓ Delhi's Seismic Risk and Shallow Earthquake ✓ India's First Intertidal Bioblitz ✓ Pension Policy for Gig Workers	Global
 ✓ Melting Glaciers and Rising Sea Levels ✓ The Growing Crisis on Peatlands ✓ Delhi's Seismic Risk and Shallow Earthquake ✓ India's First Intertidal Bioblitz ✓ Pension Policy for Gig Workers 	
 ☑ The Growing Crisis on Peatlands ☑ Delhi's Seismic Risk and Shallow Earthquake ☑ India's First Intertidal Bioblitz ☑ Pension Policy for Gig Workers ☑ Learner Ten Bill 2025 	enges,
 ☑ Delhi's Seismic Risk and Shallow Earthquake ☑ India's First Intertidal Bioblitz ☑ Pension Policy for Gig Workers ☑ India's First Intertidal Bioblitz 	enges,
✓ India's First Intertidal Bioblitz ✓ Pension Policy for Gig Workers	
7 I T P.11 2025	
Concerns over Moving African Cheetahs to India Uncome-1ax Bill, 2025	
 ✓ Rising Human-Wildlife Conflict in Kerala ✓ Unemployment in Urban Areas ✓ Reciprocal Tariffs 	
RRI Cuts Repo Rate to 6.25% amid (Slobal
Economic Pressures	Jiobai
 ✓ Rising Temperature at the North Pole ✓ Digital Payment Transactions 	
☑ International Big Cat Alliance ☑ Cryptocurrency	
☑ Arunachal Pradesh Loses 110 Glaciers in 32 Years ☑ RBI Tightens Norms for Payment Sy	stems
✓ Green Cardamom's New Relatives Penalties	
☑ Ramsar Wetlands	
☐ Tiger Occupancy in India	
Impact of Extreme Climate Events on India's Southwest Coast7. Internal Security 106	-110
☑ Madhya Pradesh became the state with the highest ☑ Escalation of Anti-Maoist Operation	ıs in
number of vultures in the country Chhattisgarh: Strategic Expansion and I Casualties	Rising
5. Science & Tech	cil
✓ Aero India 2025 ✓ India and the Paris AI Summit 2025: Shaping	
Global AI Governance ☑ Tabletop Experiment to Investigate the Quantum Power Packed News	125
Nature of Gravity	
Nature of Gravity ☑ Ban of Unapproved Drugs in India One Liners	-127

☑ Bird Flu Outbreak in Andhra Pradesh

Vaccine for Lumpy Skin Disease

☑ SRY Gene and Sex Determination

Innovative Conductive Textile by IIT Guwahati

☑ Einstein Rings

Malaria Eradication

Current Based MCQs 128-136

Indian Society & Art and Culture

The Mahakumbh Mela: A Historic Gathering and Its Crowd Management Challenges

The Mahakumbh Mela, held in Prayagraj, India, has set a global record, becoming the first event in the world to have more than 50 crore (500 million) people directly participating. As of early 2025, over 50 crore 4 lakh devotees have taken a holy dip at the Triveni Sangam, a confluence of the Ganga, Yamuna, and the mythical Saraswati rivers. The event reached its peak on Mauni Amavasya, the largest bathing day, where 90 lakh devotees took the holy dip by 6 pm. This marks the largest human congregation for any religious, cultural, or social event globally, surpassing the populations of nations like the United States, Russia, Indonesia, Brazil, Pakistan, and Bangladesh. While this event is a reflection of India's spiritual and cultural vibrancy, it also brings significant challenges in terms of crowd management and safety.

The Scale of the Mahakumbh Mela:

- The Mahakumbh Mela, held every 12 years, attracts millions of pilgrims from across the world. The festival is centered around the confluence of the Ganga, Yamuna, and the mythical Saraswati rivers, where devotees bathe in the holy waters.
- However, as large numbers of devotees rushed to the Sangam for their holy dip, chaos ensued when some people broke through barricades, jumped queues, and trampled over others. The stampede resulted in at least 30 fatalities and injuries to over 60 devotees.
- The stampede has raised important questions

about the effectiveness of crowd management at such massive events, and the tragic loss of lives has prompted an urgent need for reevaluating safety measures.

Maha Kumbh Mela 2025: A Spiritual Spectacle Prayagraj The Maha Kumbh Mela, the world's largest religious congregation, will take place in Prayagraj from Jan 13 to Feb 26, 2025. Millions will gather at the Sangam, the sacred confluence of the Ganga, Yamuna, and mythical Saraswati, for spiritual cleansing. According to Hindu mythology, the event commemorates the churning of the Milky Ocean (Samudra Manthan) by gods and demons to obtain Amrit, the nectar of immortality. During a chase to protect the nectar, drops fell at Prayagraj, Haridwar, Ujjain, and Nashik. Kumbh Mela rotates among these four sites, held once every 12 years at each. Important Bathing Dates Jan 14 Jan 29 Jan 13 Feb 3 Feb 12 Feb 26 Monday Tuesday Wednesday Monday Wednesday Wednesday Basant Maha Paush Makar Mauni Maghi Purnima Sankranti Amavasya **Panchami** Purnima Shivratri 1st Shahi 2nd Shahi 3rd Shahi Making of Prayagraj Maha Kumbh Rasulabad 1.50 lakh tents in the Mela area Ghat 400+ km of temporary roads and Prayagraj chequered plate sheets laid out Allahabad Junction Development of 14 road overbridges and flyovers ■ 12 km of temporary ghats Gyan Ganga Ghat 8 km riverfront roads 2.750 crowd-monitoring cameras set up 24x7 integrated command and control monitoring 1.50 lakh toilets set up ■ 100 MT construction and 15,000 sanitation workers and 2,500 Ganga Seva Doots deployed demolition waste recycling plant

The Challenges of Managing Mass Gatherings:

The Mahakumbh Mela presents exceptional challenges due to its size. Despite the state government's extensive preparations, including declaring the area a no-vehicle zone and restricting VIP access, the sheer number of



- attendees overwhelmed the system. The authorities had anticipated large numbers, but the turnout far exceeded estimates, which is a common problem with mass gatherings.
- The tragedy at the Mahakumbh Mela calls into question the adequacy of the planning and infrastructure needed to manage such a huge influx of people.

Key Issues in Crowd Management:

- Crowd behavior is unpredictable, and emotions such as fear, anxiety, excitement, and anger can trigger panic and uncontrolled movement. Overcrowding, insufficient exit points and inadequate security measures worsened the situation.
- Although authorities made efforts to manage the event smoothly, the breakdown in crowd control during the rush for the Mauni Amavasya dip exposed significant gaps in the planning and execution.
- Furthermore, crowd management during religious events in India is often reactive rather than proactive. Authorities need to develop systems that anticipate crowd behavior, mitigate risks, and respond quickly to emerging threats.
- The use of technology, such as drones for monitoring crowd density, and better coordination between stakeholders is critical for ensuring the safety of millions of devotees.

Infrastructure and Technology in Crowd Management:

- To prevent tragedies like the one at the Mahakumbh Mela, experts emphasize the importance of infrastructure and modern crowd control technologies.
- Insights from the National Disaster Management Authority (NDMA):
 - » The NDMA published a 2014 report analyzing crowd management for large events, particularly religious gatherings.
 - » The report identified factors contributing to stampedes: overcrowding, inadequate entry and exit points, poor infrastructure, and lack of coordination among authorities.

- Controlling the Inflow of People: Managing the number of people entering the venue by using registration systems and limiting the number of pilgrims allowed to enter.
- Regulating Crowd at the Venue: Ensuring the crowd moves in an organized manner through wide pathways, appropriate barricades, and other infrastructure.
- Managing the Outflow: Managing the exit points and ensuring that the crowd is directed to safe and well-planned exits.

The Role of Technology:

- Modern technology is crucial in preventing crowd disasters. The use of drones and real-time monitoring can significantly enhance the ability of authorities to respond proactively to crowd behavior.
- ***** Technological Solutions:
 - » Drones: Provide aerial views of crowds, helping authorities assess movement patterns and intervene if necessary.
 - » Surveillance Cameras & Crowd Simulation Tools: Help detect crowd surges and identify potential problems before they escalate.
 - » Real-Time Monitoring: Allows law enforcement to track crowd density and intervene before dangerous situations arise.

Past Incidents and Lessons Learned:

- The Mahakumbh Mela stampede in 2025 is not an isolated incident. India has experienced several tragic stampedes in the past, including the 2003 stampede at the Nashik Kumbh, which killed 29 pilgrims, and the 2005 stampede during the Kalubai Yatra Mandhardevi in Maharashtra, which claimed 293 lives. These incidents share common factors, such as overcrowding, inadequate infrastructure, and poor safety measures, all contributing to the loss of lives.
- These incidents highlight the urgent need for better crowd management strategies and improved coordination between authorities to prevent similar tragedies in the future.

Preventing Future Tragedies: Proactive Measures

To prevent future stampedes and crowd-related

Crowd Management Strategies:



incidents, experts recommend a proactive, holistic approach to crowd management.

Essential Measures:

- » Controlling the Inflow of People: Using registration systems to limit the number of pilgrims and controlling arrival patterns.
- » Improved Infrastructure: Ensuring wider pathways, better lighting, stronger barricades, and other safety features.
- » Technology-Driven Monitoring: Using drones and surveillance systems to track crowd movement and density.
- » Better Coordination: Ensuring better communication between event organizers, law enforcement, and transport agencies to respond quickly to emerging risks.

Conclusion:

The Mahakumbh Mela in Prayagraj is a symbol

of India's cultural and religious heritage. However, the recent tragedy during the event highlights the significant challenges in managing such large-scale gatherings. The loss of lives during the stampede is a tragic reminder of the importance of effective crowd management, robust infrastructure, and the proactive use of technology to ensure the safety of devotees.

- » Authorities must implement comprehensive, well-coordinated strategies to manage such large-scale events.
- » Proactive planning, infrastructure improvement, and technology can help minimize risks.
- » The lessons learned from this tragedy should be applied to improve future planning for similar events.

Minority Welfare in India: Ensuring Inclusive Growth

In a written reply to the Rajya Sabha, the Union Minister of Minority Affairs & Parliamentary Affairs, Shri Kiren Rijiju, recently provided information on the various initiatives undertaken by the Government of India to support the socio-economic development of minorities. These initiatives aim to ensure equal access to education, employment, and infrastructure for the six centrally recognized minority communities—Muslims, Christians, Sikhs, Buddhists, Jains, and Zoroastrians (Parsis). The Government's focus on inclusive development has been reinforced through the Prime Minister's New 15-Point Programme for the Welfare of Minorities, which integrates multiple schemes across ministries to promote education, employment, and social welfare for marginalized communities.

Objectives of the 15-Point Programme:

- The Prime Minister's New 15-Point Programme was launched to enhance opportunities for minorities by focusing on four core areas:
 - » Education,
 - » Employment and economic empowerment,

- » Infrastructure development, and
- » Prevention of communal disharmony.
- Under this framework, 15% of the outlays and targets of schemes implemented by participating ministries are earmarked for the welfare of notified minorities. The initiative is crucial for ensuring that minority communities, which constitute 19.3% of India's population, have access to government schemes that promote equitable development. The Government has identified 90 Minority Concentration Districts, 710 Blocks, and 66 Towns where resources are strategically focused to bridge development gaps.

Institutional Mechanisms for Minority Welfare:

To safeguard minority rights, the Ministry of Minority Affairs was established on 29th January 2006, after being carved out from the Ministry of Social Justice & Empowerment. Its mandate includes policy formulation, scheme implementation, and evaluation of programs for minorities. Additionally, the National Commission



for Minorities (NCM) was constituted under the National Commission for Minorities Act, 1992, to oversee the protection of minority rights. Initially, five communities were recognized as minorities, and in 2014, Jains were added to the list. Alongside the NCM, State Minorities Commissions function to ensure the protection of minority interests at the state level.

Minority Welfare Schemes in India **KEY INITIATIVES** Pradhan Mantri Jan **National Commission PM VIKAS** Vikas Karyakram for Minorities **Padho Pardesh Durgah Khawaja** livo Parsi Saheb Act, 1955 **USTTAD** Seekho Aur Kamao **Oaumi Wagf Board** Taraqqiati Nai Manzil **Central Waqf Council** Shahari Waqf Sampatti Nai Roshni Haj Pilgrimage Vikas Yojana

Objectives of the 15-Point Programme:

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- > Education,
- Employment and economic empowerment,
- Infrastructure development, and
- Prevention of communal disharmony.
- Another significant institutional body is the Central Waqf Council (CWC), which was established under the Waqf Act, 1995 (amended in 2013) to oversee waqf properties and enhance their administration. The Government also implements two key schemes through the CWC:
 - » Qaumi Waqf Board Taraqqiati Scheme (QWBTS): A scheme aimed at modernizing and digitizing State Waqf Boards to enhance their management. From 2019-20 to 2023-24, ₹23.87 crore was allocated under this initiative.
 - » Shahari Waqf Sampatti Vikas Yojana (SWSVY): An initiative that provides interestfree loans to Waqf Boards for the commercial development of waqf properties. ₹7.16 crore was spent on this scheme during the same period.

Beyond these efforts, the Dargah Khwaja Saheb, Ajmer, a significant religious site, is administered under the Durgah Khawaja Saheb Act, 1955, by the Ministry of Minority Affairs. The Dargah Committee facilitates charitable activities, including Langar (free communal meals), medical aid, stipends for widows and destitute women, zakat services, and educational support. These initiatives highlight the Government's commitment to preserving religious institutions while also promoting social welfare.

Education as a Key Driver for Minority Upliftment:

- According to the 2011 Census, the literacy rates of certain minority communities—Christians, Jains, Sikhs, and Buddhists—are above the national average of 72.98%, while Muslims have a literacy rate of 68.54%. To bridge educational gaps, the Government has introduced multiple scholarship schemes:
 - » Pre-Matric Scholarship Scheme: Provides financial support to minority students from Class IX to X, with 30% of scholarships reserved for girls. Between 2008-09 and 2022-23, ₹12,250.44 crore was allocated to 710.94 lakh students.
 - » Post-Matric Scholarship Scheme: Supports students from Class XI to PhD, with a 30% allocation for girls. The Government sanctioned ₹5,171.52 crore for 92.39 lakh students from 2008-09 to 2022-23.
- However, education alone is insufficient for holistic empowerment. Recognizing this, the Government has integrated skill development programs with scholarships to enhance employability.

Economic Empowerment & Skill Development for Minorities:

Economic independence is crucial for the empowerment of minority communities. The Pradhan Mantri Virasat Ka Samvardhan (PM VIKAS) scheme focuses on skill development and entrepreneurship by integrating five earlier schemes—Seekho Aur Kamao, Nai Manzil, USTTAD, Nai Roshni, and Hamari Dharohar. Some key achievements include:



- » USTTAD Scheme: 21,604 beneficiaries were trained, and 41 Hunar Haats were organized with an expenditure of ₹288.68 crore.
- » Nai Manzil Scheme: 98,709 individuals received training, with ₹456.19 crore spent on the initiative.
- » Seekho Aur Kamao Scheme: 4.68 lakh beneficiaries were trained at a cost of ₹1,744.35 crore.
- Additionally, the National Minorities Development and Finance Corporation (NMDFC) plays a key role in providing financial assistance to minority entrepreneurs. Since its establishment on 30th September 1994, NMDFC has disbursed ₹8,771.88 crore to 23,85,809 beneficiaries through microcredit programs and term loans.

Infrastructure Development: Pradhan Mantri Jan Vikas Karyakram (PMJVK)

Launched in May 2018, the Pradhan Mantri Jan Vikas Karyakram (PMJVK) is a Centrally Sponsored Scheme aimed at developing infrastructure in 1,300 identified minority-concentrated areas. Under the 15th Finance Commission Cycle (2022-23 onwards), the scheme has been expanded nationwide to improve access to education, healthcare, and employment.

Preserving Minority Heritage and Culture:

- Cultural identity is essential for the preservation of diversity. The Government's initiatives include:
 - » Jiyo Parsi Scheme (2013-14): Launched to reverse the declining Parsi population, it has supported the birth of 414 children through medical, financial, and outreach support, with an expenditure of ₹26.78 crore.
 - Pali Language Classical Status (2024): Recognizing Pali as a Classical Language aims to promote its study, particularly in Buddhist heritage research.
 - » International Abhidhamma Divas (2024): Celebrated on October 17, 2024, to honor Buddhist philosophical traditions.

Judicial and Constitutional Safeguards for Minorities:

Minority rights are embedded in the Indian Constitution to uphold pluralism and social justice. Key provisions include:

- » Article 29 & 30: Protect cultural and educational rights.
- » Article 350 A & B: Mandate education in mother tongues and establish a Special Officer for linguistic minorities.
- Judicial interpretations, such as the TMA Pai Foundation case (2002), affirm that minority status is determined at the state level, ensuring localized protection of minority rights.

Minority	Percentage
Muslims	14.2%
Christians	2.3%
Sikhs	1.7%
Budhists	0.7%
Jains	0.4%

The Sachar Committee Report (2006): A Benchmark for Minority Welfare

- The Sachar Committee, formed in 2005, provided a landmark report on the socio-economic status of Muslims in India. Recommendations included:
 - » Establishing an Equal Opportunity Commission.
 - » Linking Madarsa education with the formal education system.
 - » Improving minority representation in government jobs and public institutions.

Conclusion:

The Government's minority welfare programs are designed to empower communities through education, economic support, and social development. By ensuring access to resources and opportunities, these initiatives contribute to India's broader goal of inclusive growth and equitable development. The 15-Point Programme, PMJVK, PM VIKAS, and NMDFC schemes collectively foster a more integrated and self-sufficient minority population, strengthening India's democratic and multicultural fabric.

Short Issues

Financial Assistance for Rare Diseases

Context:

In a written response in the Lok Sabha, Minister of State for Health and Family Welfare, Prataprao Jadhav, stated that under the National Policy for Rare Diseases, patients suffering from 63 identified categories of rare diseases will receive financial assistance of up to Rs. 50 lakh for treatment. This amount will be directly provided to the 'Centers of Excellence' (CoE), which specialize in advanced treatment for these diseases.

Why is this Policy Important?

Rare diseases (affecting fewer than 6 out of 100 people) impact approximately 7-8 crore people in India, including life-threatening conditions like GSD, cystic fibrosis, and hemophilia. Treatment is often long and expensive, placing a financial burden on poor families. This financial assistance will provide relief to such families.

About Rare diseases:

 Rare diseases refer to medical conditions that affect a very small percentage of the population, often characterized by chronic, progressive, and life-threatening symptoms, making diagnosis and treatment challenging due to limited research and resources

Challenges posed by rare diseases:

- Diagnostic difficulties: Due to low prevalence, doctors might lack experience in recognizing rare diseases, leading to misdiagnosis or delayed diagnosis.
- High treatment costs: Often, treatments for rare diseases are expensive and not readily available in many healthcare systems.
- Lack of research: Limited research on rare diseases means fewer treatment options and less understanding of disease progression.
- Psychological impact: The burden of a rare disease can significantly affect the quality of life for patients and their families.

Examples of rare diseases:

 Cystic Fibrosis, Hemophilia, Muscular Dystrophy, Severe Combined Immunodeficiency (SCID), and Gaucher Disease.

Government Efforts Against Rare Diseases:

- The government has taken various measures to tackle rare diseases. The Ministry of Health has established a National Consortium for Therapeutics for Rare Diseases to make treatment accessible and promote research. The aim of this consortium is to streamline research activities related to the treatment of rare diseases in the country.
- Additionally, the Indian Council of Medical Research (ICMR) has formed the 'Extramural Program Task Force for Rare Diseases,' focusing on the diagnosis, treatment, and drug development for these diseases.

Development of Indigenous Medicine in the Country

ICMR has launched 19 research projects under the 'Therapeutics for Rare Diseases for Indigenous Therapies' initiative. These projects aim to develop affordable medicines by integrating local therapeutic methods with modern science. This initiative is seen as a significant step towards making the country self-reliant in the medical field.

Corruption Perceptions Index

Context:

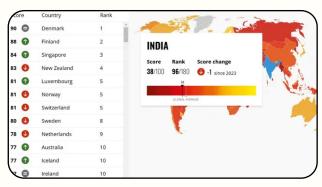
The Corruption Perceptions Index (CPI) for 2024 has been released, revealing global corruption levels and ranking countries based on perceived public sector corruption.

Key Findings:

- India's Rank: India holds the 96th position in the 2024 CPI, with a score of 38 out of 100, down from 39 in 2023. India is ranked 96th, dropping three positions from last year. The decline reflects ongoing corruption challenges despite efforts to address them.
- Global Rankings: Denmark leads as the least corrupt country, followed by Finland, Singapore, and New Zealand. At the bottom of the list, South Sudan is ranked the most corrupt with only 8 points.
- Neighbouring Countries: Among India's neighbors, Pakistan ranks 135th, Sri Lanka is at 121st, Bangladesh stands at 149th, and China ranks 76th.
- Global Corruption: The report highlights a troubling global trend, with several nations,



including the US, France, and Russia, experiencing declines in their CPI scores. Transparency International attributes these declines to political and economic factors, including authoritarianism and a lack of judicial accountability.



About the Corruption Perceptions Index (CPI):

- The Corruption Perceptions Index (CPI), launched in 1995, has become the leading global measure of public sector corruption. It evaluates and ranks 180 countries and territories based on perceptions of corruption within their public sectors.
- The index uses data from 13 external sources, which include reputable institutions like the World Bank, the World Economic Forum, private risk and consulting firms, think tanks, and other organizations. These sources collect the views of experts and business people, providing a comprehensive assessment of corruption levels.
- The CPI employs a scale from 0 to 100, where 0 indicates high corruption, and 100 represents a very clean and transparent public sector. This index, compiled by Transparency International, serves as a global barometer of public sector misconduct and highlights concerns about rising corruption worldwide.

Corruption's Impact on Climate Change:

- The report also draws attention to the link between corruption and climate change, noting that a lack of transparency hinders climate action.
- Corruption often leads to mismanagement of climate funds, obstructs policy efforts, and exacerbates environmental destruction.
- Transparency International warns that climaterelated corruption not only delays climate mitigation efforts but also impacts vulnerable populations disproportionately.

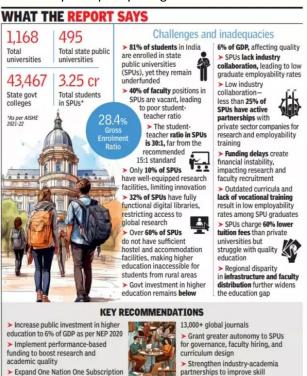
Conclusion:

While some countries have made progress, global corruption remains alarmingly high, affecting governance, democracy, and international stability. The CPI underscores the need for continued and enhanced global efforts to fight corruption, which is essential to ensuring fair governance, combating climate change, and fostering sustainable development.

NITI Aayog Report on Higher Education

Context:

NITI Aayog has released a pioneering policy report titled "Expanding Quality Higher Education through States and State Public Universities (SPUs)", marking the first comprehensive analysis of the role of State governments and SPUs in shaping India's higher education landscape. The report highlights funding disparities, gender enrolment trends, university density, and policy recommendations to enhance accessibility and quality in higher education.



Key Findings and Recommendations

(ONOS) to provide SPUs access to

- Education Expenditure across States
 - » Jammu and Kashmir leads the country in education expenditure, allocating 8.11% of its

development and employability



- GDP to education.
- » Other states with high investments include Manipur (7.25%), Meghalaya (6.64%), and Tripura (6.19%).
- » In contrast, larger states such as Delhi (1.67%), Telangana (2%), and Karnataka (2.01%) allocate significantly lower percentages.
- Despite an increase in per youth expenditure on higher education from ₹2,174 to ₹4,921 between 2005-06 and 2019-20, funding patterns among states remain highly uneven.
 - » Kerala, Tamil Nadu, Maharashtra, Andhra Pradesh, and Telangana consistently allocate higher per youth spending.
 - » Rajasthan, Punjab, and Chhattisgarh lag behind in investment.

Budgetary Allocations and Disparities

- Maharashtra leads in total higher education funding with ₹11,421 crore, followed by Bihar (₹9,666 crore) and Tamil Nadu (₹7,237 crore).
- States with smallest budgets include Sikkim (₹142 crore), Arunachal Pradesh (₹155 crore), and Nagaland (₹167 crore).
- When considering higher education expenditure as a percentage of Gross State Domestic Product (GSDP):
 - » Bihar ranks highest at 1.56%, followed by Jammu and Kashmir (1.53%) and Manipur (1.45%).
 - » Telangana has the lowest allocation at 0.18%, while Gujarat and Rajasthan allocate only 0.23% of their GSDP to higher education.

Gender Disparities and University Density:

- The report provides insights into gender enrolment trends, highlighting states where female enrolment surpasses male enrolment, including Kerala, Chhattisgarh, and Himachal Pradesh. Smaller states and Union Territories like Chandigarh, Mizoram, and the Andaman and Nicobar Islands also maintain a balanced male-female enrolment ratio.
- In terms of university density (number of universities per 1 million population):
 - » Sikkim leads with 10.3 universities per million people, followed by Arunachal Pradesh, Ladakh, Himachal Pradesh, Meghalaya, and Uttarakhand.
 - Bihar records the lowest university density at
 0.2 universities per million people, alongside

other densely populated states like Uttar Pradesh, West Bengal, and Maharashtra.

About NITI Aayog:

- NITI Aayog (National Institution for Transforming India) was established in 2015 as the government's policy think tank to provide strategic advice.
- Mandate of NITI Aavog:
 - Oversee the Adoption and Monitoring of SDGs (Sustainable Development Goals): Tracks India's progress towards global SDG targets.
 - » Promote Cooperative Federalism: Fosters collaboration between states and union territories for balanced development.
 - Provide a Framework for the National Agenda: Sets long-term development goals and policy directions.
 - » Develop Mechanisms for Village-Level Planning: Strengthens grassroots-level development through effective planning and implementation.

Way Forward:

- The report outlines nearly 80 policy recommendations to address disparities in higher education funding and accessibility. Key measures include:
 - » Increasing public funding for higher education, particularly in underfunded states.
 - » Enhancing infrastructure and academic standards at State Public Universities.

India sees over 30% decline in suicide death rates from 1990 to 2021: Lancet Study

Context:

A recent study published in The Lancet Public Health has revealed a significant decline in India's suicide death rate from 1990 to 2021. This drop is attributed to a more substantial reduction in female suicide rates compare to male counterpart. There has been a 31.5 per cent decline in suicide-related mortality rate in the country in the last three decades between 1990 and 2021.

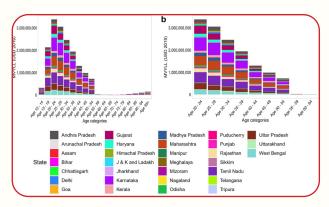
About key findings:

India has witnessed a significant decline in its suicide death rate, falling from 18.9 per lakh



population in 1990 to 13 per lakh in 2021. This reduction represents a positive shift in mental health outcomes, with a greater decline observed in females compared to males.

- The female suicide death rate decreased from 16.8 per lakh in 1990 to 10.3 per lakh in 2021, while the male rate dropped from 20.9 per lakh in 1990 to 15.7 per lakh in 2021.
- Despite the overall decline, the highest suicide death rates in India in 2020 were observed among educated women, often due to family problems. This highlights the significant mental health challenges faced by women, particularly those with higher educational qualifications, where expectations and pressures might contribute to stress.
- Family issues, including marital conflicts, financial stress, and caregiving burdens, have been identified as primary factors leading to suicides in this demographic.
- Globally, suicide-related mortality rate has declined by 39.5 percent between 1990 and 2021. It is worth noting that in 1990, about 15 people per lakh committed suicide. Whereas in 2021, this figure came down to 9.



Key Initiatives to Reduce Suicides in India

- Decriminalization of Suicide: The Mental Healthcare Act, 2017 played a pivotal role in decriminalizing suicide, marking a significant shift in how mental health issues are perceived in the country. Prior to this, Section 309 of the Indian Penal Code (IPC) made suicide a criminal offense. The decriminalization has helped reduce stigma around mental health struggles, encouraging individuals to seek support without fear of legal repercussions.
- National Suicide Prevention Strategy (2022):

The National Suicide Prevention Strategy (2022) aims to reduce suicide mortality by 10% by 2030. This comprehensive national strategy emphasizes mental health support, better access to healthcare, and awareness campaigns to reduce suicide rates across the country.

WHO's Mental Health Action Plan (2013-2030): The World Health Organization's Mental Health Action Plan recognizes the essential role of mental health in achieving overall health and well-being. This global initiative aligns with India's focus on improving mental healthcare and providing necessary interventions to prevent suicides.

Conclusion:

The decline in suicide death rates in India, particularly among women, signals a positive trend in mental health awareness and intervention. The decriminalization of suicide, along with comprehensive strategies like the National Suicide Prevention Strategy (2022) and international support like the WHO Mental Health Action Plan, reflects a national commitment to improving mental health outcomes. However, challenges remain, especially in vulnerable groups like educated women, where targeted mental health support systems are essential to further reduce suicide rates.

Skill India Programme

Context

In a significant move towards strengthening skill development in India, the Union government has decided to restructure and merge its key skilling initiatives into a unified framework under the Skill India Programme. The Cabinet has approved a substantial funding outlay of ₹8,800 crore for this initiative, which will be implemented over a three-year period ending in 2025-26.

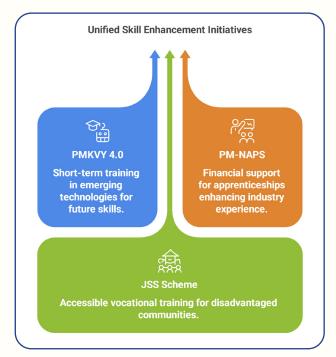
About the New Scheme:

- The Skill India Programme integrates three major skilling initiatives:
 - » Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0)
 - » Pradhan Mantri National Apprenticeship Promotion Scheme (PM-NAPS)
 - » Jan Shikshan Sansthan (JSS) Scheme.
- By consolidating these schemes, the government aims to provide structured skill development, on-



the-job training, and community-based learning, ensuring accessibility for both urban and rural populations, including marginalized communities.

 This initiative is designed to address the growing demand for a skilled workforce while promoting sustainable livelihoods across diverse demographics.



Key Components of the Programme:

The Skill India Programme is built on three core pillars that shape India's vocational education landscape:

- Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0): PMKVY 4.0 focuses on short-term training, reskilling, and upskilling through the recognition of prior learning. The scheme targets individuals between 15 and 59 years old and has introduced over 400 new courses emphasizing emerging technologies and future skills, such as:
 - » Artificial Intelligence
 - » 5G Technology
 - » Cybersecurity
 - » Green Hydrogen
 - » Drone Technology
- To ensure high-quality training and assessments, the government is developing a national pool of one lakh assessors and trainers, ensuring standardization and expertise across training centers.
- Pradhan Mantri National Apprenticeship

Promotion Scheme (PM-NAPS): PM-NAPS is designed to support both apprentices and establishments by providing 25% of the stipend (up to ₹1,500 per month per apprentice) through Direct Benefit Transfer (DBT) during the training period. This scheme caters to individuals aged 14 to 35 years, promoting hands-on industry experience to enhance employability.

■ Jan Shikshan Sansthan (JSS) Scheme: The JSS Scheme is a community-centric vocational training initiative, aimed at women, rural youth, and economically disadvantaged groups. It offers low-cost, doorstep training with flexible schedules, making skill development more accessible. The scheme is available to individuals aged 15 to 45 years, focusing on both self-employment and wage-based livelihoods.

Impact and Benefits:

The Skill India Programme is expected to significantly enhance India's workforce development. So far, more than 2.27 crore individuals have benefited from these three flagship schemes under the Ministry of Skill Development and Entrepreneurship. With the restructuring, the initiative aims to further empower a larger population with employable skills, thereby contributing to the nation's economic growth.

Conclusion:

The Skill India Programme marks a transformative step towards creating a skilled and globally competitive workforce. By integrating PMKVY 4.0, PM-NAPS, and JSS, the government ensures inclusive, flexible, and technologically advanced training opportunities for individuals, especially in rural areas and marginalized communities. This holistic approach will not only boost employability but also drive India's progress in the evolving global economy.

Supreme Court Directive on Domestic Workers' Protection

Context:

The Supreme Court of India has recently made a landmark judgment in a case involving an impoverished tribal woman from Chhattisgarh who worked as a domestic worker in Delhi. The case highlighted the widespread exploitation and abuse faced by domestic workers across India, emphasizing the urgent need for



legal safeguards to protect their rights

Background:

- The court's judgment came after it quashed charges against Ajay Malik, the employer of the domestic worker, due to lack of evidence.
- However, the court also directed the government to form a committee to consider a legal framework for domestic workers, recognizing the existing laws do not adequately protect them

Supreme Court's Observations:

- The Supreme Court noted the absence of a comprehensive central law for domestic workers, which has contributed to their vulnerability.
- Domestic workers often face low wages, unsafe working environments, and long working hours, without access to legal recourse.
- The Court emphasized the need for legal protections to address these systemic issues.

Court's Directives for Legal Reforms:

- The Court directed the Union government to establish an inter-ministerial committee consisting of experts from various ministries, including Labour, Women and Child Development, Law and Justice, and Social Justice and Empowerment.
- This committee is tasked with recommending a legal framework to protect domestic workers' rights.
- The report must be submitted within six months, which will help determine the necessity of a central law for domestic workers.

About Domestic Workers:

- Domestic Workers are individuals employed in private households to perform various tasks such as cleaning, cooking, caregiving, gardening, and other household chores.
- Certain states, such as Tamil Nadu, Maharashtra, and Kerala, have taken proactive measures by enacting their own laws to protect domestic workers.
- These states have set up specialized bodies that manage social security benefits, maternity care, educational assistance, and fair wage standards for domestic workers.

Historical Attempts for Central Legislation:

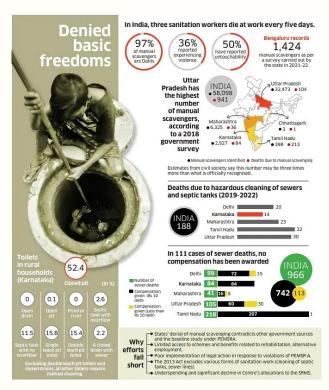
 Over the years, various bills have been introduced to regulate the rights and welfare of domestic workers, including the 1959 Domestic Workers Bill and the 2017 Regulation of Work and Social

- Security Bill.
- However, despite these efforts, a central law for domestic workers has not yet been enacted, leaving a significant gap in their legal protection.

Manual Scavenging

Context:

The Supreme Court recently directed the Chief Executive Officers (CEOs) of six major cities—Delhi, Mumbai, Chennai, Kolkata, Bengaluru, and Hyderabad—to file affidavits detailing how and when manual scavenging would be eradicated. This directive aims to enforce a ban on the practice in these cities.



About manual scavenging:

- Manual scavenging refers to the practice of manually cleaning, carrying, or disposing of human excreta from dry latrines, drains, and other sanitation systems.
- Despite being banned under the Employment of Manual Scavengers and Prohibition Act, 1993, the practice persists due to insufficient sewage systems and lack of alternative livelihoods for affected communities.
- As of January 29, 2025, 456 out of 775 districts

15 _____ www.dhyeyaias.com



- in India have reportedly eliminated manual scavenging.
- However, the issue remains prevalent in various parts of the country, primarily due to inadequate sanitation infrastructure, which forces workers into this degrading and hazardous occupation.

Social Impacts:

- Manual scavenging exposes workers to severe health risks from harmful pathogens and gases.
- It is also closely tied to caste discrimination, with many of those engaged in this work belonging to the Dalit community.
- The practice violates basic human rights and dignity, perpetuating social inequities.

Legal Framework and Reforms Needed:

- The Indian Constitution guarantees fundamental rights like equality (Article 14), abolition of untouchability (Article 17), and the right to life (Article 21).
- The Prohibition of Employment as Manual Scavenger Act, 2013, bans manual scavenging and mandates rehabilitation.
- Additionally, the NAMASTE scheme promotes mechanized sanitation and the rehabilitation of manual scavengers. Technological advancements, law enforcement, and infrastructure upgrades are crucial to fully eliminating the practice.

Saras Aajeevika Mela

Context:

The Saras Aajeevika Mela 2025 was recently inaugurated by Union Minister for Rural Development Shri Shivraj Singh Chouhan at Noida Haat. Organized from February 21 to March 10, 2025, this annual event serves as a platform to promote rural craftsmanship and artisans from across India.

About the Mela:

- It is fifth edition, the Saras Aajeevika Mela 2025 is themed "Tradition, Art, and Culture", with a strong focus on enhancing the export potential of Lakhpati SHG Didis (Self-Help Group women members). Hosted by the Ministry of Rural Development with support from the National Institute of Rural Development and Panchayati Raj (NIRDPR), the event showcases India's rich rural heritage.
- Around 450 SHG members from 30 states are participating, displaying and selling their unique

- products across 200 stalls. The exhibits feature a diverse range of handloom, handicrafts, and natural food products. Visitors can explore traditional state-specific textiles such as Andhra Pradesh's Kalamkari, Assam's Mekhla Chador, Chhattisgarh's Kosa Saree, Pashmina from Uttarakhand, and many more.
- In addition to these crafts, 25 live food stalls offer ethnic cuisines from 20 states, including regional specialties like ginger, tea, lentils, and coffee. The Export Promotion Pavilion, a key highlight of the event, aims to expand the global reach of SHG products, further boosting economic opportunities for artisans.
- To create an inclusive and engaging experience, the Mela features special arrangements for senior citizens, a kids' zone, and a mother's care area. Cultural performances add to the vibrancy, making the event a true celebration of India's rural heritage.



Conclusion:

The Saras Aajeevika Mela aligns with the Prime Minister's 'Vocal for Local' initiative and supports the vision of "Viksit Bharat by 2047". By empowering rural artisans and fostering their crafts, this event plays a crucial role in promoting inclusive growth and economic empowerment in India's rural communities.

16 ______www.dhyeyaias.com

Polity & Covernance

Digital Free Speech, Obscenity, and the Ethics of Online Influence

The case of Ranveer Allahbadia sparked national debate, highlighting the evolving tensions between free speech, digital content regulation, and legal interpretations of obscenity in India. The Supreme Court's recent intervention—granting him protection from arrest while simultaneously reprimanding him for inappropriate language—raises crucial legal and ethical questions. These include the scope of free speech, the application of obscenity laws in the digital age, and the responsibilities of social media influencers in shaping societal norms.

Understanding India's Obscenity Laws:

- The Indian legal system has long grappled with defining and regulating obscenity. Historically, the interpretation of obscene content has oscillated between moral conservatism and progressive legal doctrines. The controversy surrounding Allahbadia and fellow digital creator Samay Raina stems from multiple FIRs registered under Section 294 of the Bharatiya Nyaya Sanhita (BNS), 2023, alleging that their content was "lascivious" and had the potential to "deprave and corrupt" audiences.
- However, a key challenge remains: India lacks a precise legal definition of obscenity. This ambiguity has resulted in inconsistent legal enforcement, making it difficult to balance the right to free expression with public morality.

Legal Provisions Governing Obscenity:

❖ Bharatiya Nyaya Sanhita (BNS), 2023 – Section

294:

- » Criminalizes the creation, distribution, or display of obscene content in any form, including electronic media.
- » Defines obscenity as material that is "lascivious or appeals to the prurient interest" or has the potential to "deprave and corrupt" consumers.
- » Punishment: Up to two years of imprisonment and a fine of ₹5,000 for firsttime offenders.
- ❖ Information Technology (IT) Act, 2000 Section 67:
 - » Regulates obscene content published or transmitted via digital platforms.
 - » First-time offenders may face up to three years of imprisonment and a fine of ₹5 lakh, making it stricter than the BNS.
- While these laws aim to maintain public decency, their vague definitions often lead to subjective enforcement, raising concerns about misuse and moral policing.

Judicial Evolution of Obscenity Laws:

- Indian courts have historically relied on different legal tests to determine obscenity. The Hicklin Test and its later replacement by the Community Standards Test reflect the judiciary's attempt to balance free expression with moral concerns.
- The Hicklin Test (1868) and Its Application in India:



- » The Hicklin Test, derived from Regina v. Hicklin (1868), stated that material could be deemed obscene if any portion had a "tendency to deprave and corrupt" susceptible individuals. This test set an extremely low threshold for censorship, as it focused on the impact of isolated portions rather than evaluating the material as a whole.
- » Indian courts applied this standard in Ranjit D. Udeshi v. State of Maharashtra (1964), leading to the ban of Lady Chatterley's Lover on grounds of obscenity. This stringent approach restricted creative and journalistic expression, prompting a gradual shift in legal interpretations.
- Transition to the Community Standards Test (2014): With the advent of more liberal interpretations, the Hicklin Test was replaced in India by the Community Standards Test in Aveek Sarkar v. State of West Bengal (2014). This test:
 - » Evaluates content based on contemporary societal norms rather than outdated moral standards.
 - » Considers the work in its entirety, rather than isolating individual portions.
 - » Recognizes that what was once deemed obscene may no longer be considered so, ensuring a more dynamic interpretation of free speech and decency.
- The Supreme Court's emphasis on evolving social values has shaped the way obscenity laws apply to digital content. However, this evolution has not prevented cases where these laws are used selectively against public figures.

Obscenity vs. Free Speech: Constitutional Considerations

- Article 19(1)(a): Freedom of Speech and Expression: The Indian Constitution guarantees freedom of speech and expression under Article 19(1)(a). However, this right is not absolute and is subject to reasonable restrictions under Article 19(2), which includes limitations on grounds of:
 - » Decency and morality

- > Public order
- » Defamation and incitement to an offense
- The judiciary has consistently ruled that content deemed obscene must be assessed in light of contemporary societal standards, rather than being subjected to arbitrary moral policing.

Notable Cases Influencing India's Obscenity Laws

Several cases have shaped legal interpretations of obscenity, often blurring the lines between artistic freedom and public morality.

- Urfi Javed Controversy (2023): Actor Urfi Javed faced legal action for wearing revealing clothing in public. The case underscored concerns about moral policing under obscenity laws.
- Ranveer Singh's Nude Photoshoot (2022): Singh was booked under IPC Sections 292 and 293 for a nude photoshoot. Critics argued that such legal action threatened artistic freedom.
- Milind Soman's Beach Photograph (2020): Soman was charged for uploading a nude running photo, reflecting inconsistencies in applying obscenity laws.
- Richard Gere-Shilpa Shetty Controversy (2007): Gere faced an arrest warrant for kissing Shetty on the cheek at an AIDS awareness event, exposing the misuse of obscenity laws to police public behavior.
- Kiss of Love Protests (2014): A campaign against moral policing led to public arrests under obscenity laws, sparking debate on the subjectivity of public morality.

The Role of Digital Media in Shaping Public Moralit:

Social media has revolutionized how information is disseminated, challenging the longstanding dominance of traditional news outlets. While it has enabled wider access to diverse perspectives, this shift has also led to the rapid spread of misinformation, increasing the risk of public deception. In today's digital era, influencers play a significant role in shaping public perception, impacting the way audiences think, behave, and



make lifestyle choices. Their content influences everything from personal habits to broader societal values, making them key players in shaping public morality.

- » Rise of Unverified Content: Unlike traditional journalism, which is governed by editorial oversight and fact-checking mechanisms, social media lacks standardized accountability. The absence of rigorous scrutiny has led to an unchecked spread of misinformation, making it difficult to distinguish credible news from fabricated narratives.
- » Polarization of Debates: What was once a space for open discussion has increasingly become a battleground for ideological conflicts. Social media platforms tend to amplify extreme viewpoints, fostering division rather than constructive dialogue.

Digital Media as a Tool for Transformation:

- Rather than perceiving digital content as a threat to public morality, traditional content generation must evolve to integrate new platforms while maintaining integrity. The digital landscape provides an opportunity for responsible content creation and distribution, allowing for a more informed public discourse.
 - » Integrate Real-Time Engagement: Legacy media must adopt digital tools to maintain relevance and provide fact-based reporting that competes with viral misinformation.
 - » Bridge the Gap between Digital and Legacy Media: A balanced approach—combining the credibility of traditional journalism with the accessibility of digital media—can create a more reliable information ecosystem.
 - » Analyze the Societal Impact of Digital Content: Understanding how different forms of content influence public opinion and behavior are essential for responsible media practices.

Developing Media Literacy in the Digital Age:

 As digital media continues to shape public discourse, media literacy has become an essential skill for navigating the overwhelming flood of information. Citizens must be equipped to:

- » Identify Misleading Content: Recognizing how misinformation is created and spread enables individuals to question narratives rather than accept them at face value.
- » Evaluate the Credibility of Sources: Understanding the origin and intent behind the content helps distinguish between factual reporting and agenda-driven content.
- » Recognize Biases and Manipulative Tactics: Being aware of how social platform frames information allows for a more critical and informed approach to content consumption.

Key Media Literacy Principles:

- According to UNESCO, news must be grounded in factual reporting. Fabricated content, regardless of how widely it is shared, cannot be classified as news.
- Critical Engagement with Media: Understanding the sourcing, credibility, and potential biases in media messages is essential to prevent blind acceptance of misinformation.
- Digital Citizenship: Promoting responsible online behavior, awareness of digital rights, and ethical engagement with content fosters an inclusive and informed digital society.

Conclusion

Despite the transformative potential of ICT innovations, they do not necessarily advance the human search for truth. Instead, they often enable the unchecked proliferation of misinformation, jeopardizing the well-being of an open and plural society. As Jonathan Swift, the Anglo-Irish satirist, aptly noted centuries ago:

"Falsehood flies, and the truth comes limping after it."

In today's media-saturated culture, lies spread faster and penetrate deeper, often accepted unwittingly by people. The radicalization fostered by misinformation, amplified through information technology and persuasive rhetoric, threatens diversity, peace, and sustainable development.



Uniform Civil Code in Uttarakhand: An In-depth Analysis

Uttarakhand marked a historic milestone by becoming the first Indian state to implement a Uniform Civil Code (UCC). This reform signifies a substantial shift in India's legal and social framework. Grounded in the constitutional Directive Principles of State Policy, the UCC in Uttarakhand aims to standardize personal laws—covering marriage, divorce, inheritance, live-in relationships, and successionacross all religions. While the government touts the reform as a progressive move toward gender equality and administrative simplification, it has also ignited debates over its impact on personal freedoms and its potential to disrupt long-standing cultural and religious practices.

Historical and Constitutional Background:

- The concept of a UCC is enshrined in Article 44 of the Indian Constitution, which directs the state to work toward establishing uniform personal laws. Despite this constitutional mandate, India's diverse socio-cultural fabric has traditionally allowed different religious communities to govern personal matters through distinct laws. Goa remains the only state with a UCC, following a Portuguese Civil Code since 1867.
- The initiative for implementing the UCC in Uttarakhand was prominently featured in 2022, leading to the passage of the UCC of Uttarakhand Act in February 2024. This Act introduced significant legal reforms, such as:
 - » Equal Property Rights: Sons and daughters are accorded equal inheritance rights.
 - » Recognition of Live-in Relationships: Children born from live-in relationships are legally recognized, ensuring their legitimate claims.
 - » Uniform Divorce Grounds: A standardized framework for divorce has been established, removing religious disparities.
- A notable feature of the Act is the introduction of a digital registration system for marriage, divorce, and inheritance, which streamlines

administrative procedures.

Key Features of Uttarakhand's Uniform Civil Code

The UCC in Uttarakhand is structured around several legal and administrative reforms aimed at ensuring equality and transparency.

- Marriage and Divorce Regulations: All marriages, regardless of religious affiliation, must be registered online.
 - » Mandatory Registration Deadlines:
 - Marriages conducted since March 26, 2010, must be registered within six months.
 - Marriages conducted after UCC implementation must be registered within 60 days.
 - » Divorce registrations require details of the marriage registration, court decree, case number, final order, and children's information.
 - » The portal allows people to register their marriage annulment by submitting official court documents.

Regulations on Live-in Relationships:

- » Mandatory registration of live-in relationships within one month of UCC implementation.
- » Either or both partners can end the relationship online or offline.
- » If only one partner applies for dissolution, the registrar must confirm it with the other party.
- » If a woman conceives during a live-in relationship, the government must be informed within 30 days of childbirth.
- » Landlords cannot deny housing to couples who have registered their live-in relationship under the UCC.
- Inheritance and Will Registration: Equal property rights are granted to men and women in matters of inheritance.
 - » Three methods of will registration:



- Online form submission.
- Uploading a handwritten or typed will.
- Recording and uploading a three-minute video statement.

Digital Governance and AI Integration:

- » A dedicated UCC portal (ucc.uk.gov.in) has been developed for online registration of marriages, divorces, live-in relationships, and wills.
- » The portal features Aadhaar-based verification and an Al-powered translation service supporting 22 languages, including English.
- » Integrated data from 13 government departments, including police, courts, and municipal bodies, streamlining legal procedures.
- » A tatkal (urgent) registration facility is available for emergency cases with a nominal fee

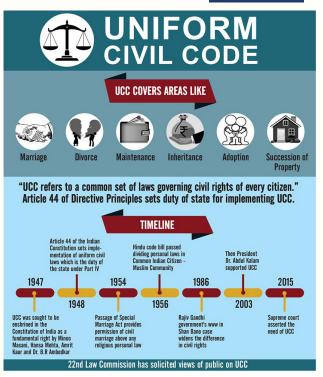
***** Administrative Oversight and Compliance:

- » Registrars and sub-registrars will oversee UCC compliance at urban and rural levels.
- » Officials will verify documents within 15 days under normal conditions and three days in emergencies.
- » In case of rejection, applicants can appeal within 30 days before the registrar and, if necessary, escalate the case to the registrargeneral within 60 days.
- » Penalties for non-compliance:
 - First-time violators receive warnings.
 - Repeated violations incur financial penalties.

Societal Implications and Criticisms:

Progressive Aspects

- » Gender Equality: The guarantee of equal inheritance rights aims to redress centuriesold discriminatory practices.
- » Administrative Efficiency: The digital registration system simplifies legal processes and reduces bureaucratic delays.
- » Social Cohesion: By promoting uniformity in personal laws, the UCC is intended to bridge legal divisions among religious communities.



Criticisms and Challenges:

- Infringement on Personal Freedoms: Critics contend that mandatory registrations, particularly of live-in relationships, infringe on individual privacy and personal choice; some couples have even considered relocating from Uttarakhand.
 - The implementation must navigate the delicate balance between enforcing uniform laws and respecting individual religious and cultural freedoms, as protected by Article 25 and the provisions of the 5th and 6th Schedules.
- Religious and Cultural Resistance: Muslim organizations and other religious groups argue that the UCC encroaches on traditional personal laws and could undermine cultural identity. The exemption granted to Scheduled Tribes further complicates the notion of uniformity.
 - » Opposition from religious communities and traditional bodies highlights the sociopolitical complexities of implementing such a reform. This resistance can lead to fragmented acceptance and legal challenges.
- Potential for Varied Interpretations: In states

21 _____ www.dhyeyaias.com



like Haryana, local bodies (e.g., khap panchayats) have demanded additional restrictions, which may lead to inconsistent implementations of the UCC across different regions.

Administrative Hurdles: While the digital system is innovative, ensuring its universal accessibility especially in remote or rural areas—remains a significant challenge.

The Broader Concept of the Uniform Civil Code

- Constitutional and Judicial Perspectives
 - » Article 44: The UCC is part of the broader constitutional mandate urging the state to establish uniform personal laws.
 - » Judicial Advocacy: Landmark cases including Mohd. Ahmed Khan vs Shah Bano Begum (1985), Sarla Mudgal v. Union of India (1995), and John Vallamattom v. Union of India (2003)—have repeatedly underscored the need for a uniform legal framework that transcends religious differences.
 - » Law Commission's Stance: In 2018, the 21st Law Commission noted that while the UCC is a desirable reform, its timing and necessity remain debatable, reflecting the tension between modern legal reforms and India's traditional fabric.

Policy Rationale and Modernization

- Elimination of Discriminatory Practices: The UCC seeks to abolish practices such as halala, iddat, and triple talaq, which are seen as outdated and discriminatory.
- Modernizing Legal Frameworks: Digital governance and uniform procedures are central to modernizing India's legal infrastructure, making it more responsive to contemporary needs.

Conclusion

The implementation of the Uniform Civil Code in Uttarakhand is a landmark reform with profound legal, social, and political implications. By standardizing personal laws, the UCC seeks to promote gender equality, enhance administrative efficiency, and foster social cohesion. However, the reform has also sparked intense debates over individual rights, cultural identity, and the scope of state intervention. As discussions on a nationwide UCC continue. Uttarakhand's experience serves as a critical reference point for understanding the challenges and opportunities of legal reforms in a pluralistic society. This case study not only illustrates the potential for progressive change but also underscores the need for sensitive, inclusive, and well-calibrated policy implementation in India.

The Immigration and Foreigners Bill, 2025: A Comprehensive Legislative Framework

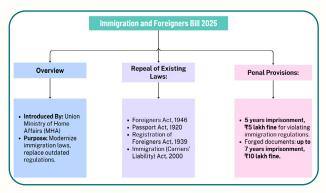
Immigration has long been a subject of critical policy deliberation in India, impacting national security, demographic composition, economic opportunities, and international relations. As globalization accelerates and cross-border movements become more frequent, regulating the entry, stay, and exit of foreign nationals has emerged as a pressing challenge. Recognizing the need for a modernized, structured, and stringent legal framework, the Union Government, has introduced the Immigration and Foreigners Bill, 2025. This legislative proposal, which was listed among 16 key

bills for the Budget Session of Parliament (January 31 – April 4, 2025), seeks to replace and consolidate multiple outdated laws governing immigration into a single, cohesive framework.

- Currently, India's immigration policies are governed by three colonial-era laws:
 - » The Foreigners Act, 1946
 - » The Passport (Entry into India) Act, 1920
 - » The Registration of Foreigners Act, 1939
- These laws were formulated at a time when global migration patterns, national security concerns, and diplomatic considerations were vastly different. The Immigration and Foreigners Bill,



- 2025, therefore, aims to streamline enforcement, close legal loopholes, and modernize immigration regulations to meet contemporary needs.
- The bill assumes significance in the wake of rising visa violations, illegal border crossings, and increasing security concerns, necessitating a centralized approach to managing foreign nationals within India's borders.



Objectives and Scope of the Immigration and Foreigners Bill, 2025:

- The primary objectives of the bill are:
 - » Regulation of Foreign Nationals: Establishing clear guidelines on passport and visa requirements for individuals seeking entry into India.
 - » Monitoring and Registration: Creating a robust mechanism for tracking the presence of foreign nationals to prevent visa overstays and illegal migration.
 - » Movement Restrictions and Security Provisions: Authorizing restrictions on the movement of certain categories of foreigners based on national security concerns.
 - » Enforcement of Deportation: Establishing clear legal procedures for the deportation of foreigners violating immigration laws.
- Additionally, the bill places specific responsibilities on institutions that interact with foreign nationals, ensuring greater compliance. These include:
 - » Educational institutions, hospitals, hotels, and airlines, which will be required to maintain and report records of foreign nationals under their jurisdiction.
 - » Transport operators (airlines, shipping companies, and railways), which will be held

- responsible for ensuring that all incoming passengers possess valid travel documents.
- By unifying fragmented immigration laws, the bill aims to simplify enforcement, reduce administrative inefficiencies, and enhance border security.

Key Provisions of the Immigration and Foreigners Bill, 2025

Centralized Immigration Control:

- » The bill proposes the establishment of a single centralized agency to oversee all immigration-related matters, ensuring uniform implementation and enforcement of laws across India.
- » A national digital database will be created to track entries, exits, and visa compliance of foreign nationals.

Visa and Passport Regulations:

- » Foreign nationals will be required to possess valid passports and visas before entering India.
- » Hotels, universities, and hospitals will be legally mandated to report the presence of foreign visitors, students, and patients to authorities.

Responsibilities of Transport Operators:

- » Airlines, shipping companies, and railways must verify passengers' travel documents before allowing entry.
- » If a foreign national is denied entry upon arrival, the responsibility for their immediate removal falls on the carrier that transported them.
- » Penalties and legal action will be imposed on carriers that fail to enforce these regulations.

Restrictions on Foreigners:

- » Foreign nationals cannot change their names while residing in India without government approval.
- » Authorities may impose movement restrictions on individuals deemed security threats.

Strengthened Enforcement Mechanisms:

» District Magistrates, Police Commissioners, and Immigration Officers will have expanded powers to monitor, detain, and deport



- foreigners violating immigration laws.
- » Offenders may face fines, imprisonment, or deportation based on the severity of violations.

Deportation and Removal Procedures:

- » The Union Government will have the authority to deport foreign nationals who violate visa conditions or pose a threat to national security.
- » Transport carriers will bear responsibility for removing foreigners denied entry upon arrival.
- By introducing structured enforcement mechanisms, the bill aims to streamline immigration control and improve national security.

Illegal Immigration from India: Scale and Trends

- While India faces challenges with illegal immigration, it is also a significant source of undocumented migration to countries such as the United States, Canada, and Europe. Estimates suggest that over 725,000 undocumented Indian migrants currently reside in the U.S. alone.
- Recent Trends in Deportations
 - » Between June and October 2024, 160,000 individuals were deported globally, including over 1,000 Indian nationals.
 - » The U.S. has intensified mass deportations, particularly targeting migrants from Punjab, Haryana, and Gujarat.
 - » Many Indian migrants now prefer entering the U.S. through Canada, as Canada offers faster visa processing (76 days compared to over a year for the U.S.).

Methods of Illegal Migration from India

Visa Overstays:

- » Many Indians enter legally but fail to return after their visas expire.
- » Student and work visas are often misused to seek unauthorized employment.

Unauthorized Border Crossings:

- » The "Dunki Route" involves fake visas, human smugglers, and dangerous border crossings.
- » The Darién Gap (Panama-Colombia) remains a high-risk route used by Indian migrants heading to the U.S. illegally.

» Many migrants illegally enter the U.S. via Canada, where entry restrictions are less strict.

* Marriage and Birthright Citizenship Fraud:

- » Fake marriages are arranged to obtain permanent residency in foreign countries.
- » Birth tourism is used to secure automatic U.S. citizenship for children born to Indian parents in the U.S.

Underlying Causes of Illegal Immigration from India

- Economic Disparity: Higher wages in the U.S. (\$10–15 per hour) attract migrants despite risks.
- Agricultural Crisis: Farmers in Punjab and Haryana often sell their land to finance illegal migration.
- Human Trafficking: India is among the top 10 countries for human trafficking victims.
- Bureaucratic Barriers: 600+ day U.S. visa wait times push individuals toward illegal migration.

Implications of the Immigration and Foreigners Bill, 2025

- If passed, the bill will reshape India's immigration system, leading to:
 - » Stronger enforcement of immigration laws, reducing visa violations.
 - » Improved national security, preventing unauthorized migration.
 - Better diplomatic relations by ensuring adherence to international immigration norms.

The bill will also affect:

- » Foreign workers, students, and tourists in India.
- » India's relations with nations with large Indian immigrant populations (e.g., U.S., Canada, UK).
- » Security measures against illegal immigration, particularly from Bangladesh and Myanmar (Rohingya refugees).
- As India positions itself as a global economic and political power, the Immigration and Foreigners Bill, 2025, will serve as a critical instrument in shaping future immigration policies and enhancing border security.



The Freebies Culture in India: Supreme Court Concerns and Multifaceted Dimensions

The growing trend of offering free goods and services—popularly known as "freebies"—has sparked a significant debate in India in recent years. Political parties frequently introduce such schemes, especially during election seasons, as a means to appeal to voters. While these initiatives can provide much-needed relief to marginalized sections of society, they also raise pressing concerns about economic sustainability, political ethics, and long-term social impact.

Recently, the Supreme Court of India expressed strong concerns about the growing trend of "freebies" offered by political parties and governments—especially during election periods. The Court questioned whether these policies, by providing goods and services free of cost, might inadvertently create a culture of dependency and reduce the incentive to work.

Supreme Court's Observations:

- In a hearing on shelter homes for the homeless, the Supreme Court raised a provocative question: Are these freebies creating a "class of parasites" by discouraging people from working? This statement highlights the Court's apprehension that short-term, election-driven benefits could have long-term adverse effects.
- The Court underscored concerns that providing free provisions without any work requirement might foster a dependency culture and dilute the work ethic of the citizens.
- Furthermore, the Court noted that many such policies are introduced close to elections, suggesting they may be more about vote-bank politics than genuine public welfare.

Impact on Work Ethic and Dependency:

One of the key issues raised is the impact of freebies on work ethic. Observations from regions like Maharashtra indicate that free provisions have contributed to a shortage of laborers in sectors such as agriculture. Critics argue that when individuals receive goods and services without any effort, there is less motivation to work. This potentially undermines personal responsibility and self-sufficiency, leading to a cycle of dependency on government support.

Political Motivations behind Freebies:

- The timing of freebie announcements—often just before elections—has led many to question their true purpose. Rather than being part of a long-term welfare strategy, these measures are frequently seen as tools for electoral gain.
- Surveys support this view; one study found that 78% of respondents labeled freebies as voteseeking tactics. This electoral aspect further complicates the debate, as it brings into question whether the primary objective is public welfare or political maneuvering.

Public Opinion and Economic Concerns:

- Public opinion on freebies is divided. A survey conducted across multiple Indian cities revealed that:
 - » 56% of respondents viewed freebies as unnecessary.
 - » 78% of respondents believed freebies were mainly used as electoral incentives.
 - » 61% expressed concern over their impact on national finances.
 - » 84% of wealthier respondents considered freebies economically harmful, compared to 46% of lower-income respondents who saw subsidies on essentials—especially healthcare—as justified.
- These statistics illustrate a significant economic and social divide in how freebies are perceived, reflecting concerns over fiscal responsibility and sustainability.

Freebies vs. Welfare Schemes:

The Reserve Bank of India (RBI), in its 2022 report, defined freebies as "public welfare measures provided free of charge." These



typically focus on short-term relief and include items like free laptops, TVs, bicycles, electricity, and water—often used as electoral incentives. However, some argue that they may encourage dependency rather than self-sufficiency.

- On the other hand, welfare schemes are structured programs aimed at long-term improvement in living standards and access to essential resources. Rooted in the Directive Principles of State Policy (DPSPs) and aligned with social justice goals, these schemes aim for lasting benefits.
- **Examples of welfare schemes include:**
 - » Public Distribution System (PDS): Ensuring food security.
 - » MGNREGA: Providing employment opportunities.
 - » Mid-Day Meal (MDM) Program: Addressing child nutrition and education.

Positive Aspects of Freebies:

- Support for Marginalized Communities: In regions with high poverty rates, freebies can provide essential support and help uplift lowerincome groups.
- Foundation for Long-Term Welfare: Several long-term welfare initiatives have evolved from freebie schemes. For example, the Mid-Day Meal Scheme and subsidized food programs have played a key role in supporting the underprivileged.
- Boosting Local Industries: Some freebies, such as providing sewing machines or bicycles, can stimulate local industries and enhance economic activity.
- Enhanced Access to Education: Distribution of laptops and bicycles has been linked to improved school attendance and learning outcomes, especially in rural areas.
- Encouraging Social Welfare: Free services like bus passes for women have helped increase workforce participation and fostered women's empowerment, ultimately contributing to overall social welfare.

Negative Aspects of Freebies:

Fiscal Burden: Freebie schemes can place a heavy strain on public finances. In some states,

- freebies account for a notable percentage of the state's gross domestic product.
- Electoral Manipulation: The use of freebies as electoral tools is seen as undermining free and fair elections, as they may distort voter behavior.
- Resource Misallocation: Funds directed towards freebies could divert resources from critical sectors like healthcare, education, and infrastructure, affecting long-term development.
- Fostering Dependency: Instead of encouraging self-reliance, repeated free distributions may lead to a culture of dependency, reducing the incentive for individuals to work.
- Environmental Concerns: Some freebie schemes, such as subsidized free electricity, can lead to overuse of natural resources and environmental degradation.

High Price of Freebies, Subsidies Election promises may cost up to 2.2% of state GDP State **Estimated Cost** % of GDP **Election Date** (₹ billion) Maharashtra 2.2% ₹960 bn Karnataka 537 1.9 May 2023 Telangana 2.2 352 Rajasthan 307 1.8 Andhra Pradesh 273 1.7 Madhya Pradesh 234 1.6 Nov 2023 Odisha 169 1.8 May 2024 Haryana 137 1.1 Oct 2024 Chhattisgarh 83 1.5 **Jharkhand** 55 1.2

Ethical Perspectives on Freebies:

Governmental Responsibility: The state has a moral duty to assist its citizens, especially the marginalized. However, there is a fine line between fulfilling this duty and engaging in populism for electoral gain. Ethical governance demands transparency, accountability, and a



focus on sustainable development.

- Citizens' Role: While beneficiaries of freebies gain immediate relief, there is also an ethical expectation for individuals to take responsibility for their growth. Over-reliance on freebies might discourage efforts towards self-improvement and economic independence.
- Equity and Justice: Policies must be analyzed to ensure that they do not favor certain groups disproportionately, thereby maintaining fairness and social equity.

The Way Forward:

- Strengthening Democratic Institutions: Empowering bodies like the Election Commission to monitor and regulate the use of freebies during elections is crucial.
- Enhancing Voter Education: Educating the public about the long-term economic and social impacts of freebies can help voters make informed decisions.
- Focusing on Sustainable Welfare Programs: Shifting the policy focus from short-term incentives to structured, sustainable welfare schemes will promote long-term development.
- Ensuring Transparency and Accountability: Clear guidelines and robust anti-corruption

- measures can help ensure that welfare programs are effectively implemented and reach the intended beneficiaries.
- Investing in Social Security: Rather than relying on ad hoc free distributions, enhancing social security systems—such as quality healthcare, education, and job creation initiatives—will address the root causes of socio-economic inequality.

Conclusion:

The Supreme Court's remarks serve as a critical reminder of the potential pitfalls associated with the freebies culture in India. While freebies may offer immediate support to the marginalized, they also raise significant concerns about dependency, resource allocation, and electoral fairness. By carefully examining both the positive and negative dimensions of these policies, and by adopting a more sustainable and equitable approach to public welfare, India can better balance immediate relief with long-term economic and social progress. This balanced approach will be essential in shaping future welfare and fiscal policies in the country.

Short Issues

Chhattisgarh HC's Ruling on Marital Rape and Section 377

Context:

The Chhattisgarh High Court recently made a significant ruling concerning marital rape and Section 377 of the Indian Penal Code (IPC). The court ruled that the marital rape exemption under Section 375 extends to Section 377. This means that forced "unnatural sex" within a marriage, even if non-consensual, will not be treated as an offense under Section 377, which criminalizes unnatural sex.

What the Court Said?

 The High Court emphasized that Section 375 of the IPC defines rape but provides an exemption for

- non-consensual sex between a man and his wife if she is above the age of 18. Under the current law, a husband cannot be prosecuted for rape if he engages in non-consensual sex with his wife, provided she is legally an adult.
- Building on this, the Chhattisgarh HC extended the marital rape exemption to Section 377. The court concluded that forced unnatural sex within marriage would not be considered an offense under Section 377.
- While Section 377 criminalizes unnatural sex, the Supreme Court's 2018 decriminalization of homosexuality did not eliminate non-consensual acts from its scope. The court relied on the rationale that the marital rape exception in Section 375 should apply to Section 377 as well.



Significance of the Ruling:

- This ruling holds significant implications for legal protections for married women. Prior to this decision, women who experienced non-consensual sexual acts within marriage could turn to Section 377 for legal recourse, especially in cases where domestic violence laws were inadequate.
- However, by extending the marital rape exemption to Section 377, the court has effectively removed one of the few remaining avenues for married women to prosecute their husbands for forced sexual acts, including forced unnatural sex.
- This decision is widely viewed as a setback for women's legal rights in cases of marital rape and sexual violence within marriage. By narrowing the legal scope for such offenses, the ruling highlights the urgent need for further reforms in India's legal framework to better protect women's rights and bodily autonomy.

Conclusion:

The Chhattisgarh High Court's ruling on marital rape and Section 377 adds complexity to India's legal position on sexual violence within marriage. With limited legal options available for married women facing sexual violence, the ruling underscores the ongoing necessity for comprehensive legal reforms to address issues like marital rape and ensure adequate protection for women's rights.

Bail under PMLA Cases

Context:

The Supreme Court has recently ruled on bail conditions under the Prevention of Money Laundering Act (PMLA), reinforcing its stringent provisions. This ruling overturned a Patna High Court decision that had granted bail to an accused in a money laundering case. The Supreme Court emphasized that the procedural standards under Section 45 of the PMLA were not followed, thereby asserting that the strict conditions for bail must be upheld.

Key Aspects of the Judgment:

Bail under PMLA:

- » Section 45 of PMLA mandates strict conditions for granting bail.
- » Courts must determine whether:
 - > There is a reasonable belief that the

- accused is not guilty of the offence.
- > The accused is unlikely to commit further offences if granted bail.
- » The Supreme Court reiterated that these conditions are mandatory and must be strictly followed to prevent unjustified bail approvals.

Discretion in Granting Bail

- » The Patna High Court had granted bail to a convict due to prolonged imprisonment without trial.
- » The Supreme Court criticized this decision, emphasizing that procedural delays cannot override the stringent conditions set by PMLA.
- » The judgment reaffirmed that bail cannot be granted on procedural grounds alone, and the legal framework under PMLA must be adhered to.

Money Laundering

Money laundering is the process of concealing the origins of illegally obtained money, often through financial transactions involving foreign banks or legitimate businesses.

Stages of Money Laundering:

- Placement— Introducing illegal funds into the financial system.
 - » Breaking up large sums into smaller deposits.
 - » Depositing money into foreign/offshore banks.
 - » Purchasing high-value assets (art, jewelry, etc.).
- Layering: Concealing the origins through complex transactions.
 - » Changing currency or transferring funds multiple times.
 - » Using shell companies to obscure ownership.
 - » Buying and selling assets to mask the source.
- Integration: Injecting laundered money into the legitimate economy.
 - » Investing in real estate, businesses, or stock markets.
 - » Using fraudulent loans and invoices to justify transactions.

Impacts of Money Laundering:

- Security Threats
 - » Terror Financing: Used to fund terrorist activities.
 - Example: The 26/11 Mumbai attacks were partially financed through laundered



money.

- » Organized Crime: Supports drug trafficking, human trafficking, and arms smuggling.
- » Extremism: Fuels insurgencies and destabilizes national security.

Economic Consequences:

- » Disrupts Legitimate Businesses: Criminal front companies distort market competition.
- » Financial Market Instability: Can cause liquidity crises in banks.
- » Loss of Government Control: Illicit financial flows can outpace national budgets.
- » Economic Distortion: Diverts funds from productive sectors to low-quality investments.

Social Impacts:

- » **Encourages Crime:** Strengthens criminal organizations and syndicates.
- » Corrupts Institutions: Illegitimate funds allow criminals to influence politics and law enforcement.
- » Undermines Public Trust: Weakens confidence in governance and financial institutions.

Regulatory Authorities Overlooking AML Laws Regulatory Authorities Overlooking AML Laws Ministry of Finance International Financial Services Centres Authority Security Exchange Board of India Insurance Regulatory and Development Authority of India

Anti-Money Laundering Measures in India:

- Prevention of Money Laundering Act, 2002 (PMLA): Allows authorities to confiscate illicit assets.
- Financial Intelligence Unit (FIU-IND): Monitors and reports suspicious financial activities.
- Enforcement Directorate (ED): Investigates and prosecutes money laundering cases.

International Anti - Money Laundering Framework:

- Financial Action Task Force (FATF): Sets global standards for anti-money laundering (AML).
- United Nations Global Programme (GPML): Assists nations in combating money laundering and terrorism financing.
- UN Vienna Convention (1988): Criminalizes money laundering and promotes international cooperation.
- Asia/Pacific Group on Money Laundering (APG): Encourages FATF compliance in the Asia-Pacific region.
- Eurasian Group (EAG): A regional alliance combating money laundering and terrorist financing.

Conclusion:

The Supreme Court's ruling reinforces the strict bail conditions under PMLA, ensuring that legal safeguards against money laundering remain intact. This decision is likely to impact future cases, emphasizing a balance between individual rights and the necessity of strong anti-money laundering measures.

Supreme Court on Death Penalty

Context:

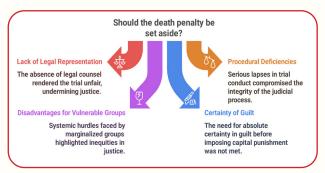
The Supreme Court of India recently set aside the death penalty awarded to a man convicted of murdering his wife and 12-year-old daughter, citing serious flaws in the criminal justice system. The judgment underscored the significance of a fair trial and due process, particularly for economically and socially disadvantaged individuals.

Reasons for Setting Aside the Death Penalty:

- Lack of Legal Representation: The accused was denied legal representation at crucial stages of the trial. This absence of proper legal defense was one of the primary reasons the Court found the trial unfair.
- Procedural Deficiencies: The Court found that serious lapses occurred in how the trial was conducted. This included a failure to ensure the accused had proper legal counsel, undermining the fairness of the judicial process.



- Disadvantages Faced by Vulnerable Groups: The Court acknowledged that India's criminal justice system disproportionately disadvantages those who are economically or socially vulnerable. The accused in this case faced additional systemic hurdles, which were exacerbated by his marginalized status.
- Capital Punishment and Certainty of Guilt: The bench emphasized that capital punishment, being the most severe form of punishment, should only be imposed when there is absolute certainty about the guilt of the accused. In this case, the Court found that such certainty was lacking.



Criminal Justice System of India:

The objective of the Criminal Justice System of India is to prevent crime, punish criminals, provide justice to the victims and maintain law and order in the society. This system is made up of police, judiciary and correctional system.

Main Components:

- Police
 - » It is the first pillar of the criminal justice system.
 - » Its main responsibilities are to receive information about the crime, investigate, arrest criminals and provide evidence to the prosecution in the court.

Judiciary

- » The function of the judiciary is to conduct a fair trial of crimes and sentence the culprits.
- » It conducts the judicial process according to the Constitution and the Penal Code.
- » It includes the Supreme Court, High Courts and Lower Courts.

Correctional System

» Its objective is to rehabilitate the culprits and include them in the mainstream of society. » It includes prison system, probation, parole and reformatory homes, which are designed to prevent criminals from re-offending.

Major committees related to reform in criminal justice system:

- Vohra Committee, 1993
 - » Major recommendations: Establishment of a dedicated agency to analyze and share intelligence collected by various agencies. Reform the criminal justice system to ensure strict action against criminals.
- Malimath Committee, 2003
 - » Major recommendations: Provide more resources and technical training to judicial officers and investigating agencies. Give more autonomy to prosecution agencies to make prosecution and police system more efficient.

New Chief Election Commissioner (CEC) of India

Context:

Former IAS officer Gyanesh Kumar has recently been appointed as the Chief Election Commissioner (CEC) of India, succeeding Rajiv Kumar. However, the Leader of Opposition submitted a dissent note, urging a deferment of the appointment until the Supreme Court delivers its verdict on petitions challenging the new law governing the selection process.

Evolution of the CEC Appointment Process:

- Earlier, the President appointed the CEC on the advice of the Prime Minister, with the senior-most Election Commissioner being promoted based on the order of appointment notification.
- However, in 2023, the Supreme Court, in Anoop Baranwal vs Union of India, ruled that the appointment of the CEC and Election Commissioners (ECs) must involve a Selection Committee, comprising:
 - » The Prime Minister
 - » The Leader of Opposition (LoP) in the Lok Sabha (or Leader of the largest Opposition party if LoP is absent)
 - » The Chief Justice of India (CJI)

Parliamentary Response:

In response, Parliament passed the Chief Election



Commissioner and Other Election Commissioners (Appointment, Conditions of Service, and Term of Office) Act, 2023, replacing the CJI in the Selection Committee with a Union Cabinet Minister nominated by the Prime Minister. This change has sparked concerns over executive dominance in the appointment process.

The New Appointment Process:

- The 2023 Act introduces a two-stage appointment system:
 - » Search Committee: Headed by the Law Minister, shortlists five candidates.
 - » Selection Committee: Comprising the Prime Minister, the Leader of Opposition, and a Union Minister, finalizes the appointment, which is then formally made by the President.
- Under the new law, candidates must have held the rank of Secretary to the Government of India and have experience in election management. The tenure is capped at six years, with no possibility of reappointment.

Conclusion:

The Supreme Court's pending judgment will determine whether Parliament can override a Constitutional Bench ruling through legislation, particularly concerning the independence of the Election Commission. Critics argue that the new law grants the government greater control over the Election Commission, raising concerns about its neutrality and long-term implications for electoral fairness in India.

India's New Draft Regulations on Predatory Pricing

Context:

India's national competition regulator, the Competition Commission of India (CCI), has introduced the Draft Competition Commission of India (Determination of Cost of Production) Regulations, 2025. This initiative is part of a broader effort to modernize India's competition laws under the Competition (Amendment) Act, 2023, ensuring alignment with global best practices.

Purpose of the Proposed Regulations:

 The draft regulations aim to update the methodology for determining production costs in predatory pricing cases, replacing the existing CCI (Determination of Cost of Production) Regulations, 2009.

 The consultation period for stakeholders is open from February 17 to March 19, 2025, allowing feedback submissions via CCI's online portal.

Difference between 2009 and draft 2025 regulation

CCI (Determination of Cost of Production) Regulations, 2009	CCI (Determination of Cost of Production) Regulations, 2025
The regulation relied on market value, that was defined as consideration which the customer pays or agrees to pay for a product that is/can be sold or provided.	The regulation relies on average total cost, i.e., defined as total cost divided by total output during the referred period.
The determination of cost included cost concepts such as avoidable cost, long-run average incremental cost, market value.	The determination of cost proposed to include cost concepts such as average total cost, average avoidable cost, or long-run average incremental cost.

Understanding Predatory Pricing

- Predatory pricing is an anti-competitive practice where a dominant firm sets prices below cost to eliminate competitors, intending to raise prices once competition is weakened or eliminated.
- Section 4(2)(a)(ii) of the Competition Act, 2002 prohibits such practices when they lead to unfair market dominance.
- Under the Competition Act, 2002, three conditions must be met for a pricing strategy to be classified as predatory:
 - » Dominant Market Position: The firm must hold significant market power.
 - » Pricing Below Cost: Prices must be deliberately set below the cost of production.
 - » Intent to Eliminate Competitors: The firm must aim to drive competitors out of the market.
- The 2025 draft regulations propose modernized cost benchmarks, incorporating contemporary economic theories and global competition standards to regulate predatory pricing more effectively. The CCI has the authority to impose



penalties, corrective measures, and pricing regulations in specific sectors to prevent market distortions.

Challenges in Regulating Predatory Pricing:

- Since 2009, India's market dynamics have evolved significantly, particularly with the rise of digital markets and platform-based economies. This transformation makes it challenging to differentiate between predatory pricing and legitimate competitive pricing strategies.
- The updated cost assessment methodologies aim to provide greater clarity in identifying anticompetitive pricing strategies.
- Experts believe these reforms will enhance regulatory oversight, ensuring dominant firms do not misuse their market power. The new guidelines are also expected to reduce uncertainty in pricing strategies, benefiting businesses, especially in price-sensitive sectors.

Conclusion:

The new draft regulations are designed to provide better tools for identifying and preventing predatory pricing, fostering a more competitive and transparent market in India. The ongoing consultation process will play a crucial role in shaping these regulations, ensuring a balance between fair competition, consumer protection, and business innovation. Once finalized, these updated regulations will offer clearer guidelines for businesses, regulatory bodies, and consumers alike, reinforcing India's commitment to a fair and competitive market.

NAKSHA Project

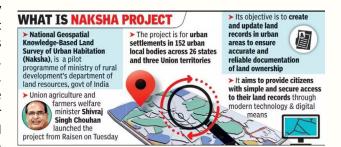
Context:

The Ministry of Rural Development recently launched a pilot project called "National Geospatial Knowledge-based Land Survey of Urban Habitations (NAKSHA)" to modernize urban land records using geospatial technology.

About NAKSHA Project:

 NAKSHA was announced in 2024 as a part of the Digital India Land Records Modernization Programme (DILRMP). It aims to create and update reliable documentation of land ownership in urban areas, enhancing transparency and minimizing

- disputes.
- Coverage: NAKSHA is currently in its 1-year pilot phase, which is being conducted in 152 Urban Local Bodies (ULBs) across 26 states and 3 Union Territories (UTs). After successful completion of the pilot program, it is expected to be rolled out nationwide.
- Technical Partner: The Survey of India is the technical partner for the project, responsible for conducting aerial surveys and providing orthorectified imagery to ensure accurate mapping.
- Platform Development: The end-to-end web-GIS platform for NAKSHA is being developed by the Madhya Pradesh State Electronic Development Corporation (MPSEDC).
- Coordination: The initiative is being coordinated by a State Level Committee (SLC), which operates under the Chief Secretary's office, ensuring effective implementation and monitoring at the state level.



Significance of Digitizing Land Records through NAKSHA

- Empower Citizens: NAKSHA ensures citizens have legal documentation of land ownership, thereby empowering them with clear, legal rights over their properties.
- Reduces Disputes: Digitized and legal land documentation helps minimize conflicts over land ownership, leading to reduced judicial burden related to land disputes.
- Enhances Governance: With transparent and efficient digital documentation, NAKSHA supports better governance by improving the ease of urban planning and decision-making.
- Boosts Investment: The digitalization of land records promotes ease of doing business and positions cities as attractive investment hubs,



stimulating economic growth.

About DILRMP (Digital India Land Records Modernization Programme)

- The Digital India Land Record Modernization Programme (DILRMP), previously known as the National Land Record Modernization Programme (NLRMP), was launched in 2008 by the Government of India with the purpose to digitize and modernize land records and develop a centralised land record management system.
 - » It is a Central Sector Scheme funded entirely by the government (100% Centre funding).
 - » DILRMP has been extended for a five-year period, with its duration from 2021 to 2026.

Key Components:

- Computerization of land and registration records.
- Digitization of revenue courts.
- Integration with Aadhaar (voluntary) for authentication and land ownership verification.

Other Key Initiatives:

- Unique Land Parcel Identification Number (ULPIN): Also known as Bhu-Aadhar. ULPIN is a unique identifier for each land parcel, aimed at preventing duplication and fraud in land records.
- BHOOMI SAMMAN: A recognition program to appreciate efforts in land record digitization and modernization.

Removal Process of a High Court Judge in India

Context:

Rajya Sabha Chairman Jagdeep Dhankhar recently addressed concerns regarding the removal of Justice Shekhar Yadav of the Allahabad High Court. He emphasized that only Parliament has the constitutional authority to remove a High Court judge, as per the Indian Constitution.

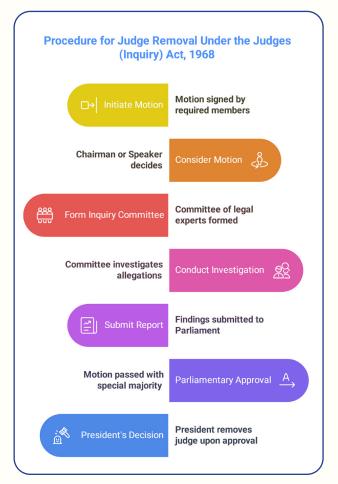
Grounds for Removal:

- A judge can be removed on the grounds of misbehaviour or incapacity:
 - » Misbehaviour: Includes wilful misconduct, corruption, lack of integrity, and offences involving moral turpitude.
 - » **Incapacity:** Refers to a physical or mental condition preventing the judge from effectively

performing judicial duties.

Process for Removal:

- A removal motion must be introduced in both Houses of Parliament (Rajya Sabha and Lok Sabha).
- The motion must be approved by:
 - » A majority of the total membership of each House.
 - » A two-thirds majority of members present and voting (special majority).



Procedure Under the Judges (Inquiry) Act, 1968:

Step 1: Initiating the Motion

- The motion must be signed by at least:
 - » 50 Rajya Sabha members.
 - » 100 Lok Sabha members.

Step 2: Consideration of the Motion

- The Chairman of the Rajya Sabha or Speaker of the Lok Sabha may:
 - » Admit the motion for investigation.



- » Reject the motion if it does not meet the required criteria.
- » Consultation with legal and constitutional experts takes place before proceeding.

Step 3: Formation of the Inquiry Committee

- If admitted, a three-member committee is formed, consisting of:
 - » One Supreme Court Judge.
 - » One High Court Judge.
 - » One distinguished jurist.
 - » The committee investigates the allegations of misbehaviour or incapacity.

Step 4: Investigation and Report

- The committee submits its findings:
 - » If the judge is cleared, the motion is dismissed.
 - » If the judge is found guilty, the report is placed before both Houses of Parliament.

Step 5: Parliamentary Approval

- » The motion must be passed with a special majority in both Houses.
- » If approved, it is forwarded to the President of India.

Final Decision

» The President has the authority to formally remove the judge upon parliamentary approval.

Legal and Institutional Considerations:

- Balancing Judicial Independence and Accountability
 - » The removal process safeguards judges from political pressure, ensuring judicial independence.
 - » It also provides accountability in cases of serious misconduct.

Challenges in Removing a Judge

- » The special majority requirement makes removal rare.
- » Even if an Inquiry Committee finds a judge guilty, securing enough votes in Parliament is difficult.

Judicial Conduct and Ethical Standards:

- The Reinstatement of Values of Judicial Life (1997) requires that:
 - » Judges must maintain public trust in the judiciary.
 - » They should avoid actions or statements that compromise their impartiality.

- The Judges (Inquiry) Bill, 2006 (not passed) proposed defining misbehaviour and introducing minor disciplinary actions, such as:
 - » Warnings.
 - » Public or private censure.
 - » Temporary withdrawal of judicial work.

Conclusion:

The motion against Justice Yadav highlights the delicate balance between judicial independence and accountability. The rigorous removal process ensures that judges are protected from political influence while maintaining judicial integrity.

President's Rule in Manipur

Context:

President's Rule has been imposed in Manipur following the state's inability to form a new government after the resignation of Chief Minister N. Biren Singh on February 9, 2025. The decision was made by President Droupadi Murmu, who, upon assessment, determined that the state government could not function in accordance with the Constitution.

Implications of President's Rule in Manipur:

- Governance: The administration of the state will be managed by the Governor on behalf of the President, with assistance from the Chief Secretary and other appointed advisors.
- Legislative Assembly: The state legislative assembly may be either suspended or dissolved.
- Ordinances: The President has the authority to issue ordinances regarding the state's administration when Parliament is not in session.

About President's Rule:

President's Rule is implemented under Article 356 of the Indian Constitution when a state government is deemed unable to function as per constitutional provisions. During this period, the Union Government assumes direct control, the Chief Minister and Council of Ministers are dismissed, and the Legislative Assembly may be either prorogued or dissolved.

Conditions for Imposition:

 Breakdown of governance, such as a coalition collapse, a no-confidence vote, or the inability to elect a Chief Minister.



- Failure to adhere to Constitutional norms, as reported by the Governor.
- Postponement of elections due to exceptional circumstances such as war, natural disasters, or pandemics.

Repeating history

from October 17, 1969, to

March 22, 1972

Manipur is among States with highest instances of President's Rule

■ This marks the 11th time ■ The latest instance was President's Rule has 277 days from June 2, 2001, to been imposed March 6, 2002 ■ Rishang Keishing of the ■ The first was for Congress became the 66 days from January MANIPUR first Chief Minister to 12 to March 19, 1967 complete his full term. ■ The longest was for Okram Ibobi Singh of 2 years and 157 days Congress was the first Chief

Criticism and Recommendations:

 Concerns Regarding Misuse: Some interpretations suggest that Article 356 has been utilized in ways that impact the federal structure of governance.

Minister to finish not one but

three terms

 Recommendations for Limited Use: The Sarkaria Commission (1983) advised that President's Rule should be implemented only in exceptional cases, following the exhaustion of all alternative measures.

Notable Instances of President's Rule:

- The S. R. Bommai case (1994) led to stricter regulations governing its imposition.
- In Jammu and Kashmir, the state was placed under Governor's Rule, which later transitioned to President's Rule after the revocation of Article 370 in 2019.
- Manipur has seen President's Rule imposed 11 times, the highest among Indian states.
- Chhattisgarh and Telangana have not experienced President's Rule to date.

Ethnic Violence in Manipur:

- The ethnic violence that began in May 2023 has contributed to the ongoing instability in Manipur. The conflict primarily involves the Meitei community, which constitutes the majority, and the Kuki-Zo community, which forms a minority.
- The tensions escalated following a Manipur High Court ruling, which recommended extending

certain benefits to the Meitei community. The situation intensified due to the geographical and demographic distribution of the communities, with the Meitei population concentrated in the valley regions and the Kuki-Zo population residing in the hills. The conflict has resulted in widespread violence, including arson, vandalism, and other serious offenses, affecting the overall stability of the state.

Conclusion:

The imposition of President's Rule in Manipur reflects the administrative challenges and ongoing tensions in the region. The situation continues to be monitored, with efforts directed toward restoring stability and governance.

Freebies Culture in India

Context:

The Supreme Court of India has recently raised concerns about the increasing trend of "freebies" offered by political parties and governments, particularly before elections. During a hearing on shelter homes for the homeless, the Court discussed whether such policies might discourage people from working by providing resources without any effort or contribution.

Key Issues Discussed:

- Impact on Work Ethic: Justice Gavai highlighted the effect of freebies on labor participation, particularly in Maharashtra, where the availability of free provisions has led to a shortage of agricultural workers. The concern is that if essential resources are provided without cost, people may not feel the need to seek employment.
- Creation of Dependency: The Court also discussed whether financial assistance without work requirements could lead to dependency. Instead of promoting self-reliance, such policies might make individuals reliant on government support, which could impact overall productivity and economic growth.
- Political Motivations: Another aspect raised was the timing of these freebie policies, as many are introduced close to elections. This has led to discussions on whether such measures are primarily aimed at public welfare or are used as a strategy to influence voter decisions.



Freebies vs. Welfare Schemes:

- The Reserve Bank of India (RBI), in its 2022 report, defined freebies as "public welfare measures provided free of charge." These typically focus on short-term relief and include items like free laptops, TVs, bicycles, electricity, and water—often used as electoral incentives. However, some argue that they may encourage dependency rather than self-sufficiency.
- On the other hand, welfare schemes are structured programs aimed at long-term improvement in living standards and access to essential resources. Rooted in the Directive Principles of State Policy (DPSPs) and aligned with social justice goals, these schemes aim for lasting benefits.
- Examples of welfare schemes include:
 - » Public Distribution System (PDS): Ensuring food security.
 - » MGNREGA: Providing employment opportunities.
 - » Mid-Day Meal (MDM) Program: Addressing child nutrition and education.

Conclusion:

The Supreme Court's observations highlight the ongoing debate about the impact of freebies on society. While these measures can provide immediate relief to those in need, there are concerns about their long-term effects on work participation and self-sufficiency. The discussion also emphasizes the importance of sustainable policies that balance short-term support with long-term economic and social development. Further hearings are expected to explore the legal and ethical aspects of freebie-driven policies.

Supreme Court Ruling on Alimony and Maintenance in Void Marriages

Context:

In a landmark judgment, the Supreme Court of India has ruled that alimony and maintenance can be granted to a spouse even if the marriage is declared void under the Hindu Marriage Act (HMA), 1955.

Key issues addressed in the Ruling:

Alimony and Maintenance in Void Marriages:
 The Supreme Court clarified that spouses in a

- void marriage are entitled to claim permanent alimony or maintenance under Section 25 of the Hindu Marriage Act. Despite the marriage being legally invalid, the right to financial relief remains unaffected.
- Interim Maintenance: The court further ruled that interim maintenance can be awarded during the pendency of a case under the HMA, even if the marriage is later declared void. Section 24 of the Act allows for the provision of maintenance, subject to specific conditions. The decision to grant such relief remains discretionary and depends on the conduct of the parties involved.
- Misogynistic Terminology in Court Judgments: The Supreme Court strongly criticized the use of derogatory and misogynistic terms such as "illegitimate wife" and "faithful mistress" in a judgment by the Bombay High Court. It emphasized that such language undermines the dignity of women and is inappropriate in legal proceedings, as it reinforces harmful stereotypes and prejudices.

About Void Marriages

A void marriage is one that is legally invalid from the outset and is treated as though it never existed. Unlike voidable marriages, which require a court order for annulment, void marriages hold no legal standing, and the parties involved cannot claim typical marital rights or benefits.

Reasons for a Void Marriage:

- Incestuous Marriage: A marriage between individuals closely related by blood (e.g., siblings or parent-child relationships) is considered incestuous and automatically void. Such unions are legally prohibited to prevent genetic concerns and uphold societal norms.
- Polygamous Marriage: If one of the spouses is already legally married to another person, any subsequent marriage is considered polygamous and void. For instance, if a man remarries without legally dissolving his first marriage, the second marriage holds no legal validity.
- Violation of Prohibited Relationship Degree:
 Marriages between individuals falling within a prohibited degree of relationship—such as close cousins or other near relatives—are void under the law. This rule ensures adherence to legal and



cultural norms surrounding family relationships.

 Marriage between Sapinda Relatives: A Sapinda relationship refers to a relationship connected through a common ancestor. Marriages within the Sapinda category (close blood relatives) are strictly prohibited and automatically void, as such unions could lead to inbreeding and disrupt social order.

Conclusion:

The Supreme Court's ruling reinforces legal safeguards for individuals in void marriages by ensuring their right to financial support through alimony or maintenance. By upholding these provisions, the judgment strengthens the legal framework protecting individuals whose marriages are later annulled or declared void, ensuring they are not left financially vulnerable.

PAC on Toll Tax Reduction and Better Highway Management

Context:

The Public Accounts Committee (PAC) of Parliament, led by K.C. Venugopal, has asked the government to review the toll tax rules for National Highways (NH) after concerns about outdated fee structures and maintenance issues raised during a recent meeting.

Key Issues:

- Toll Tax Structure and Revenue Increase: The existing toll tax system, governed by the NH Fee Rules, 2008, calculates toll charges based on a fixed rate per kilometer. The PAC noted that with rising vehicular traffic, toll revenue has significantly increased. It suggested that toll fees should be reconsidered and potentially reduced, ensuring fair charges for commuters.
- Non-Compliance by Concessionaires: Concerns were raised regarding private operators (concessionaires) failing to meet their contractual obligations. Issues include inadequate road maintenance, lack of proper facilities (such as rest stops and medical aid), and failure to manage high-risk accident-prone areas.
- Traffic Congestion at Toll Plazas: Despite the introduction of FASTags, long queues at toll plazas remain a major concern. The PAC cited the Paliyekkara Toll Plaza as an example

where concessionaires were not complying with agreements, causing inconvenience to commuters.



About the Public Accounts Committee (PAC):

- Formation: The PAC is formed under Rule 308 of the Rules of Procedure and Conduct of Business in the Lok Sabha.
- It consists of 22 members in total.
- 15 members are elected from the Lok Sabha, and up to 7 members are elected from the Rajya Sabha.
- Members are elected annually using proportional representation.

Functions of the PAC:

- It examines the government's revenue and expenditure to ensure financial accountability.
- Reviews how the money granted by Parliament was spent by the government.
- Scrutinizes the annual Finance Accounts and the audit reports of the Comptroller and Auditor General (C&AG).
- Holds government officials accountable for the economy, efficiency, and effectiveness of public spending.

Importance of the PAC:

- The PAC acts as a crucial check on government spending, ensuring that the funds allocated by Parliament are used properly and efficiently.
- It helps maintain transparency and accountability, particularly regarding the government's financial activities.



Conclusion:

The PAC has called for a review of the toll fee rules, emphasizing the need for lower toll rates due to increased revenue from more vehicles. It also urged stricter enforcement of contractual obligations by concessionaires and addressed concerns about privacy with new technologies for toll collection.

Proposed Immigration Bill, 2025

Context:

The Central government is set to introduce the Immigration and Foreigners Bill, 2025, aimed at modernizing India's immigration framework. This new legislation will replace outdated laws governing the entry, movement, and regulation of foreign nationals in India.

Replacing Outdated Laws:

- The Bill will consolidate and replace several preindependence and outdated laws, including:
 - » Passport (Entry into India) Act, 1920
 - » Registration of Foreigners Act, 1939
 - » Foreigners Act, 1946
 - » Immigration (Carriers' Liability) Act, 2000
- These laws were enacted during the World Wars and are no longer suited to present-day immigration challenges.

Key Provisions of the Bill:

- Stricter Penalties for Violations:
 - » Unauthorized Entry: Foreign nationals entering India without authorization will face a fine of up to ₹5 lakh.
 - » Fake Passport Use: Those using forged passports will face a fine of up to ₹10 lakh.
- Institutional Role in Immigration: Universities, hospitals, and other institutions will have defined responsibilities while admitting foreign nationals to ensure compliance with immigration rules.
- Regulation of Foreigners in India: Foreigners' registration, movement, and restrictions will be clearly outlined. Civil authorities will be empowered to regulate places frequently visited by foreigners for better monitoring.
- Liability of Carriers (Airlines & Ships): Airlines and shipping companies will be held responsible for transporting foreign nationals who do not

- comply with Indian immigration laws.
- Removal of Foreigners: The central government will have the power to remove foreign nationals violating immigration laws or facing movement restrictions.
- Modernized Immigration Procedures: The Bill aims to streamline passport and visa procedures, making immigration more structured and efficient.

Implications of the Bill:

- The Immigration and Foreigners Bill, 2025 is a major step towards modernizing India's immigration framework, ensuring:
 - » Better control over foreign nationals regarding their movement, entry, and stay.
 - » Defined responsibilities for universities and hospitals dealing with foreign nationals.
 - » Stronger enforcement with stricter penalties for unauthorized entry and fake documents.
 - » Alignment with global immigration standards in an increasingly interconnected world.

Conclusion:

By consolidating multiple outdated laws into a single, comprehensive framework, this Bill enhances security, regulation, and efficiency in India's immigration system. It reinforces India's commitment to stronger border control, better institutional accountability, and a globally competitive immigration policy.

TN Govt-Governor Dispute Case

Context:

The ongoing dispute between the Tamil Nadu government and Governor R.N. Ravi has drawn significant attention to the role of state Governors in the legislative process. The case, currently before the Supreme Court (SC), has raised questions over the constitutional limits of the Governor's power to withhold assent to bills passed by state Assemblies.

The Heart of the Issue:

The crux of the Tamil Nadu government's dispute with Governor Ravi revolves around the interpretation of Article 200 of the Indian Constitution. This article mandates that when a bill is presented to the Governor after being passed by the state legislature, the Governor must decide



whether to:

- » Give assent to the Bill, which then becomes law in the state.
- » Withhold assent and send the Bill back for reconsideration by the state legislature.
- » Reserve the Bill for the President's consideration.
- Article 200 also stresses that the Governor must take this action "as soon as possible" after receiving the Bill. The Tamil Nadu government has argued that prolonged delays in granting assent to these bills undermine the democratic process and violate the principles of the Constitution. Since the state first approached the SC, similar concerns have been raised by other opposition-led states about delays in assent.

Key Issues Before the Supreme Court

- Repeated Withholding of Assent: The Tamil Nadu government has raised the issue of whether the Governor has the authority to withhold assent for a second time after the state Assembly has passed the Bill again following the Governor's initial withholding. In this context, the SC will consider if the Governor is required to either grant assent or reserve the Bill for the President after the Assembly re-passes the Bill.
- Governor's Power to Refer Bills to the President: The SC will examine the limits of the Governor's power to refer a Bill to the President. While Article 200 allows the Governor to reserve a Bill for the President, the Court will assess if this power extends to all Bills or only to those with specific constitutional implications.
- The Pocket Veto: Another critical issue is the concept of the pocket veto, where the Governor indefinitely delays assent to a Bill. The Tamil Nadu government has questioned whether such prolonged delays have any constitutional validity. The SC may need to clarify if there is any threshold after which such inaction becomes unconstitutional.
- Time Frame for Assent: Although Article 200 states that assent should be granted "as soon as possible," it does not specify a time frame for this action. The SC has previously addressed the issue of delay but has yet to issue a binding timeline for Governors. The Court will likely consider whether it should impose a clear deadline for assent and, if

so, what that timeline should be.

Previous SC Observations:

- In past decisions, the SC has emphasized that the Governor cannot withhold assent indefinitely. For instance, in the Nabam Rebia and Bamang Felix vs Deputy Speaker (2016) case, Justice Madan Lokur had remarked that the Governor must return a Bill with a message, including any suggested amendments, and cannot withhold assent permanently.
- This ruling was reinforced in November 2023 when the Court, while hearing a similar case filed by the Punjab government, stated that the phrase "as soon as possible" in Article 200 means that a Governor cannot delay assent indefinitely.

Supreme Court Decision on Arrest

Context:

In a landmark judgment, the Supreme Court of India has ruled that informing an arrested person about the grounds of their arrest is not just a procedural formality but a mandatory constitutional requirement. The Court held that failure to provide this information at the earliest opportunity renders the detention illegal, violating the right to liberty under Article 22(1) of the Indian Constitution.

Case and Ruling:

The ruling was delivered in a case involving a man arrested by Haryana Police, where the Supreme Court found the arrest unconstitutional due to non-compliance with Article 22(1). As a result, the Court ordered his immediate release, reinforcing the principle that law enforcement must strictly adhere to constitutional safeguards.

Requirement for Specific Grounds of Arrest:

- The Court emphasized that the grounds of arrest must be:
 - » Communicated effectively in a language the arrestee understands.
 - » Detailed enough for the individual to know the exact reason for detention.
- While the Court did not mandate that the grounds of arrest be provided in writing, it referred to the Pankaj Bansal vs. Union of India case, where a



written format was suggested as the ideal method. The Court noted that following this written approach would help eliminate the risk of noncompliance.

Legal Implications of Non-Compliance:

- The judgment clarified that failure to comply with Article 22(1) makes an arrest unconstitutional, meaning:
 - » The arrestee cannot remain in custody, even for a second.
 - » Filing a charge sheet or obtaining a magistrate's order cannot validate an unconstitutional arrest
- Furthermore, when an arrested person is presented before a Judicial Magistrate for remand, it is the magistrate's duty to confirm that Article 22(1) was followed. If compliance is not established, the individual must be immediately released.

Burden of Proof on Law Enforcement:

The Supreme Court also ruled that in cases where an arrestee claims non-compliance with Article 22(1), the burden of proof falls on the Investigating Officer or Agency. Law enforcement must provide concrete evidence that the individual was informed of the grounds for arrest.

Conclusion:

This ruling stands as a strong reaffirmation of the fundamental right to liberty and the procedural safeguards enshrined in Article 22. It underscores that constitutional protections are not optional but a binding duty for law enforcement agencies. By ensuring strict adherence to these safeguards, the Supreme Court has strengthened India's criminal justice system, preventing arbitrary arrests and reinforcing citizens' rights.

Supreme Court direction on Forest Act

Context:

The Supreme Court of India has ruled that neither the Union government nor states can reduce forest land unless compensatory land is provided for afforestation. This directive was issued during hearings on petitions challenging amendments to the Forest (Conservation) Act, 1980, reinforcing the importance of protecting

forest areas and ensuring that any loss due to developmental projects is offset by new green spaces.

About the Issue:

- The controversy stems from the 2023 amendments to the Forest (Conservation) Act, 1980, which aimed to redefine what qualifies as a forest.
- The amendments introduced Section 1A, which limited the definition of forests to lands declared or recorded as forests after 1980. Petitioners argued that this could exclude large tracts of ecologically valuable land, weakening conservation efforts.
- The definition of 'forest' became a major point of contention. The government proposed that forests could include lands recognized by state or local authorities, raising concerns about inconsistent implementation. The Supreme Court intervened to clarify how forests should be legally interpreted and protected.

Supreme Court's Ruling:

- Reaffirming its 1996 TN Godavarman Thirumulpad case ruling, the Supreme Court upheld a broad and inclusive definition of 'forest' to safeguard all green spaces, irrespective of classification, ownership, or government records.
- The Court directed the government to revert to the "dictionary meaning" of 'forest' to maintain the original intent of the Act. It clarified that forests must include not just recorded lands but also:
 - » Forest-like areas
 - » Unclassed forests
 - » Community forest lands
- The Court also ruled that this broad interpretation must remain in effect until states and Union Territories complete a consolidated record of all forest lands, including those not officially recognized.

About the Forest (Conservation) Act, 1980:

- The Forest (Conservation) Act, 1980, was enacted to prevent further deforestation and safeguard the ecological balance in India.
- It regulates the diversion of forest land for non-forest purposes, with an emphasis on compensatory afforestation.
- The recent amendments sought to redefine the term 'forest' and set new criteria for what lands could be considered under forest conservation law.



Conclusion:

The Supreme Court's ruling is a crucial step in protecting India's forests. By mandating compensatory afforestation and reaffirming a broad definition of forests, the Court has ensured that all green spaces remain safeguarded, whether formally recorded or not. This decision strengthens conservation efforts, protecting biodiversity and ecological balance despite developmental pressures.

Centre-State dispute on National Education Policy

Context:

Recently, the central government has made it clear that unless Tamil Nadu agrees to the implementation of the National Education Policy (NEP) 2020, the state will not be provided financial assistance of Rs 2,000 crore sanctioned under the Samagra Shiksha Abhiyan. This decision has further deepened the already ongoing federal tussle between the Center and the state government over the education policy.

About Three-Language Formula in NEP 2020:

- The National Education Policy (NEP) 2020 retains the three-language formula from the 1968 NEP, but introduces greater flexibility, addressing concerns, especially from non-Hindi-speaking States like Tamil Nadu.
- The policy allows States to choose their three languages, with the requirement that at least two must be native to India. This shift provides non-Hindi-speaking regions the freedom to avoid Hindi, a significant change from earlier mandates.
- NEP 2020 prioritizes bilingual education, advocating for instruction in students' mother tongue alongside English. This aims to maintain cultural connections while enhancing cognitive benefits.
- It also highlights Sanskrit as an optional language, offering a revival of the classical language, though questions remain about its practical implementation due to limited resources.

Tamil Nadu's Opposition:

 Tamil Nadu has historically resisted the imposition of Hindi, starting with the 1937 protests against

- making Hindi compulsory. Violent protests in 1965 and 1968 further reinforced the state's stance. Political parties fear that despite NEP 2020's flexibility, practical challenges would make Hindi the default third language, sidelining regional languages like Tamil.
- NEP's flexibility might still lead to Hindi dominance due to practical issues, such as a shortage of language teachers. The central government's promotion of Hindi, including a ₹50 crore fund for Hindi teachers in non-Hindi-speaking states, has intensified these concerns, especially as no similar initiatives are made to promote South Indian languages.



The Way Forward:

A dialogue between the Centre and Tamil Nadu is essential to resolve the issue. While Tamil Nadu's two-language policy has led to strong educational outcomes, imposing the three-language policy could disrupt this success. A balanced approach that respects regional autonomy while aligning with national goals is necessary to ensure that the policy serves all states effectively.

Conclusion:

NEP 2020's three-language formula aims to promote multilingualism but faces significant resistance, particularly from Tamil Nadu, due to fears of Hindi imposition. A practical, cooperative approach to language education is essential to ensure that the policy respects regional diversity while fostering national unity and educational progress.

41 _____ www.dhyeyaias.com



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India-Qatar Strategic Partnership: Strengthening Bilateral Ties amid **Geopolitical Shifts**

The recent State Visit of Sheikh Tamim bin Hamad Al Thani, the Amir of Qatar, to India on February 17-18, 2025, marked a significant milestone in the evolving relationship between the two nations. This visit coincided with the India-Qatar Joint Business Forum, where the Ministers of Commerce from both countries, along with key stakeholders from finance, energy, infrastructure, and technology, convened to explore new avenues for economic cooperation. During the visit, India and Qatar elevated their bilateral relationship to a Strategic Partnership, a move aimed at enhancing cooperation across multiple domains, including trade, energy, investment, and security. This strategic alignment comes at a crucial time when both countries are navigating global economic transformations, regional power shifts, and evolving geopolitical challenges in the Middle East.

Key Highlights of the Visit:

- **Elevation to a Strategic Partnership:** India and Qatar have historically enjoyed warm diplomatic ties, but their decision to upgrade their relationship to a "Strategic Partnership" marks a new phase of deeper collaboration. The term "strategic" in India's diplomatic engagements is generally used in relations with key allies such as the UAE and Saudi Arabia, and its inclusion in India-Qatar ties signals a new level of commitment. The Strategic Partnership implies greater cooperation in:
 - Energy Security (continued long-term LNG

- and LPG supplies).
- Investment and Trade Expansion (new economic collaborations and increased FDI).
- Maritime Security and Counterterrorism (joint exercises like Za'ir-Al-Bahr).
- Technology and Infrastructure (investment in AI, fintech, and smart cities).



Economic and Trade Commitments:

- Qatar's sovereign wealth fund has already invested USD 1.5 billion in India and has now pledged an additional USD 10 billion, targeting infrastructure, renewable energy, and emerging technologies like artificial intelligence (AI) and machine learning.
- The two countries have set an ambitious target



to double bilateral trade from USD 14 billion to USD 28 billion over the next five years.

» A Revised Agreement for Avoidance of Double Taxation was signed to facilitate smoother business transactions and prevent dual taxation.

Free Trade Agreement (FTA) Discussion

- » India and Qatar also explored the possibility of a Free Trade Agreement (FTA), which could significantly enhance economic cooperation.
- » This discussion is part of India's broader negotiations with the Gulf Cooperation Council (GCC) for a regional trade agreement.
- » An FTA with the GCC would benefit multiple industries, particularly energy, petrochemicals, and services.

Infrastructure and Financial Integration:

- » Operationalization of India's Unified Payment Interface (UPI) in Qatar was discussed, a move that could simplify financial transactions and benefit Indian expatriates.
- » Qatar National Bank is considering expanding its presence in GIFT City (Gujarat International Finance Tec-City), further integrating financial services between the two nations.

Geopolitical and Regional Cooperation:

- » India reaffirmed its stance on supporting a two-state solution in the Israel-Palestinian conflict, aligning with Qatar's mediation efforts.
- » Qatar's role as a mediator in conflicts such as Afghanistan and Gaza makes it a key regional player, indirectly influencing India's engagement in the Middle East.

Why is Qatar Important for India?

Energy Cooperation

- » Qatar is India's largest supplier of Liquefied Natural Gas (LNG), accounting for 48% of India's total LNG imports.
- » It is also India's top supplier of Liquefied Petroleum Gas (LPG), contributing 29% of total LPG imports.
- » This stable and uninterrupted energy partnership is crucial as India transitions towards cleaner energy sources, reducing coal dependency while meeting its growing energy needs.
- » QatarEnergy has recently signed a 20-year deal worth USD 78 billion with India's Petronet,

ensuring long-term energy security.

India-Qatar Ties Soar to New Heights

- •Strategic Leap Bilateral ties upgraded to a strategic partnership.
- Trade Target Aim to double trade from \$14 billion to \$28 billion by 2030.
- •Investment Boost Qatar pledges \$10 billion investment in India.
- Cultural Ties Plans to celebrate India-Qatar Year of Culture, Friendship & Sports.
- Digital Expansion UPI to be accepted nationwide in Qatar.
- Ease of Travel- E-visa facility extended to Qatari nationals.
- Strengthening Bonds 5 MoUs signed on trade, youth, sports, archives & business collaboration.



Strategic and Geopolitical Cooperation:

- » Qatar is central to India's "Link and Act West" policy, which focuses on strengthening ties with GCC nations such as UAE, Saudi Arabia, Oman, and Kuwait.
- » Its strategic location in the Gulf region, which supplies over 55.3% of India's crude oil needs, enhances India's energy security.
- » Qatar's diplomatic role in Middle Eastern conflicts, such as Afghanistan and the Israel-Palestine issue, provides India with indirect leverage in regional affairs.

Counterterrorism and Defense Cooperation:

- » India and Qatar share common interests in counterterrorism and maritime security.
- » The Za'ir-Al-Bahr (Roar of the Sea) maritime exercise strengthens naval cooperation.
- » Regular naval visits and training programs further enhance strategic collaboration.

India-Qatar Bilateral Relations: A Multi-Dimensional Partnership

Trade Relations:

- » Bilateral trade between India and Qatar stood at USD 14.08 billion in 2023-24, with India's exports at USD 1.7 billion and imports at USD 12.3 billion.
- » India is among Qatar's top three export destinations (along with China and Japan) and one of Qatar's top three import sources (along with China and the US).
- » Qatar's primary exports to India include

43



- LPG, LNG, petrochemicals, chemicals, and aluminum.
- » India's exports to Qatar include cereals, textiles, iron, steel, and machinery.

***** Investment and Business Cooperation:

- » Over 15,000 Indian companies are currently operating in Qatar.
- » Indian firms have invested USD 450 million in the Qatari market, reflecting strong business ties.
- » Recent MoUs between the Qatari Businessmen Association and Confederation of Indian Industry aim to promote business-community interactions.

Cultural and People-to-People Ties:

- » Cultural exchanges take place under the 2012 Cultural Cooperation Agreement, with 2019 celebrated as the India-Qatar Year of Culture.
- » Over 835,000 Indians live in Qatar, forming the largest expatriate community (27% of Qatar's population).

Strategic Implications and Future Prospects

The elevation of India-Qatar ties to a Strategic Partnership marks a new era in bilateral relations. The economic and energy cooperation, along with growing defense and counterterrorism

- collaboration, ensures a strong foundation for future engagements.
- With the new Bilateral Investment Treaty (BIT) under negotiation, India appears willing to accommodate Qatar's economic interests, similar to its BIT with the UAE in 2024. The flexibility in investment policies signals a mutually beneficial economic relationship.
- Moreover, Qatar's geostrategic importance in West Asia, its mediation roles in conflicts, and its strong ties with both the US and regional actors make it a crucial diplomatic partner for India.

Conclusion:

The India-Qatar Strategic Partnership is a significant development in India's engagement with the Gulf region. As both nations look to deepen cooperation in trade, energy, security, and investment, the future of bilateral relations appears promising and dynamic. The commitment to doubling trade, increasing Qatari investments in India, and enhancing defense and financial integration highlights a growing and resilient partnership that is set to expand further in the coming years.

India's Neighbourhood First and Act East Policies: Connectivity in the Northeast amid Regional Instability

India's Northeast has become a key focus of its foreign policy, especially under the Neighbourhood First and Act East policies. This region, made up of eight states and sharing borders with five countries, has the potential to be a major hub for trade and connectivity between South and Southeast Asia. By improving infrastructure and transport links, India aims to strengthen economic ties with its neighbors and integrate the Northeast into regional development. However, recent political changes in Bangladesh and ongoing instability in Myanmar have created serious challenges. Several important connectivity projects have been delayed or suspended, affecting

trade, infrastructure development, and diplomatic relations. The shift in Bangladesh's leadership has led to uncertainties in bilateral agreements, while conflicts in Myanmar have disrupted key transport routes. These issues not only slow down India's regional plans but also impact economic growth and security in the Northeast.

India-Bangladesh Connectivity: Political Shifts and Economic Disruptions

- Strategic Importance of Bangladesh for India's Northeast:
 - » Bangladesh borders four Northeastern states, providing landlocked regions with crucial



- connectivity to the rest of India and maritime access to the Bay of Bengal.
- » Over the past 15 years, bilateral cooperation between India and Bangladesh—especially under the Awami League government—has facilitated several connectivity projects, marking what was termed the "Golden Chapter" of bilateral ties.
- » India has invested heavily in Bangladesh, with an \$8 billion development portfolio.

Political Transition and its Impact

- » The regime change in Bangladesh in August 2024 has significantly altered bilateral dynamics.
- » The political shift, marked by former Prime Minister Sheikh Hasina's flight to India and the establishment of an interim government under Chief Advisor Muhammad Yunus, has led to strained relations.
- » Anti-India sentiments, diplomatic uncertainties, and Hasina's extradition dilemma have contributed to the suspension of key connectivity projects.

Disruptions in India-Bangladesh Trade and Infrastructure India secures operational rights to a terminal in Mongla Port. Logistical challenges stall operationalization of the terminal. The Ashugani Inland Container Port project is put on hold. A significant decline in India-Bangladesh trade occurs. **Border activities** decrease, impacting livelihoods. Key railway services between India and Railway services suspended [] Bangladesh are suspended. Cross-border bus 🙀 Cross-border bus services unavailablε services remain unavailable.

Disruptions in Trade and Infrastructure Development:

- Maritime Access: India had secured operational rights to a terminal in Mongla Port (June 2024) and funded the Khulna-Mongla Port rail link. However, logistical hurdles have stalled their operationalization.
- Rail and Inland Transport: The Ashuganj Inland Container Port project, which would facilitate the newly inaugurated Akhaura-Agartala rail link, remains suspended.
- Declining Trade: Since the political transition, India-Bangladesh trade has declined, with border closures, customs clearance issues, and increased security surveillance. Between April and October 2023, Indian exports to Bangladesh fell by 13.3%, while imports dipped by 2.3%. Fly ash exports, critical for Bangladesh's construction sector, dropped by 15–25%.
- Land Border Connectivity: The Benapole-Petrapole land port, responsible for nearly 30% of bilateral trade, has seen reduced activity, affecting border-dependent livelihoods. Railway services (Maitree Express, Bandhan Express, Mitali Express) have been suspended since July 2024, and crossborder bus services remain unavailable.

Suspended Joint Initiatives

- Several initiatives outlined in the last Joint Statement before the regime change remain on hold, including:
 - » The Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicle Agreement, aimed at enhancing sub-regional connectivity.
 - » Operationalization of goods-train services from India (Gede, Haldibari) to Bangladesh (Darshana, Chilahati) and further into Bhutan.
 - » Cooperation in digital connectivity, including the rollout of 4G/5G by Indian telecom companies Bharti Airtel and Jio Infocomm.

Strategic Implications:

» The evolving political situation in Bangladesh underscores the fragility of India's connectivity projects. The impact is not limited to trade and infrastructure; people-to-people connectivity and regional integration have also suffered setbacks.

45 _____ www.dhyeyaias.com



Myanmar's Internal Conflict and the Kaladan Project:

The Arakan Army and Escalating Instability: Myanmar's Rakhine State, critical to India's Kaladan Multi-Modal Transit Transport Project (KMMTTP), is witnessing growing conflict. The Arakan Army (AA) has seized control of 15 out of 18 townships, disrupting key border points with Bangladesh and Paletwa in Chin State—both vital for India's connectivity projects.

Challenges to India's Connectivity Initiatives:

- Sittwe Port Operations: The port, operationalized in 2023, faces security threats amid ongoing violence.
- Paletwa-Zorinpui Highway: The 109-kilometre road link crucial for KMMTTP remains incomplete due to legal, logistical, and security challenges. Despite AA's reported support for the project, military airstrikes and conflicts have stalled progress.
- * IMT Trilateral Highway (IMT-TH): Aimed at linking India's Northeast with Thailand via Myanmar, this initiative is part of broader regional connectivity efforts extending to Cambodia, Laos, and Vietnam. However, instability has slowed progress, with only 25% of key infrastructure completed. The replacement of 69 bridges on the Tamu-Kyigone-Kalewa road remains a bottleneck.

Security and Infrastructure Constraints in India's Northeast

- Land Disputes in Mizoram: Unresolved land acquisition issues and infrastructure deficiencies further delay the Kaladan project.
- Border Trade Disruptions: Trade routes through Moreh (Manipur) and Zokhawthar (Mizoram) remain restricted due to ethnic tensions and security concerns.
- Geopolitical Engagements: India has engaged with Myanmar's ruling junta, ethnic armed organizations (EAOs), and the National Unity Government (NUG) to safeguard its projects. However, ongoing violence complicates diplomatic efforts.

Myanmar's instability poses a direct challenge to India's regional connectivity ambitions under BIMSTEC and the Act East Policy. The prolonged conflict underscores the need for India to adopt a multi-stakeholder approach, ensuring that projects are resilient against geopolitical disruptions.

Way Forward:

India's Neighbourhood First and Act East policies rely heavily on stable and secure connectivity initiatives in its Northeast. However, the political transition in Bangladesh and Myanmar's escalating conflict has disrupted key projects. Trade, infrastructure, and cross-border movement have suffered setbacks, threatening India's broader regional integration efforts.

- Strengthening Border Management: India must enhance security measures along its borders with Bangladesh and Myanmar to safeguard trade routes and infrastructure projects.
- Diversifying Diplomatic Engagements: Proactive engagement with multiple political actors in Bangladesh and Myanmar is crucial to mitigating disruptions.
- Resilient Infrastructure Development: Investments in alternative connectivity routes, such as enhanced air and maritime transport, can provide long-term solutions.
- Regional Security Cooperation: Collaborating with ASEAN and BIMSTEC nations to stabilize Myanmar and improve cross-border governance is necessary.
- Economic and Trade Diversification: India should explore alternative trade agreements and investment strategies to minimize reliance on politically volatile regions.

While challenges persist, India's strategic approach to connectivity must evolve to address emerging geopolitical realities. By focusing on resilience and adaptability, India can sustain its regional ambitions and secure the economic future of its Northeast.

Broader Geopolitical Implications:



Deportation of Indian Migrants from the United States: Analyzing the Implications

f I he deportation of Indian migrants from the United States has gained renewed attention, especially with the recent expulsion of 205 Indian nationals via a U.S. military aircraft. This event highlights the Trump administration's stringent immigration enforcement policies, marking a broader shift in U.S. migration control. Many of the deported migrants hail from Gujarat and Punjab, states with a history of high emigration rates. The large-scale removal of undocumented migrants has significant consequences, affecting India-U.S. diplomatic relations, socioeconomic stability, and international human rights frameworks. Understanding the factors driving illegal migration, the legal mechanisms governing it, and the consequences of deportation is crucial in shaping policies that balance border security with humanitarian concerns.

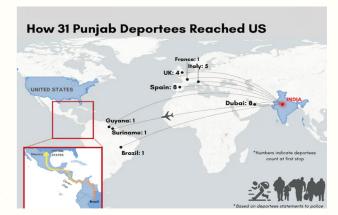
Migration: Definition and Types

- Migration refers to the movement of people from one place to another due to economic, political, social, or environmental reasons. It can be classified into two main types:
 - » Legal migrants are those who relocate through authorized channels, obtaining visas, work permits, or permanent residency.
 - » Illegal migrants enter a country without permission or overstay their visas. According to India's Citizenship Act, 1955, an illegal migrant is a foreigner who either enters India without valid documents or remains beyond the permitted duration.

Statistical Overview of Indian Migration to the U.S.:

As of November 2024, U.S. Immigration and Customs Enforcement (ICE) reported that 20,407 Indian nationals were either detained or facing removal orders. Among them, 17,940 had final removal orders but were not in detention, while

- 2,467 were held under Enforcement and Removal Operations (ERO). Indians ranked as the fourth-largest nationality group in ICE custody and the highest among Asians.
- In the past year, approximately 1,100 Indian nationals were deported via special charter flights. Between November 2023 and October 2024, 519 Indians were sent back to India. The most recent deportation flight, operated by a U.S. military C-17 aircraft, departed from San Antonio, Texas. The cost of deportation is substantial; for instance, a military deportation flight to Guatemala costs around \$4,675 per migrant.



Push and Pull Factors of Migration

Migration occurs due to a combination of push and pull factors.

Push Factors (Forcing Migration Out of India):

- Economic distress due to high unemployment rates and lack of job opportunities.
- » Political instability, corruption, and governance-related dissatisfaction.
- » Social discrimination, with disadvantaged communities seeking better prospects abroad.
- » Exploitative human smuggling networks, where unauthorized agents lure migrants with false promises.
- Pull Factors (Attracting Migrants to the U.S.):



- » Higher wages and better economic opportunities.
- » Established Indian immigrant networks in states like California, Texas, and New Jersey.
- » Prospects of social mobility, including access to quality education and healthcare.
- » Family reunification, where relatives sponsor visas or assist in illegal migration.

Challenges Faced by Indian Migrants Leading to Illegal Immigration

- Many Indians resort to illegal migration due to obstacles in securing legal entry. The high cost, long processing times, and restrictive visa policies push individuals toward unauthorized routes.
- Employment challenges in India, combined with societal pressure to achieve financial success, often lead individuals to take risky journeys. Some rely on unscrupulous agents who charge exorbitant fees but provide unsafe or deceptive means of entry into the U.S.

Impact on India-U.S. Bilateral Relations:

- Large-scale deportations of Indian nationals carry diplomatic and economic implications. While India has agreed to accept deported migrants after verification, managing repatriation logistics remains a challenge. The issue also raises concerns about human trafficking networks and illegal migration channels.
- From an economic perspective, deportations disrupt families that depend on remittances, especially in states like Punjab and Gujarat. Many returnees face difficulties reintegrating into Indian society due to financial instability and stigma.

Legal and Human Rights Considerations

- Deportation policies must comply with international legal frameworks to ensure the protection of migrants' rights.
 - The principle of non-refoulement prohibits deporting individuals to countries where they might face persecution.
 - » Due process and legal recourse must be provided, ensuring migrants have access to fair trials and legal representation.
 - » Concerns over the use of military resources,

as human rights organizations argue that military-led deportations raise ethical and legal issues under international law.

Initiatives to Counter Illegal Migration

- India too, grapples with significant illegal migration challenges, particularly along its eastern and northern borders. In the northeast, especially Assam, a longstanding influx of Bangladeshi migrants has reshaped the region's demographics. More recently, persecuted Rohingyas from Myanmar have sought refuge in India.
- From the north, religious minorities from Pakistan and Afghanistan have migrated due to persecution. These movements pose security risks, particularly in Kashmir, where militants exploit porous borders to infiltrate through the Line of Control.
- To address these challenges, the Indian government has implemented various measures to curb illegal migration.
- 'Surakshit Jayen, Prashikshit Jayen' campaign, launched by the Ministry of External Affairs, promotes safe and legal migration pathways.
- Migration and mobility partnership agreements with countries like France, ensuring legal migration while returning identified illegal migrants.
- Border management measures, including:
 - » Physical infrastructure such as border fencing and floodlighting.
 - » Comprehensive Integrated Border Management System (CIBMS) for enhanced border surveillance.
 - » Regular patrolling and anti-tunneling operations by security forces like the BSF and Assam Rifles to prevent illegal infiltration.

Global Initiatives:

- International efforts to regulate migration include:
 - » Global Compact for Safe, Orderly, and Regular Migration, under the International Organization for Migration (IOM), which promotes responsible migration policies.
 - » Protocol against the Smuggling of Migrants by Land, Sea, and Air, under the United Nations Convention against Transnational Organized Crime (UNTOC), aiming to prevent human

48 _____www.dhyeyaias.com



- smuggling.
- » INTERPOL's support in breaking criminal networks facilitating illegal migration.

Dunki Routes: The Unauthorized Migration Pathways

- "Dunki routes" refer to unauthorized migration pathways frequently used by Indian migrants. Initially associated with Punjab and Haryana, these routes have now expanded to Gujarat. Migrants typically enter the U.S. via Latin America, relying on human traffickers to navigate treacherous paths.
- Stages of the Migration Journey:
 - » Entry into Latin America: Migrants first fly to Ecuador, Bolivia, or Guyana due to lenient visa policies. Others travel through Mexico after obtaining visas via Dubai.
 - » Crossing the Darién Gap: This dense jungle between Colombia and Panama is one of the most dangerous migration routes. Migrants face extreme weather, wild animals, and criminal gangs engaged in robbery, kidnapping, and violence
 - » Traversing Central America: Migrants bribe officials while traveling through Costa Rica, Nicaragua, Honduras, and Guatemala.
 - » Crossing into the U.S.: The final hurdle involves entering the U.S. through the Rio Grande or scaling border fences, often facing the risk of arrest.

High Costs and Exploitation by Smugglers:

The cost of unauthorized migration via dunki routes is extremely high. Smugglers charge anywhere between ₹30-40 lakh to ₹1 crore per migrant. Many migrants take on debt or sell property to finance their journey, making them vulnerable to further exploitation. Smuggling networks operate through encrypted communication channels and social media, luring desperate individuals with false promises.

Conclusion:

- The deportation of Indian nationals via U.S. military aircraft reflects the U.S. government's intensified immigration enforcement measures. While the U.S. has the sovereign right to control its borders, the use of military resources raises ethical, diplomatic, and legal concerns. Addressing the root causes of illegal migration requires a multi-pronged approach that includes:
 - » Strengthening legal migration channels by expanding work visas and skill-based migration programs.
 - » Enhancing India-U.S. cooperation on migration management, including tackling human smuggling networks.
 - Ensuring the protection of migrants' rights by providing humane treatment to deportees and preventing exploitation.
- By fostering bilateral collaboration and implementing policies that balance security with humanitarian concerns, both India and the U.S. can develop a more effective and ethical approach to migration challenges.

Short Issues

The Cook Islands-China Agreement

Context:

The Cook Islands and China recently signed an "action plan for the comprehensive strategic partnership," marking a significant development in the Pacific region. Signed by Cook Islands Prime Minister Mark Brown and Chinese Premier Li Qiang, the agreement outlines cooperation in key sectors such as trade, investment, infrastructure, transport, and ocean science.

Geopolitical Significance:

The Cook Islands' decision to enhance relations with China takes place within the broader context of Beijing's expanding influence in the Pacific. Historically, the region has been influenced by Western allies, particularly the United States,



Australia, and New Zealand.

 China's expanding presence in the Pacific is seen as a strategic shift, with potential implications for diplomatic alignments and regional security.

Economic and Strategic Importance:

- Although small in population (approximately 17,000 people), the Cook Islands holds considerable geopolitical significance. The nation, along with 13 other Pacific island countries, has jurisdiction over vast maritime zones covering approximately 15% of the Earth's surface.
- China's Strategic Interests: The Cook Islands' ability to form independent international agreements makes it a significant diplomatic partner.
- Geopolitical Competition: The agreement strengthens China's presence in a region that has historically been aligned with Western powers.
- Potential Economic Benefits: Enhanced cooperation in trade, investment, and infrastructure could contribute to the Cook Islands' economic growth.



Deep-Sea Mining and Resource Extraction:

- One of the most significant aspects of the agreement relates to seabed mineral research and deep-sea mining. The Cook Islands is home to vast deposits of polymetallic nodules, containing valuable minerals such as nickel and cobalt, which are essential for industries like battery production, electronics, and defense technology.
- China's Resource Strategy: China, a dominant force in global rare earth processing, is actively seeking alternative sources of critical minerals.
- Economic Potential vs. Environmental Concerns: While deep-sea mining presents

- economic opportunities, it also raises environmental concerns, attracting international scrutiny.
- Future Developments: The collaboration between the Cook Islands and China in this sector may influence future developments in mineral extraction, with implications for the Pacific's resource economy.

Maritime Security and Regional Stability

- Another crucial aspect of the agreement involves maritime security and the management of exclusive economic zones (EEZs).
- Strategic Waterways: The agreement may influence control over key Pacific maritime routes.
- China's Prior Security Engagements: China has previously pursued security arrangements with Pacific nations, including the Solomon Islands, prompting discussions on regional military access.
- Future Considerations: While the agreement does not explicitly include military provisions, the potential for expanding security cooperation in the future remains an area of interest.

Conclusion:

The Cook Islands' strategic partnership with China represents a development in the Pacific's geopolitical landscape. While it creates economic opportunities in trade and resource development, it also raises discussions regarding regional power relations, security cooperation, and environmental sustainability. As China continues to engage with Pacific nations, responses from countries such as New Zealand, Australia, and the United States will play a role in shaping the region's future economic and strategic framework.

The Eighth Indian Ocean Conference (IOC)

Context:

External Affairs Minister (EAM) S. Jaishankar recently addressed the Eighth Indian Ocean Conference (IOC) held in Muscat, Oman, where he discussed the current geopolitical challenges impacting the Indian Ocean region. India, in partnership with Singapore and Oman, is hosted the Eighth Indian Ocean Conference (IOC) in Muscat. Oman.

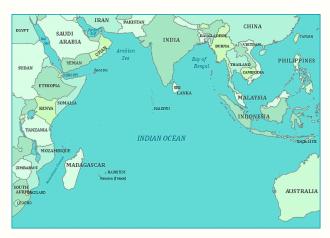
Issues Addressed:

Geopolitical Instability: The Foreign Minister



highlighted the instability in both West Asia and the Indo-Pacific. Disruptions to global shipping due to conflicts in West Asia and rising tensions in the Indo-Pacific were emphasized, with a call to respect international law and avoid unilateral changes to the status quo.

- Adherence to Agreements: He stressed the importance of nations adhering to agreements and respecting international norms to maintain regional stability and security.
- Challenges for Littoral States: The issue of resource constraints, debt burdens, and Sustainable Development Goals (SDG) challenges faced by island nations in the Indian Ocean was raised. These complications affect the monitoring of Exclusive Economic Zones (EEZ) and efforts to prevent illegal activities.
- Rebuilding Connectivity: There was a focus on the need for transparent and inclusive connectivity initiatives to rebuild after colonial disruptions and ensure equal benefits for all nations in the region.
- Security Concerns: Concerns were raised about illegal trafficking, terrorism, and the protection of fishing interests in the Indian Ocean. Regional cooperation was called for to effectively address these pressing issues.



Importance of the Indian Ocean:

- Cultural and Civilizational Connect: Unlike the geopolitical "Indo-Pacific," the Indian Ocean is a largely peaceful region with deep historical, cultural, and civilizational ties. Spanning the shores of 26 countries, it serves as a lifeline for landlocked nations like Nepal and Bhutan, linking them to global trade.
- Economic Importance: The Indian Ocean is a

- crucial trade route, handling 70% of the world's container traffic. It facilitates 80% of India's external trade and 90% of its energy trade, making it a critical global economic hub.
- Strategic Importance: The Indian Ocean also holds strategic significance, with increasing military and commercial activities. Global powers like the US, UK, and France maintain a strong presence in the region, and China is actively investing to expand its influence.

Steps Taken by India to Enhance its Maritime Influence and Key Concerns

- Steps Taken: In 2015, India launched the SAGAR (Security and Growth for All in the Region) initiative to enhance its maritime influence and ensure regional security.
- Key Concerns: India faces several challenges in the region, including piracy, terrorism, illegal fishing, and human trafficking. Additionally, issues like climate change, rising sea levels, and the influence of Chinese companies, such as Huawei, in undersea communication networks, require attention.

India-US TRUST Initiative

Context:

The India-US TRUST Initiative was introduced during the recent visit of India's Prime Minister to the United States. India, as the second-largest manufacturer of active pharmaceutical ingredients (APIs) after China, is expected to benefit from this initiative, particularly in securing essential mineral supplies for pharmaceutical production.

About India-US TRUST Initiative:

- The initiative is designed to enhance cooperation between India and the United States in the critical minerals sector, focusing on lithium, rare earth elements (REEs), and other strategic resources.
- It builds upon India's recent inclusion in the US-led Minerals Security Finance Network (MSFN) and the Minerals Security Partnership (MSP).

Key objectives of the initiative include:

- Diversifying and securing critical mineral supply chains to reduce dependence on any single source.
- Facilitating technology transfers and addressing export controls to improve trade and innovation in strategic industries.



- Strengthening high-tech commerce across sectors such as defense, artificial intelligence, semiconductors, and biotechnology.
- Developing supply chains for pharmaceuticals, particularly for minerals like lithium and zinc, which are essential for API production.
- Encouraging collaboration among governments, research institutions, and private industry to advance innovation and sustainable development.

Mineral Security Partnership (MSP):

The Mineral Security Partnership (MSP) is a global initiative launched in 2022 to mitigate risks in critical mineral supply chains by fostering investments in mineral extraction, processing, and recycling.

Membership and Funding:

- » The MSP consists of 14 countries and the European Commission, collectively accounting for more than 50% of global GDP.
- » Key financial institutions involved include the US International Development Finance Corporation (DFC), European Investment Bank (EIB), and Japan International Cooperation Agency (JICA).
- » The funding is not restricted to MSP member nations, and investments are aimed at global projects to create diversified supply chains.
- » India became a member of the MSP in 2023 and contributes to strengthening critical mineral supply chains on a global scale.

Critical Minerals and Their Importance:

- Critical minerals play a key role in modern technology but are often subject to supply chain vulnerabilities due to limited production sources and geopolitical factors.
 - » Example: Lithium, Cobalt, Nickel, Copper, and Rare Earth Elements (REEs).
- India has identified 30 critical minerals, including Antimony, Graphite, Gallium, and Molybdenum, which are essential for industries such as telecommunications, electric vehicles, renewable energy, and defense.

Significance of Critical Minerals:

- » Economic: Integral to industries such as electronics, electric vehicles, and telecommunications.
- » Environmental: Essential for renewable energy technologies, including solar panels, wind turbines, and semiconductors.

» Security: Crucial for defense applications, including aircraft and missile technologies.

Conclusion:

The India-US TRUST Initiative represents a strategic step in strengthening critical mineral supply chains and expanding bilateral cooperation in key industrial sectors. While the initiative does not grant Indian companies the same tax incentives under the US Inflation Reduction Act (IRA) as Japan, it provides opportunities for collaboration in high-tech industries. By building on previous efforts under the MSFN and MSP, the initiative aims to create resilient and diversified supply chains, benefiting both India and the United States.

Crisis in the Democratic Republic of Congo

Context:

The Democratic Republic of Congo (DRC) is facing a major crisis after the M23 rebel group, reportedly supported by Rwanda, captured Goma. This city, rich in minerals, lies on the border between the two countries. Since the fighting began in January 2025, over 2,900 people have died, and nearly 700,000 have been displaced, according to the UN. The conflict is now spreading toward Bukavu, another important city in eastern DRC.



Reasons behind the Conflict

While ethnic tensions between Hutus and Tutsis

52



are a major cause, competition over minerals is also driving the conflict.

- Eastern DRC is rich in Coltan, a mineral used in smartphones and other electronics.
- The DRC holds about 40% of the world's Coltan supply. Controlling cities like Goma helps M23 gain access to these valuable resources.



Historical Background:

- Tensions between the Hutus and Tutsis date back to colonial rule when European powers favored the Tutsis, giving them administrative roles. This created resentment among the Hutus, who took power in a 1959 revolution, forcing many Tutsis to flee.
- In 1994, the assassination of Rwanda's Hutu President Juvénal Habyarimana triggered a genocide in which Hutu extremists killed around 800,000 Tutsis and moderate Hutus. The killings stopped when the Tutsi-led Rwandan Patriotic Front (RPF), led by Paul Kagame, took control of Rwanda. Kagame has remained in power since 2000.
- After the genocide, around two million Hutus, including those responsible for the killings, fled to eastern DRC. The region is now home to over 120 armed groups, including the Hutu-led Democratic Forces for the Liberation of Rwanda (FDLR) and

the M23, which claims to represent the Tutsi community.

Who are the M23 Rebels?

- The M23 rebel group was formed in 2012 by former soldiers who had been part of another rebel group, the National Congress for the Defence of the People (CNDP). In 2009, the DRC government had promised to integrate CNDP fighters into its army, but when this did not happen, the M23 was created.
- M23 first captured Goma in 2012 but withdrew after a peace agreement. In 2022, they resurfaced, claiming that the government had not kept its promises. The UN has accused them of committing war crimes.

Conclusion:

The crisis in eastern DRC is a result of deep-rooted ethnic conflicts and economic rivalries. While historical tensions between Hutus and Tutsis remain a driving force, competition over valuable minerals has intensified the conflict. The situation remains volatile, with regional actors taking different stances. Without a comprehensive peace effort, the fighting is likely to continue, further destabilizing the region.

Indian PM's Visit to France

Context:

Prime Minister Narendra Modi's recent visit to France has deepened India-France relations across various sectors, including defense, nuclear energy, and artificial intelligence (AI).

Issues discussed during the visit:

- Nuclear Energy Cooperation: India and France have agreed to collaborate on nuclear energy projects, particularly on developing modern nuclear reactors.
 - » A major focus was on the Jaitapur nuclear power plant project and the development of Small Modular Reactors (SMRs), which are seen as an innovative future solution for civilian nuclear energy.
- **Defense Cooperation:** Defense collaboration remains a central theme, with discussions surrounding the procurement of submarines, missile systems, aircraft, and helicopter engines.
 - The joint statement highlighted India's invitation for the French Army to explore



- acquiring India's Pinaka Multi-Barrel Rocket Launcher (MBRL) system, marking a milestone in defense relations.
- » France has been included as an observer in the Eurodrone MALE program, emphasizing strengthened cooperation in defense equipment programs.
- Artificial Intelligence (AI): Modi and Macron launched an "India-France Roadmap on Artificial Intelligence" aimed at fostering the safe and ethical development of AI, reflecting their shared philosophical approach to AI's role in societal development. The roadmap underscores cooperation in AI that is secure, open, and trustworthy.
- Collaboration in Third Countries: The two leaders also discussed their cooperation in third countries, particularly in the Indo-Pacific region.
 - » They inaugurated the "India-France Indo-Pacific Triangular Development Cooperation," aimed at supporting climate and SDG-focused projects in third countries. This aligns with both nations' broader strategic interests in the region.
- Economic and People-to-People Ties: The visit also focused on strengthening economic ties through initiatives such as supporting Indian startups at France's Station F incubator and expanding India's real-time payment system, UPI, to France.
 - » Both nations also launched the "India-France Year of Innovation," which will be celebrated starting in March 2026.

India-France Relations:

- India and France have a long-standing relationship, underpinned by mutual respect and shared values. The diplomatic ties between the two nations date back to 1947, when India became an independent nation, and these relations were formally upgraded to a strategic partnership in 1998.
- Over the years, the partnership has evolved and deepened, encompassing a wide range of sectors such as defense, trade, nuclear energy, climate change, and cultural exchanges.
- Both countries are united by their commitment to the principles of the United Nations, a strong belief in international law, and the promotion of democracy, human rights, and peace.

PM Narendra Modi's Visit to France 10th to 12th February 2025 PM to co-chair the Al Action > PM to inaugurate India's Summit with world leaders and first consulate in France, global tech CEOs in Marseille > PM to visit the International PM to review progress on the 2047 Horizon Roadmap for the Thermonuclear Experimental India-France strategic Reactor (ITER) project partnership PM to pay tribute to Indian soldiers of World Wars I and II at Mazargues War Cemetery

Conclusion:

The Modi-France visit marks a significant step in enhancing bilateral ties across key areas such as defense, nuclear energy, artificial intelligence, and economic cooperation. The strategic alignment between India and France on defense technologies, nuclear energy, and technological innovation reflects a deeper, more collaborative partnership. Moreover, the inclusion of India in international defense and technological programs further cements the growing global role of both nations.

AI Action Summit 2025

Context:

The AI Action Summit, held recently in Paris, concluded with the signing of the "Inclusive and Sustainable Artificial Intelligence (AI) for People and the Planet" statement by over 50 countries, including India, China, and the European Commission. However, the U.S. and the U.K. abstained from joining.

Key Outcomes of the Summit:

- Coalition for Environmentally Sustainable AI:
 Launched by France in collaboration with UNEP &
 ITU, it aims to place AI on a more sustainable path.

 India is a founding member.
- Current AI Initiative: A global public interest partnership focusing on data, openness and accountability. It aims to raise \$2.5 billion over the



- next five years. India is a partner country.
- Paris Charter for AI of General Interest: Establishes principles of openness, accountability, participation, and transparency in Al. India adopted the charter.
- Paris Declaration on Maintaining Human Control in AI-enabled Weapon Systems: Calls for regulation of AI in warfare, but India did not endorse it.

Paris Joint Statement on Inclusive and Sustainable AI:

- The statement calls for accessible, ethical, and trustworthy AI, ensuring it benefits society while promoting international collaboration. It aims to:
 - » Reduce inequalities and help developing nations build AI capacity.
 - » Foster innovation without market monopolies.
 - » Address Al's impact on jobs and labor markets.
 - » This marked a shift from the Bletchley Declaration (2023), which focused primarily on Al safety.

Summit Themes:

- Public Interest AI: Ensuring AI serves social, economic, and environmental good.
- Future of Work: Addressing job displacement and promoting inclusive policies.
- Innovation & Culture: Balancing Al growth with cultural and creative industry protection.
- Trust in AI Enhancing transparency, security, and safety.
- Global AI Governance: Creating an inclusive international framework for AI regulation.

Understanding AI:

- Artificial Intelligence (AI) enables machines to learn, reason, and perform human-like tasks. It operates through:
 - » **Machine Learning (ML):** Algorithms that learn from data to improve decision-making.
 - » Deep Learning: Neural networks that mimic the human brain, excelling in image and speech recognition.
 - » Natural Language Processing (NLP): Al's ability to understand and respond to human language, as seen in voice assistants like Siri and Alexa.

AI's Growing Energy Demand:

 According to the International Energy Agency (IEA), data centers powering AI already consume 1-2% of global electricity. This is expected to rise significantly in the coming years due to Al's growing energy needs.

AI Action Summit Series

- » 2023 UK (Bletchley Declaration on Al safety).
- » 2024 South Korea (Al policy and governance).
- » 2025 France (co-chaired by India) (Focus on Al safety, innovation, governance, and future of work).
- The Paris Summit reinforces India's role in Al governance and marks a significant step toward global Al collaboration for a sustainable future.

Bilateral Investment Treaty with India

Context:

Switzerland and Liechtenstein, two members of the European Free Trade Association (EFTA), are intensifying efforts to secure a Bilateral Investment Treaty (BIT) with India. This push follows a trade agreement signed by the EFTA and India in March 2024, which aims for a significant \$100 billion investment over the next 15 years.

Why Switzerland and Liechtenstein want a BIT with India?

Tax Issues and the Nestlé Case:

- » In December 2024, Switzerland suspended the MFN clause in the Double Taxation Avoidance Agreement (DTAA) of 1994.
- » India's Supreme Court ruled that the DTAA could not be enforced unless officially notified under the Income Tax Act, leading to higher taxes on Swiss firms like Nestlé.
- » This raised concerns for Swiss investors, making a BIT essential to protect their investments.

• India's Cancellation of Old BITs:

- » India canceled its old BITs from 1993 after losing several international legal disputes involving huge sums.
- » These BITs favored India's control over investor rights.
- Without BITs, foreign investors lacked legal protection, prompting Switzerland and Liechtenstein to push for a new agreement.

• India's Changing Investment Rules:

» India's 2016 BIT model required investors



- to exhaust all legal options in India before seeking international arbitration.
- » Many Western trade partners found this rule too restrictive and urged India to adopt a more investor-friendly approach.



India's Shift Towards a More Investor-Friendly BIT:

- Mentioned in the Union Budget: The government has acknowledged investor concerns and regulatory burdens in its economic policies.
- Ongoing Negotiations: India is actively discussing BITs with the UK and the European Union, indicating a broader shift toward liberalized investment policies.
- Learning from the UAE Treaty: India's recent BIT with the UAE includes:
 - » Protections for foreign portfolio investors.
 - » Entity-based safeguards.
 - » Balanced investor-state dispute resolution mechanisms.

How a BIT with Switzerland and Liechtenstein Can Benefit India:

- Boosting Foreign Investment:
 - » A Bilateral Investment Treaty (BIT) would increase investor confidence, leading to more long-term investments in India.
 - » Sectors like pharmaceuticals, precision engineering, and financial services would benefit from stronger legal protections.
- Following Global Trade Standards:
 - » By updating its investment rules, India aligns

- with international best practices, making it a more attractive place for foreign investors.
- » Issues like Switzerland's withdrawal of Most-Favoured-Nation (MFN) status could be resolved through structured BIT talks.

Economic and Strategic Advantages:

- » A strong BIT will support India's Make in India program and infrastructure projects.
- » Clear and stable investment policies will help India attract more trade deals and global partnerships.

Conclusion:

The demand for a Bilateral Investment Treaty (BIT) between India and Switzerland-Liechtenstein is an important step in India's changing trade and investment policies. India is trying to protect its own interests while also ensuring foreign investors feel secure. If successful, this BIT could serve as a model for future investment agreements with other countries. A well-planned BIT would strengthen India's economic ties with EFTA, making it a more attractive and trustworthy place for foreign investments. This, in turn, would boost economic growth and global trade partnerships.

India and U.K. Strengthen Defence Cooperation at Aero India 2025

Context:

India and the United Kingdom have taken significant steps to enhance bilateral defence cooperation with the formal launch of the Defence Partnership—India (DP-I) and several key agreements announced at Aero India 2025. These agreements focus on air defence systems, missile production, and naval advancements, further strengthening India's self-reliance in defence manufacturing.

Launch of Defence Partnership-India (DP-I):

The U.K. Ministry of Defence has established DP-I, a dedicated cell aimed at deepening defence collaboration with India. This initiative will serve as a centralized platform to facilitate joint projects, streamline cooperation, and enhance strategic ties between the two nations.

Key Defence Agreements and Developments:

Production of MANPADS and Lightweight Multirole Missiles (LMM):



- » A contract was signed between Thales U.K. and Bharat Dynamics Limited (BDL) for the production of Laser Beam-Riding Man Portable Air Defence Systems (LBRMs).
- » The agreement includes the supply of STARStreak high-velocity missiles and launchers, strengthening India's air defence capabilities.
- » Following this, Thales and BDL will collaborate on producing Lightweight Multirole Missiles (LMMs), integrating Indian industries into Thales' global supply chain, ensuring interoperability, and creating jobs in both nations.

Establishment of ASRAAM Assembly and Test Facility:

- » A first-of-its-kind Advanced Short-Range Airto-Air Missile (ASRAAM) assembly and test facility will be set up in Hyderabad.
- » This facility will manufacture ASRAAM missiles for India's Jaguar and Light Combat Aircraft-Mk1A, supporting domestic defence production and exports.

Maritime Cooperation and Naval Advancements:

- » A Statement of Intent (SoI) was signed for the design and development of an Integrated Full Electric Propulsion (IFEP) system for India's next-generation Landing Platform Dock (LPD) fleet.
- » Collaboration between General Electric (GE) Vernova and Bharat Heavy Electricals Limited (BHEL) aims to develop India's first maritime Land-Based Testing Facility, with LPDs expected to be operational by 2030.

Advancing India's Self-Reliance in Defence:

These agreements align with India's Atmanirbhar Bharat (self-reliant India) initiative, reinforcing its defence manufacturing capabilities while fostering technological and industrial partnerships with the U.K. The collaboration supports economic growth, security interests, and long-term strategic cooperation between the two nations.

Conclusion:

The launch of DP-I and the signing of multiple high-impact agreements at Aero India 2025 mark a new phase in India-U.K. defence relations. These initiatives will enhance India's air and naval capabilities, integrate domestic industries into the global supply chain, and

set the stage for long-term defence collaboration.

Baltic Nations Cut Ties to Russian Power Grid

Context:

In a major step, Estonia, Latvia, and Lithuania recently disconnected from the Russian power grid. This move brings them closer to fully joining the European Union's electricity network. The decision, planned for a long time, is meant to improve energy security and reduce dependence on Russia, showing the Baltic nations' effort to strengthen their ties with Europe.

Background:

- For decades, the Baltic States remained linked to Russia's IPS/UPS power grid, a legacy of the Soviet era. Even after regaining independence in the early 1990s, they continued depending on Russian infrastructure to manage grid frequencies and prevent power outages.
- Although they stopped purchasing electricity from Russia after its 2022 invasion of Ukraine, they still relied on the system for stability. However, growing security concerns and the push for greater energy independence ultimately led to the decision to sever this final link.

Implications of the Disconnection:

- **Energy Security:** Reduces the risk of power disruptions caused by geopolitical tensions.
- Stable Electricity Supply: Integration into the EU grid ensures a more reliable power source, reducing the chance of shortages.
- Renewable Energy Access: The new connection allows for greater adoption of renewable energy.
- Improved Supply Management: The EU grid offers better flexibility in balancing demand and distribution.
- Economic Growth: Stronger energy independence could attract new investments and boost economic opportunities.
- Political Significance: Symbolizes a decisive break from Russian influence and alignment with Western policies.





About the Baltic Nations:

The Baltic nations "Estonia, Latvia, and Lithuania" are located in Northern Europe along the eastern coast of the Baltic Sea. Their geographical positioning has historically placed them at the crossroads of European and Russian influence.

Borders:

» West & North: Baltic Sea

» East: Russia

» Southeast: Belarus

» Southwest: Poland & a Russian exclave (Kaliningrad)

Capitals:

» Estonia: Tallinn» Latvia: Riga» Lithuania: Vilnius

Independence & EU Membership:

- The Baltic nations first gained independence from the Russian Empire in 1918 after World War I. However, they were later occupied by the Soviet Union until the early 1990s, when they regained sovereignty.
- Today, approximately one-quarter of the populations of Estonia and Latvia are ethnic Russians, reflecting the lingering impact of Sovietera policies.

 All three countries became European Union (EU) members in 2004, strengthening their economic and political ties with the West.

Conclusion:

The Baltic nations' disconnection from the Russian power grid is a landmark decision, reinforcing their commitment to energy independence, political autonomy, and European integration. Beyond its technical implications, this move represents a strategic realignment, ensuring long-term stability, security, and economic growth while reducing Russian influence in the region.

Trump's Memo on Chabahar Port

Context:

U.S. President Donald Trump recently issued a memorandum that could have significant geopolitical and economic consequences, particularly concerning the Chabahar Port in Iran, a critical infrastructure project managed by India. The U.S. President's directive, aimed at intensifying sanctions on Iran, calls for a modification or potential rescindment of sanctions waivers related to Chabahar Port. This move has sparked concerns among various stakeholders, including India, Afghanistan, and U.S. regional allies.

Chabahar Port and Its Strategic Importance:

- Chabahar Port, located in southeastern Iran, is a vital infrastructure project managed by India under a ten-year agreement. It serves as a crucial trade route for India, enhancing connectivity with Afghanistan and Central Asia while bypassing Pakistan.
 - » Alternative Trade Route: Chabahar enables India to bypass Pakistan's restrictions, ensuring seamless trade with Afghanistan.
 - » Regional Connectivity: Strengthens India's influence in Afghanistan and Central Asia, facilitating economic and security cooperation.

Potential Implications for India:

- Strategic & Economic Impact
 - » Trade Disruptions: India's heavy investment in Chabahar facilitates trade with Afghanistan. Revoking waivers could hinder trade flows, reducing economic benefits and limiting India's regional influence.



- » Regional Isolation: Losing Chabahar access could weaken India's presence in Afghanistan and Central Asia, affecting its long-term strategic interests.
- Diplomatic Challenges:
 - » Strained India-U.S. Relations: India's continued partnership with Iran over Chabahar conflicts with U.S. sanctions, creating potential diplomatic friction.
 - » Balancing Ties with Iran and the U.S.: India must carefully navigate its relationships with both nations to protect its interests.
 - » Negotiations for Exemptions: India may push for waivers, emphasizing Chabahar's role in regional stability and counterterrorism.



- Impact on Afghanistan:
 - » Trade & Economic Stability: Chabahar plays a key role in Afghanistan's economic growth. Restricting India's access could disrupt trade, impacting Afghan businesses and livelihoods.
 - » Security Concerns: Reduced Indian involvement may weaken international efforts in counterterrorism and regional security.
- Shifting Geopolitical Alignments:
 - » Exploring Alternative Trade Routes: India may reassess its regional strategy, strengthening economic ties with Russia, China, and other global players.
 - » Leveraging Multilateral Platforms: India could turn to organizations like the Shanghai

- Cooperation Organization (SCO) and BRICS to mitigate the impact of losing Chabahar.
- » Diplomatic & Economic Consequences: India's response to this challenge will shape its global position and influence future relations with key international players.

Conclusion:

The Trump administration's move to modify or revoke Chabahar-related waivers presents a significant challenge to India's strategic, economic, and diplomatic interests. With potential disruptions to trade, regional stability, and India's geopolitical positioning, New Delhi must carefully navigate diplomatic negotiations with the U.S. The outcome will have lasting consequences on India's foreign policy, regional influence, and global standing.

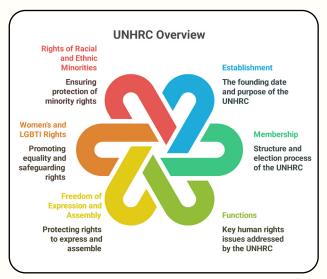
US withdrawal from UN Organisations

Context:

The US President Donald Trump recently signed an executive order withdrawing the United States from UN Human Rights Council (UNHRC). This decision was driven by concerns over perceived "anti-American bias" within this agency.

Implications of the U.S. Withdrawal:

- Loss of Influence: The U.S. withdrawal diminishes its ability to influence human rights discussions and decisions within the council.
- Reduced Scrutiny: Without active U.S. participation, there may be less rigorous scrutiny of human rights violations by other member states.
- Isolationist Tendencies: The withdrawal reflects a shift towards isolationism, potentially reducing the U.S.'s role in global governance and international cooperation.
- Impact on Allies: Allied nations may perceive the U.S. withdrawal as a retreat from multilateral commitments, affecting international relations and collaborative efforts.
- Influence on Global Norms: The U.S. departure from these bodies may embolden other nations to question or withdraw from international agreements, potentially undermining global norms and standards.



About the United Nations Human Rights Council (UNHRC):

- Establishment: The UNHRC was established on March 15, 2006, replacing the Commission on Human Rights.
- Membership: It comprises 47 members, elected

for three-year terms based on regional groups. Members serve one term before they are ineligible for immediate re-election.

- **Functions:** Investigating human rights violations in UN member states.
- Addressing critical thematic issues, including:
 - » Freedom of Expression and Assembly: Protecting individuals' rights to express themselves and assemble peacefully.
 - » Women's and LGBTI Rights: Promoting equality and safeguarding the rights of women and LGBTI individuals.
 - » Rights of Racial and Ethnic Minorities: Ensuring the protection of racial and ethnic minorities' rights.

Conclusion:

The U.S. withdrawal from the UNHRC limits its influence on global human rights issues and signals a retreat from international engagement, which could have lasting consequences for global cooperation and human rights standards.



Environment 4 & Ecology

India's Tiger Population: Growth, Challenges and Conservation Strategies

India, home to nearly 75% of the world's tigers, has witnessed a steady increase in its tiger population, reflecting the success of conservation initiatives. According to the All India Tiger Estimation 2022, the current population stands at 3,682 (range: 3,167-3,925), a significant rise from 2,967 in 2018 and 2,226 in 2014. With a 6% annual growth rate in consistently sampled areas, this increase underscores India's commitment to tiger conservation. However, this progress also presents challenges such as habitat loss, human-wildlife conflict, and socio-political influences that continue to shape tiger survival.

Conservation Strategies and Government Initiatives:

The National Tiger Conservation Authority (NTCA), under the Government of India, has adopted a three-pronged strategy to manage human-wildlife conflict and support tiger conservation:

- Material and Logistical Support: Through the Centrally Sponsored Scheme of Project Tiger, funding is provided to reserves for infrastructure development, conflict management, and staff training. Financial aid is extended for exgratia compensation, awareness campaigns, and procurement of equipment, including immobilization tools and tranquilizers.
- Restricting Habitat Interventions: Conservation efforts focus on balancing tiger populations within reserves. If a reserve reaches its carrying capacity, interventions are limited to prevent excessive wildlife spillover, thereby reducing human-animal conflicts. In buffer zones, habitat

- modifications are controlled to ensure tigers naturally disperse to other rich forested areas.
- Standard Operating Procedures (SOPs): The NTCA has issued three SOPs to manage conflict situations:
 - » Straying of Tigers in Human-Dominated Areas
 - » Tiger Attacks on Livestock
 - » Relocation of Tigers from Source Areas to Less Populated Landscapes
- These SOPs help in managing dispersing tigers, preventing livestock-related conflicts, and ensuring population balance across landscapes. Additionally, under Tiger Conservation Plans (TCPs), site-specific interventions are undertaken, supported by Project Tiger funding.

Tiger Occupancy and Habitat Expansion:

- A recent study published in Science highlights a 30% increase in tiger occupancy across 138,200 sq. km over the past two decades. While protected areas (PAs) covering 35,255 sq. km serve as prime tiger habitats, tigers have also moved into areas inhabited by nearly 60 million people.
- The study analyzed tiger recovery across 20 Indian states from 2006 to 2018, dividing landscapes into fixed 10x10 km grids. Findings reveal a gradual expansion of tiger habitats:
 - » 2006-2010: 35% of new areas colonized
 - » 2010-2014: 20% of new areas colonized
 - » 2014-2018: 45% of new areas colonized
- Tigers prefer habitats with high prey density, low human activity, and moderate economic prosperity. Their occupancy is closely linked to

61 ______www.dhyeyaias.com



the distribution of prey species such as spotted deer (Axis axis), sambar deer (Rusa unicolor), swamp deer (Rucervus duvaucelii), and gaur (Bos gaurus). These herbivores significantly influence tiger presence.

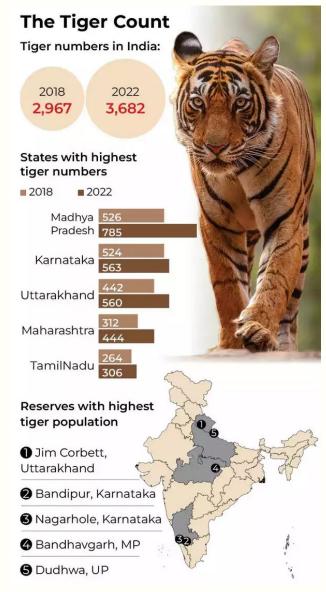
- Moreover, tiger habitats overlap with other large carnivores and megafauna:
 - » Asian elephants (59%)
 - » Gaur (84%)
 - » Leopards (62%)
 - » Dholes (68%)
 - » Sloth bears (51%)
- This reinforces the umbrella species concept, where tiger conservation indirectly benefits entire ecosystems by preserving biodiversity and contributing to carbon sequestration—an essential factor in combating climate change.

Local Tiger Extinctions and Conservation Challenges:

- Despite positive growth, local extinctions have been recorded in 17,992 sq. km over 12 years, with the highest losses occurring between:
 - » 2006-2010: 64% of total local extinctions
 - » 2010-2014: 17%
 - » 2014-2018: 19%
- The worst-affected areas are in eastern India, particularly Chhattisgarh, Odisha, and Jharkhand, where reserves such as:
 - » Guru Ghasidas
 - » Palamau
 - » Udanti-Sitanadi
 - » Similipal
 - » Satkosia
 - » Indravati
- face severe conservation threats. These regions, among India's poorest districts, suffer from bushmeat hunting, poaching, and habitat degradation, making it difficult for tigers to thrive.

Impact of Armed Conflict on Tiger Conservation:

One of the study's most striking revelations is the direct link between armed conflict and tiger extinction. Nearly 47% of tiger extinctions were recorded in areas affected by Naxalite insurgencies, particularly in Chhattisgarh (Indravati, Achanakmar, Udanti-Sitanadi) and Jharkhand (Palamau). However, regions where armed conflict has subsided, such as Nagarjunsagar-Srisailam, Amrabad, and Similipal, are witnessing tiger recovery. Yet, armed insurgencies in Odisha, Chhattisgarh, Jharkhand, Telangana, Andhra Pradesh, and Maharashtra continue to hinder conservation efforts, creating unstable environments for wildlife protection.



Human-Tiger Coexistence: Socioeconomic Impacts:

Interestingly, tigers thrive in some densely populated states like Madhya Pradesh, Maharashtra, Uttarakhand, and Karnataka,

62



where conservation efforts are supported by:

- » Eco-tourism revenue
- » Government compensation schemes
- » Community-based conservation projects
- These areas have successfully managed humanwildlife coexistence, with locals benefiting from tiger-related tourism and conservation initiatives.
- Conversely, tiger colonization rates are lowest in high-poverty rural areas, where communities rely heavily on forests for livelihood. The lack of alternative income sources and proper awareness makes conservation efforts difficult in these regions.

Sustainability and Future Conservation Strategies:

- The study emphasizes that economic prosperity plays a dual role—while sustainable eco-tourism and conservation funding enhance tiger recovery, excessive urbanization and land-use change can negatively impact tiger habitats.
- Investments in eco-development projects and community participation are crucial to ensuring sustainable conservation. Protected areas can serve as models for biodiversity conservation, poverty alleviation, and ecosystem services, ensuring local communities benefit from conservation success.

- At the same time, strict enforcement of wildlife laws is necessary to combat poaching, habitat destruction, and encroachments. Legislative measures such as:
 - » Land protection policies
 - » Prohibition of forest land diversion
 - » Sustainable development planning
 - » must be upheld to safeguard tiger populations.

Conclusion:

- India's tiger conservation efforts showcase a global success story, with legal frameworks, scientific monitoring, and government interventions playing a pivotal role. However, the challenges of habitat fragmentation, human-wildlife conflict, armed insurgencies, and socioeconomic disparities require continued attention. Future strategies must focus on:
 - » Balancing conservation with economic development
 - » Enhancing community participation
 - » Strengthening anti-poaching efforts
 - » Ensuring sustainable land-use practices
- By maintaining a holistic and inclusive approach, India can continue to lead the world in tiger conservation, securing a future where tigers and humans coexist harmoniously.

India's Milestone in Solar Energy: Achieving 100 GW Capacity

India has reached a significant milestone in its renewable energy sector by surpassing 100 GW of installed solar power capacity. This achievement marks a major step in India's transition toward sustainable energy and reinforces its position as a global leader in solar energy development. With a 500 GW non-fossil fuel energy target set for 2030, as outlined by Prime Minister Narendra Modi, the country is making remarkable strides in scaling up solar infrastructure. This rapid progress reflects India's commitment to reducing its reliance on fossil fuels, mitigating climate change, and enhancing energy security.

India's Solar Energy Growth:

India's solar energy sector has witnessed exponential growth over the past decade. Installed solar capacity has increased from 2.82 GW in 2014 to 100 GW in 2025, marking an astonishing 3,450% growth in just ten years.

Current Status of Solar Energy in India:

- As of January 31, 2025, India's total installed solar capacity stands at 100.33 GW, with an additional:
 - » 84.10 GW under implementation.
 - » 47.49 GW under tendering.
- In addition to standalone solar projects, India is rapidly advancing hybrid and round-the-clock



- (RTC) renewable energy projects that integrate solar with wind and battery storage.
- Currently, 64.67 GW of hybrid and RTC projects are either under implementation or tendered.
- The country's total renewable energy capacity, including solar, wind, hydro, and biomass, has reached 296.59 GW.

Solar Energy as the Leading Force in India's Renewable Expansion:

Solar power is the dominant contributor to India's renewable energy growth, accounting for 47% of the total installed renewable capacity. The past year alone has seen record-breaking growth, with 24.5 GW of new solar capacity added in 2024, more than doubling the installations of 2023.

Utility-Scale Solar: Key Growth Areas

- Utility-scale solar projects are large-scale solar installations that generate electricity and sell it to utility companies. They are usually defined as projects that produce 10 megawatts (MW) or more of energy. India has significantly expanded utility-scale solar projects, which account for the bulk of the newly installed capacity.
- In 2024, 18.5 GW of utility-scale solar was installed, a 2.8-fold increase compared to 2023. The leading states in utility-scale solar development include:
 - » Rajasthan
 - » Gujarat
 - » Tamil Nadu
 - » Maharashtra
 - » Madhya Pradesh
- These states have capitalized on favorable climatic conditions, government incentives, and large-scale solar parks to drive growth.

Rooftop Solar: Empowering Households and Businesses

- The rooftop solar sector in India has also experienced significant expansion, with 4.59 GW of new capacity added in 2024, marking a 53% increase compared to 2023.
- A major catalyst for this growth has been the PM Surya Ghar: Muft Bijli Yojana, introduced in 2024, which has led to nearly 900,000 rooftop solar installations across the country. This scheme has made clean energy more accessible

- and affordable for Indian households and small businesses.
- By promoting decentralized energy generation, rooftop solar helps reduce transmission losses, lower electricity bills, and improve energy independence at the household level.

India's Rise as a Global Solar Manufacturing Hub:

- India has not only expanded solar installations but also strengthened its domestic solar manufacturing sector. In 2014, India's solar module production capacity was just 2 GW. By 2024, it had increased to 60 GW, establishing India as a key global player in solar manufacturing.
- With continued policy support and investments, India aims to achieve 100 GW of solar module production capacity by 2030, reducing its dependence on imports and bolstering its position in the international solar market.

Government Policies and Initiatives Supporting Solar Energy:

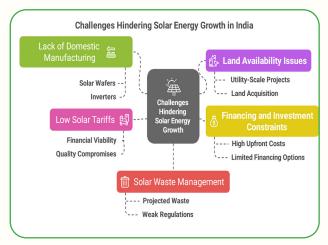
The rapid growth of India's solar energy sector is largely driven by policy support from the Ministry of New and Renewable Energy (MNRE). Several key initiatives have been implemented, such as:

- Solar Parks and Large-Scale Installations: The government has approved 45 solar parks with a total capacity of 37 GW, enabling large-scale solar energy generation. Some of the largest operational solar parks include:
 - » Pavagada Solar Park (2 GW), Karnataka
 - » Kurnool Solar Park (1 GW), Andhra Pradesh
 - » Bhadla-II Solar Park (648 MW), Rajasthan
- Rooftop Solar Promotion: Programs such as the PM Surya Ghar: Muft Bijli Yojana provide financial incentives and subsidies to encourage households and businesses to adopt rooftop solar systems.
- Domestic Solar Manufacturing Incentives: The Production-Linked Incentive (PLI) Scheme aims to boost domestic manufacturing of high-efficiency solar PV modules, reducing dependency on imports and enhancing India's global competitiveness.
- Grid Modernization and Infrastructure Development

64 ______ www.dhyeyaias.com



- » Inter-State Transmission System (ISTS) charge waivers for solar projects.
- » Strengthened Renewable Purchase Obligations (RPOs) to ensure utilities procure a higher percentage of renewable energy.
- Solar-Wind Hybrid Projects and Energy Storage: India is developing the world's largest renewable energy park, a 30 GW solar-wind hybrid project in Gujarat, to ensure continuous and stable power supply.



Challenges Hindering Solar Energy Growth:

Despite remarkable progress, India faces several challenges in scaling up solar energy:

- Lack of Domestic Manufacturing of Solar Parts: While module production has increased, India still imports key components like solar wafers and inverters, limiting its energy self-sufficiency.
- Land Availability Issues: Utility-scale solar projects require vast land areas, making land acquisition a major challenge in densely populated regions.
- Financing and Investment Constraints: High upfront costs and limited availability of affordable financing options slow down large-scale solar projects.
- Low Solar Tariffs Affecting Profitability: India enforces some of the lowest solar tariffs globally, which affects the financial viability of solar projects and leads to compromises in quality.
- Solar Waste Management: India is projected to generate 1.8 million tonnes of solar waste by 2050, yet e-waste regulations for solar panels

remain weak, posing environmental risks.

Recent Developments: Solar-Powered Electric Highways:

A major initiative in India's renewable energy expansion is the development of solar-powered electric highways. These highways will facilitate the charging of electric trucks and buses, reducing carbon emissions in the transport sector and integrating solar energy into mobility solutions.

Future Roadmap: Strengthening India's Solar Energy Sector:

To maintain its growth trajectory, India must focus on the following strategies:

- Promoting Hybrid Renewable Energy Systems: Integrating solar and wind energy can stabilize power generation and enhance efficiency.
- Expanding Transmission Infrastructure: Investing in high-voltage transmission lines will ensure efficient power distribution across the country.
- Advancing Battery Storage Solutions: Developing grid-scale battery storage will help manage intermittent solar energy supply and enhance grid reliability.
- Strengthening Distribution Companies (DISCOMs): Upgrading infrastructure, privatizing inefficient DISCOMs, and reforming billing systems can improve energy distribution efficiency.

Conclusion:

India's achievement of 100 GW solar capacities is a testament to its commitment to clean energy and sustainability. With strong government support, technological advancements, and investment in domestic manufacturing, India is well-positioned to achieve its 500 GW non-fossil fuel energy target by 2030. By addressing challenges such as manufacturing dependencies, financing gaps, and solar waste management, India can further solidify its leadership in the global solar energy landscape and move toward a more sustainable and energy-secure future.

Short Issues

Melting Glaciers and Rising Sea Levels

Context:

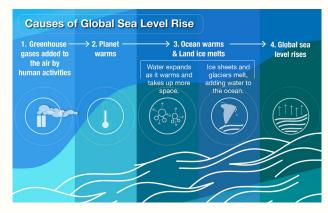
A recent study reveals that melting glaciers are expected to contribute nearly 2 cm to global sea level rise this century. Over the past 25 years, glaciers have been losing 273 billion tonnes of ice annually, significantly increasing sea levels.

Key highlights made:

- The study highlights two key factors driving this rise:
 - » Melting Glaciers/Ice Sheets: Since 2000, glaciers have lost 2%-39% of their ice, making a significant contribution to sea level rise.
 - » Thermal Expansion of Seawater: Rising global temperatures cause seawater to warm and expand, contributing to one-third to half of the global sea level rise.

Global and Regional Trends:

- Since 1880, the global sea level has risen by 21 cm. However, the rate of increase has accelerated from 0.18 cm/year in 1993 to 0.42 cm/year today, marking an unprecedented rise.
- Not all regions experience the same impact.
 For example, the southwestern Indian Ocean is witnessing a rise of 2.5 mm/year, surpassing the global average.



Impact on Coastal Cities:

 Among Indian cities, Mumbai has recorded the highest sealevel rise, increasing by 4.44 cm between 1987 and 2021, making it highly vulnerable. Other cities, including Haldia, Visakhapatnam, and Kochi, have also seen rising sea levels, posing threats to coastal infrastructure and communities.

Concerns and Consequences:

An increase in sea levels presents severe risks to human populations and ecosystems, with key consequences including:

- Coastal Flooding: Higher sea levels intensify flooding and coastal erosion, leading to land loss and displacement of communities living along coastlines.
- Case Study: Between 1990 and 2016, the West Bengal coast lost nearly 99 sq km of land, a significant loss attributed to rising sea levels.
- Global Vulnerability: A 2024 study indicates that 29% of the global population resides within 50 kilometers of the coast, with 15% living within just 10 km. These populations face heightened risks from rising sea levels.
- Intensified Storm Surges: Higher sea levels contribute to stronger storm surges, pushing seawater further inland during tropical storms. This threatens coastal ecosystems like mangroves, coral reefs, and salt marshes, which play a vital role in biodiversity conservation and freshwater protection.
- Freshwater Contamination: As seawater intrudes inland, it contaminates freshwater supplies, reducing access to clean water and disrupting daily life for affected populations.

Conclusion:

The ongoing rise in sea levels, primarily driven by melting glaciers and thermal expansion, poses an escalating risk, especially for coastal cities and vulnerable populations. Urgent climate action is necessary to reduce emissions and mitigate further damage.

The Growing Crisis on Peatlands

Context:

The study published in the journal Conservation Letters recently revealed that at least 27 per cent of the world's peatlands are located on indigenous peoples' lands,



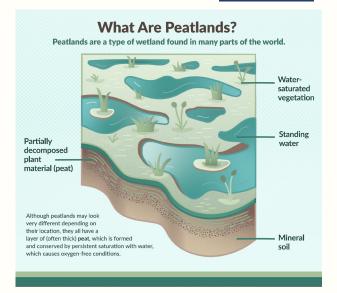
where these communities have protected them. A study reveals that peatlands, which store more carbon than all the world's forests combined, are alarmingly underprotected.

Key Findings of the Study

- Limited Protection: Only 17% of peatlands are within protected areas, with just over half of these being strictly protected.
- Protection by Region: Boreal peatlands are 16% protected, while temperate and tropical peatlands are both 27% protected, with 8% strictly protected in tropical regions.
- Regional Disparities: Countries like China and India show higher levels of protection for their peatlands.
- Comparison to Other Ecosystems: Peatlands are less protected than other ecosystems, such as mangroves (42% protected), salt marshes (50% protected), and tropical forests (38% protected).

About Peatland:

- A peatland is a type of wetland characterized by soils made up of organic matter from decaying plants, forming layers of peat. These ecosystems develop due to the incomplete decomposition of organic material, typically plant litter, which occurs because of water-logging and subsequent lack of oxygen (anoxia).
- Peatlands are unique landforms that result more from biological processes than physical ones, often exhibiting distinctive shapes and surface patterns as they evolve over time.



The Importance of Peatlands

- Carbon Storage: Despite covering only 3% of Earth's land, peatlands hold the largest amount of carbon on land.
- Natural Buffers: They act as natural water filters and help mitigate environmental disasters.
- Biodiversity and Livelihoods: Peatlands support diverse species, including freshwater fish and endangered species, while providing food and fuel to local communities.

Threats to Peatlands:

- Drainage and Land Conversion: Damaged peatlands contribute significantly to global CO2 emissions, responsible for nearly 5% of anthropogenic CO2 emissions.
- Overgrazing: Peatlands in mountainous areas are particularly vulnerable to degradation from overgrazing.
- Peat Extraction: Peat is extracted for use as fuel and in horticulture, leading to habitat destruction.

Initiatives for Protecting Peatlands:

- Global Peatland Initiative: Led by the UN Environment Programme, this initiative aims to accelerate conservation efforts.
- Ramsar Convention (1971): An international treaty dedicated to wetland conservation, including peatlands.
- Wetlands Rejuvenation Programme: Launched by India's Ministry of Environment, Forest and Climate Change (MoEFCC) in 2020, this program

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aims to restore over 500 wetlands across India.

 Amrit Dharohar Scheme (2023-24): This scheme focuses on optimizing wetland utilization in India, enhancing peatland conservation efforts.

Conclusion:

Peatlands are vital ecosystems, yet their protection remains insufficient, requiring more focused global and regional conservation efforts to safeguard their environmental, biodiversity, and carbon storage benefits.

Delhi's Seismic Risk and Shallow Earthquake

Context:

A magnitude 4.0 earthquake recently struck Delhi on February 17, 2025, with its epicenter near Dhaula Kuan, highlighting the city's ongoing earthquake risk. Delhi lies in Seismic Zone IV, meaning it is a high-risk area for earthquakes. While it is not located on an active tectonic plate boundary, fault lines and geological factors contribute to its seismic activity.

Causes and Effects:

Unlike Himalayan earthquakes caused by plate movements, the recent earthquake was an intraplate event due to "in-situ material heterogeneity." This occurs when differences in rock type, density, and fluid presence create stress in the Earth's crust, leading to localized earthquakes.

Effects of In-Situ Heterogeneity on Faults:

- Stress Accumulation: Variations in underground materials create pressure in fault zones, increasing earthquake chances.
- Localized Tremors: These earthquakes do not involve major tectonic shifts but can cause strong shaking near the epicenter.

Fault Lines Affecting Delhi:

- Himalayan Seismic Belt
 - » Though Delhi is far from the Himalayas, earthquakes from this region often affect the city.
 - » Main Central Thrust (MCT) and Main Boundary Thrust (MBT) are key fault lines responsible for major Himalayan earthquakes.
 - » Powerful quakes like the 1905 Kangra

earthquake and the 2015 Nepal earthquake (both 7.8 magnitude) were strongly felt in Delhi.

Delhi-Haridwar Ridge & Aravalli Fault System

- » The Delhi-Haridwar Ridge extends beneath the city, making it prone to intra-plate earthquakes (those occurring within a tectonic plate rather than at plate boundaries).
- » The Aravalli-Delhi Fault System is a deep underground fault line responsible for past earthquakes in and around Delhi.

Indo-Gangetic Plain & Soil Amplification

 Delhi sits on the Indo-Gangetic Plain, which consists of soft alluvial soil. Unlike hard rock, this soil amplifies earthquake waves, making tremors feel stronger and increasing the risk of structural damage.

Understanding Seismic Zones:

- A seismic zone indicates an area's earthquake risk based on past activity and geological studies. India is divided into four seismic zones:
 - » Zone II Low risk
 - » Zone III Moderate risk
 - » Zone IV High risk (Delhi falls in this category)
 - » Zone V Highest risk

SEISMIC ZONES IN INDIA

India has four seismic zones based on earthquake risk:

- Zone V (Very High Risk): Northeastern states, J&K, Himachal, Uttarakhand, Gujarat (Rann of Kutch), Andaman & Nicobar.
- Zone IV (High Risk): Delhi, parts of J&K, Himachal, Uttarakhand, Bihar, West Bengal, Haryana, Sikkim, Gujarat.
- Zone III (Moderate Risk): Maharashtra, MP, Chhattisgarh, Odisha, Tamil Nadu, Kerala, Goa, parts of Rajasthan, UP, Bihar.
- Zone II (Low Risk): Rest of India, with minimal seismic activity.





Being in Zone IV means:

- Delhi has a high chance of strong shaking during an earthquake.
- The expected earthquake intensity is around MSK-8, which means significant structural damage is likely.



 Buildings in Delhi should be designed to withstand strong tremors.

Shallow Earthquakes and their impact:

- The National Center for Seismology reported that the Delhi earthquake occurred at a depth of 5 km, making it a shallow earthquake.
- Shallow earthquakes (0-70 km depth) cause more damage because they release energy close to the surface.
- Intermediate (70-300 km) and deep earthquakes (300-700 km) lose energy before reaching the surface, making their impact weaker.

Conclusion:

Delhi's dense population, aging buildings, and soft soil make it highly vulnerable to earthquakes. To reduce risks, strict building regulations, retrofitting old structures, earthquake awareness programs, and strong disaster response systems are essential. Proactive measures will help protect lives and infrastructure from future earthquakes.

India's First Intertidal Bioblitz

Context:

Intertidal Bioblitz, a nationwide effort to document marine life across India's coastal regions, was recently organized by the Coastal Conservation Foundation and the East Coast Conservation Team. The event brought together researchers, citizen scientists, and conservationists from Mumbai, Andaman, Goa, and Visakhapatnam, shedding light on the vibrant but often overlooked intertidal ecosystems.

Major Discoveries and Findings:

- This first nationwide initiative on intertidal species was conducted over ten days and recorded more than 3,600 observations and 514 species using iNaturalist, a global citizen science tool. The findings highlight the rich marine biodiversity of India's coasts and underscore the need for further exploration and conservation efforts.
- First Record of Pseudoceros bifascia in Mainland India:
 - » A key discovery during the bioblitz was the identification of Pseudoceros bifascia, a

- flatworm species recorded for the first time from mainland India.
- » This species was previously documented only in Lakshadweep. The sighting in Visakhapatnam expands its known range and emphasizes the need for further marine research along the country's eastern coastline.

New and Rare Species Found in Visakhapatnam:

- » Over 1,533 observations were made in Visakhapatnam alone, documenting 227 species.
- » Two previously undescribed species were recorded, along with more than ten first-time species observations in the region.
- » A night tidepooling session revealed a high diversity of marine life, including butterfly fish, porcupine fish, surgeonfish, moray eels, and a juvenile angel fish.

Biodiversity Findings from Mumbai and Goa:

- » Mumbai suburban areas recorded 80 species, while the metropolitan region, led by the Coastal Conservation Foundation, documented 120 species.
- » Notable species observed include the oldwoman octopus, orange-striped hermit crab, mangrove leaf slug, tiger moon snail, and highfin moray eel.

• Intertidal Discoveries in Andaman Islands:

- » More than 70 species were recorded in the intertidal zones of Andaman across three different locations.
- » Notable sightings included bubble snails, flatworms, sea slugs, moray eels, an octopus, and a juvenile stingray.
- The unique coral-dominated landscape of the Andaman region differs significantly from the sponge and hydroid-rich coastlines of Maharashtra and Goa.

Conservation Concerns

- Habitat Degradation at Andaman's Natural Bridge:
 - » Heavy tourist activity is damaging marine habitats through trampling and feeding of marine species.
 - » Species like mantis shrimp and crabs near the bridge are adapting to human presence,



becoming bolder.

Impact of Coral Bleaching:

- » The 2024 global coral bleaching event severely affected soft corals in Andaman.
- » Conservationists are monitoring recovery efforts to assess long-term effects.

Shifts in Species Distribution:

» Pearly sea anemones are being replaced by carpet sea anemones in Andaman's tidepools, signaling potential environmental shifts.

Conclusion:

The Intertidal Bioblitz has laid the foundation for future marine biodiversity research in India. Regular monitoring can help track species changes, assess human impact, and guide conservation efforts. This inaugural event marks the beginning of an annual tradition aimed at safeguarding India's rich marine ecosystems, one tide at a time.

Concerns over Moving African Cheetahs to India

Context:

A recent study by the Centre for Wildlife Studies (CWS), published in Frontiers in Conservation Science, has raised critical concerns about India's translocation of African cheetahs. Titled Delineating the Environmental Justice Implications of an Experimental Cheetah Introduction Project in India, the study questions the project's ecological, ethical, and welfare impact, casting doubts on its long-term viability.

Key Findings

- High Mortality Rate: The project has seen a much higher mortality rate than expected. While the target survival rate was 85%, actual figures show a concerning 40% to 50% mortality rate in the first phase.
- Welfare Challenges and Stress: The cheetahs from Namibia and South Africa have undergone extreme stress, with over 90 instances of chemical immobilization and frequent veterinary interventions. Their continued medical supervision raises concerns about their adaptability and wellbeing in an unfamiliar environment.
- Ecological Unsustainability: With only around 6,500 mature African cheetahs left in the wild,

- relying on a continuous supply from Southern Africa is unsustainable. The study warns that this could further strain already vulnerable cheetah populations.
- Ethical Concerns: The project's dependence on translocating cheetahs from their natural habitats has raised ethical questions. Removing individuals from vulnerable populations for experimental reintroduction may worsen conservation challenges rather than help them.
- The study advocates for a more inclusive conservation approach—one that integrates diverse knowledge systems, cultural values, and local perceptions of wildlife. Instead of relying on artificial relocation, it suggests fostering shared spaces where humans and wildlife coexist without distress or conflict. Conservation strategies should also involve local communities in decision-making to ensure sustainable and ethical wildlife management.



About Project Cheetah

 Launched in 2022, Project Cheetah aims to reintroduce cheetahs, extinct in India since 1952, by relocating individuals from Africa.



- The initiative seeks to restore ecological balance, enhance biodiversity, and boost tourism.
- The first batch of cheetahs arrived at Kuno National Park from Namibia in 2022, followed by another from South Africa in 2023.

Conclusion:

The translocation of African cheetahs to India remains a contentious issue, with significant ecological and ethical concerns. This project underscores the need for a holistic conservation approach—one that prioritizes animal welfare while ensuring environmental sustainability. Moving forward, re-evaluating such initiatives through participatory and evidence-based frameworks is essential to benefit both wildlife and local communities in the long term.

Rising Human-Wildlife Conflict in Kerala

Context:

Kerala is witnessing a surge in human-wildlife conflicts, with Wayanad district reporting four deaths within 48 hours due to elephant attacks. The Union Environment Ministry recorded 460 deaths and 4,527 injuries from 2020 to 2024 due to encounters with wild animals. This crisis has sparked discussions in the Rajya Sabha, urging amendments to the Wildlife Protection Act, 1972, to prioritize human safety.

Extent of Human-Wildlife Conflict:

Between 2019 and 2024, elephant attacks caused 2,833 fatalities across India, with 629 deaths in 2023-24 alone. Kerala recorded 102 elephantrelated deaths in 2024.

Recent Incidents in Kerala:

- Elephant Attacks in Wayanad (2024): Four people were killed in two days, including a 27-yearold man in Attamala, a landslide-affected village.
- Tiger Attack (January 24, 2024): A tribal woman working in a coffee plantation was fatally attacked.
- These incidents highlight the urgent need for effective wildlife management.

Concerns and Challenges:

- Human safety is compromised under existing laws.
- Farmers and plantation workers face financial losses due to fear of attacks.

- Wild boars destroy key crops like banana, ginger, turmeric, and tapioca.
- Lack of a clear national strategy on human-wildlife conflict management.

Fragmentation Of Transit Paths, Unregulated Tourism And Loss Of Forests Induced By Landslides Are Pushing Elephants Into Conflict With Humans

Ears out
Head shake
Secretion from glands

Chembra
Poul
Mundakal
M

JUMBOS REMEMBER EXPERIENCES

Individual elephants are different. Many of them probably don't want to come into contact with people, but some may want to hurt people or eat crops

2 Elephants learn from/ remember past experiences. If an elephant has had a bad encounter with a person, it may become more dangerous to others in future 3 Elephant breeding herds are very skittish and will avoid confrontations but can be very dangerous if you get too close

4 Jumbo bulls can be very relaxed and difficult to chase off. Passive techniques will reduce danger

The Need for a National Strategy:

- The National Board for Wildlife (NBWL) made following suggestions:
 - » A national policy for structured conflict management.
 - Stronger state-level wildlife management for timely interventions.
 - » Legal reforms to balance conservation with human safety.

Issues with the Wildlife Protection Act, 1972

- The Wildlife Protection Act (WPA), 1972, aims to conserve wildlife and regulate activities affecting biodiversity. However, several issues persist:
 - » Weak enforcement and corruption hinder its effectiveness.
 - » Mismatches with global conservation standards like CITES.



- » No punitive measures for trading species banned internationally.
- » Lack of recognition for threatened species listed by IUCN.
- » Migratory species lack protection, despite prolonged stays in India.
- » Certain provisions aggravate human-wildlife conflicts.

Conclusion:

The increasing human-wildlife conflict in Kerala is part of a larger national crisis. Rising fatalities and economic losses demand urgent policy interventions. Amendments to the Wildlife Protection Act, 1972, along with better management strategies, are crucial to balancing wildlife conservation with human safety. Ongoing discussions will shape a sustainable approach to mitigating conflicts.

Marine Heatwaves

Context:

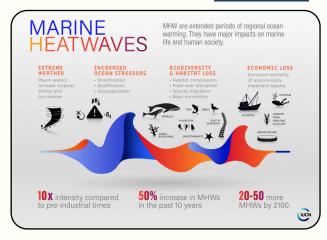
A marine heatwave (MHW) off Western Australia's coast recently led to the death of over 30,000 fish. Climate change has made such events up to 100 times more likely. These MHWs, which began in September 2024, continue to intensify, with sea surface temperatures (SST) rising by 2°C or more above average in some areas. This ranks as the second-worst MHW in the region's history, following the extreme 2010–11 event.

What are Marine Heatwaves?

- Marine heatwaves occur when sea surface temperatures rise 3–4°C above average for at least five consecutive days, lasting weeks, months, or even years. Over recent decades, MHWs have become longer, more frequent, and more intense. Studies show:
 - » Since 1982: MHW days have doubled.
 - » Past decade: A 50% increase in MHWs, as per a 2021 IUCN report.

Why has MHWs Intensified?

The primary driver is climate change, with oceans absorbing 90% of excess heat. Since 1850, global SSTs have risen nearly 0.9°C, with rapid acceleration in the last four decades. Projections indicate that MHWs will escalate dramatically with further global warming.



Impact of Marine Heatwaves:

- MHWs severely disrupt marine ecosystems:
 - » Fish Kills & Habitat Destruction: The 2010– 11 MHW caused mass fish deaths and wiped out kelp forests.
 - » Coral Bleaching: Weakens reefs, endangering marine life. The Great Barrier Reef suffered its seventh mass bleaching event in 2024.

Way Forward:

As climate change worsens, MHWs are expected to intensify, posing a major threat to marine conservation. Urgent global action is needed to mitigate climate change and protect ocean ecosystems. If warming trends continue unchecked, MHWs will become a permanent and destructive feature of the planet's oceans, necessitating immediate international cooperation to combat their impact.

Sacred Groves

Context:

The Supreme Court has recently directed the Rajasthan government to map and classify sacred groves as forests under the Wildlife Protection Act (WLPA), 1972. This decision has sparked concerns regarding its impact on community rights and traditional conservation practices.

The Issue: Conflict Between WLPA and FRA:

The Forest Rights Act (FRA), 2006, recognizes community forest resources under gram sabhas, empowering local communities to manage them. However, the Supreme Court's directive places sacred groves under government control, potentially disrupting long-standing conservation



- traditions and undermining community rights.
- India has an estimated 100,000 to 150,000 sacred groves, primarily in the Western Ghats, Central Plateau, and Northeastern states, making it home to the highest number globally.

Understanding Sacred Groves:

Sacred groves are community-protected forest patches with immense cultural and ecological significance. Conserved through traditional customs and religious beliefs, these groves act as biodiversity hotspots and crucial water recharge zones, contributing to ecological stability.



The Supreme Court Case:

- The landmark T.N. Godavarman v. Union of India case (1996) established that any land exhibiting forest characteristics should be classified as forest land. In 2004, Rajasthan's expert committee identified sacred groves as forests only if they met criteria such as covering at least 5 hectares and containing 200+ trees per hectare.
- However, the Supreme Court's ruling on December 18, 2024, overrides these conditions, directing that all sacred groves be mapped, classified as forests, and declared as community reserves.

Significance of Sacred Groves:

 Biodiversity Conservation: Sacred groves support rare and endemic species, serving as genetic reservoirs.

- Water Conservation: Many groves are linked to springs, ponds, and rivers, playing a crucial role in aquifer recharge.
- Soil Conservation & Climate Regulation: Dense vegetation stabilizes ecosystems, prevents soil erosion, and aids in land conservation.
- Cultural & Religious Importance: Sacred groves are deeply integrated into local traditions, rituals, and spiritual practices.
- Disaster Mitigation: They contribute to climate resilience, helping mitigate floods, droughts, and landslides.

Challenges to Sacred Groves:

- Urbanization & Encroachment: Rapid development threatens sacred groves due to land conversion for infrastructure and real estate projects.
- Decline in Traditional Beliefs: Modernization and loss of indigenous knowledge weaken communitydriven conservation efforts.
- Invasive Species: Non-native species like Lantana camara and Prosopis juliflora degrade native flora, impacting ecosystem health.
- Government Policies & Legal Conflicts: The WLPA's framework for community reserves conflicts with FRA's recognition of community forest rights, creating administrative challenges.

Conclusion:

While the Supreme Court's directive seeks to strengthen conservation efforts, it risks disrupting community rights and traditional ecological practices. A balanced approach that respects indigenous traditions while ensuring robust ecological protection is essential for the sustainable preservation of sacred groves.

Rising Temperature at the North Pole

Context:

In recent years, the Arctic has experienced increasing extreme temperature anomalies, and February 2025 marked a particularly alarming episode. On February 2, temperatures at the North Pole reached more than 20°C above the average, a dramatic deviation from the usual freezing conditions. This unusual warming event highlights the ongoing climate crisis, as the Arctic has



been warming at a rate four times faster than the global average since 1979.

Why is the Arctic Warming So Fast?

- The primary reason for the accelerated warming in the Arctic is the albedo effect. Sea ice, with its bright white surface, reflects a significant amount of sunlight back into space, helping to regulate temperatures. However, as the ice melts, darker ocean water or land is exposed, absorbing more heat and accelerating the warming process. This cycle, known as the "positive feedback loop," amplifies temperature increases in the region.
- Additionally, the Arctic experiences weaker convection compared to tropical regions. In the tropics, sunlight directly heats the surface, causing warm air to rise and redistribute heat. In contrast, the lack of convection in the Arctic means that heat tends to remain concentrated near the surface, further intensifying temperature rises.

The Global Implications of Arctic Warming:

- The Arctic plays a crucial role in regulating global temperatures, often referred to as the planet's "refrigerator." As this region warms, it loses its ability to act as a heat sink, with far-reaching global consequences:
 - » Rising Sea Levels: Melting Arctic ice contributes to rising sea levels, threatening coastal regions worldwide. This exacerbates flooding risks and damages infrastructure in low-lying areas.
 - » Disruption of Weather Patterns: The loss of sea ice and subsequent warming of the Arctic can disrupt atmospheric circulation, leading to more extreme weather events in the Northern Hemisphere. These may include severe winters, intense heatwaves, and unpredictable storms.
 - » Impact on Marine Life: The melting of Arctic ice threatens marine ecosystems, which rely on the stability of ice-covered waters. This has significant implications for biodiversity and global fisheries.

Conclusion:

The extreme temperature anomaly observed at the North Pole in February 2025 underscores the rapid pace of climate change, especially in the Arctic region. The combination of the albedo effect, weaker convection, and oceanic changes accelerates warming at an unprecedented rate. If these trends continue, the Arctic's role in cooling the planet may diminish, leading to widespread consequences for global weather patterns, sea levels, and ecosystems. Urgent action is needed to mitigate global warming and protect the Arctic. Addressing the warming of the region is essential to securing a stable climate and protecting future generations from the impacts of climate change.

International Big Cat Alliance

Context:

The International Big Cat Alliance (IBCA) has officially come into force as a treaty-based, inter-governmental organisation. The Ministry of External Affairs (MEA), acting as the Depository for the Framework Agreement, confirmed that five countries — the Republic of Nicaragua, the Kingdom of Eswatini, the Republic of India, the Federal Republic of Somalia, and the Republic of Liberia — have deposited their instruments of ratification, acceptance, or approval, making them the founding members of the IBCA.

About Big Cat Alliance:

- The IBCA was launched by Prime Minister Narendra Modi on April 9, 2023, during an event commemorating the 50th anniversary of Project Tiger.
- The initiative's main objective is the conservation of seven major big cat species: the Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma.
- In a cabinet meeting on February 29, 2024, the government officially approved the establishment of the IBCA, with its headquarters based in India.
- The establishment of the IBCA was spearheaded by the National Tiger Conservation Authority (NTCA), a nodal organization under the Ministry of Environment, Forest & Climate Change (MoEFCC).
- Its mission is to facilitate international collaboration and synergy in conservation efforts, consolidating successful practices and expertise for the global protection of big cats.
- As of now, 27 countries, including India, have agreed to join the IBCA, along with several international and national organizations dedicated to wildlife conservation.



The membership of the IBCA is open to all UN member countries, especially those that host these species, and to non-range countries that are interested in supporting big cat conservation efforts.

Big Cats under Protection & Their Conservation Status

Big Cat Spe- cies	Scientific Name	IUCN Status	CITES Status	Wildlife Protec- tion Act, 1972 (India)
Tiger	Panthera	Endan-	Appen-	Sched-
	tigris	gered	dix I	ule 1
Asiatic	Panthera	Endan-	Appen-	Sched-
Lion	Leo persica	gered	dix I	ule 1
Leop-	Panthera	Vulnera-	Appen-	Sched-
ard	pardus	ble	dix I	ule 1
Snow Leop- ard	Panthera uncia	Vulnera- ble	Appen- dix I	Sched- ule 1
Chee-	Acinonyx	Vulnera-	Appen-	Sched-
tah	jubatus	ble	dix I	ule 1
Jaguar	Panthera onca	Near Threat- ened	Appen- dix I	Not found in India
Puma	Puma con- color	Least Concern	Appen- dix I	Not found in India

Arunachal Pradesh Loses 110 Glaciers in 32 Years

Context:

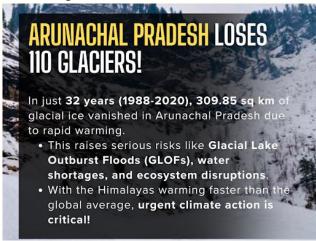
A recent study has revealed a significant loss of glaciers in the eastern Himalayas of Arunachal Pradesh, where 110 glaciers disappeared between 1988 and 2020. Conducted by researchers from Nagaland University and Cotton University, the study highlights the rapid retreat of glaciers, raising concerns about climate change, ecosystem disruption, and increasing risks of Glacial Lake Outburst Floods (GLOFs).

Key Findings of the Study:

Published in the Journal of Earth System Science,

the study used remote sensing and Geographic Information Systems (GIS) to analyze glacier retreat over 32 years. The research identified the following trends:

- » Glacial Area Loss: The glaciers in Arunachal Pradesh shrank by 309.85 square kilometers, retreating at a rate of 16.94 square kilometers per decade.
- » Reduction in Glacier Count: The number of glaciers decreased from 756 to 646, marking a 47% loss in glacial cover.
- » Geographical Characteristics: Most of the studied glaciers were located at elevations of 4,500 to 4,800 meters above sea level, with north-facing slopes (15° to 35° inclination).
- » Environmental Consequences: The retreat of these glaciers has exposed bedrock and created glacial lakes, significantly increasing the risk of GLOFs, which can cause severe flooding and destruction in downstream regions.



Climate Change in the Eastern Himalayas:

- Temperature Increase: The Himalayas have warmed by 1.6°C in the past century, with the eastern Himalayas warming at 0.1° to 0.8°C per decade—a rate surpassing the global average.
- Future Projections: By the end of the century, the region is expected to experience a temperature rise of 5-6°C and an increase in precipitation by 20-30%.
- Impact on Small Glaciers: Glaciers smaller than 5 square kilometers are retreating at the fastest rate, making them particularly vulnerable to climate variations.

5



What are Glacial Lakes?

- Glacial lakes are water bodies formed by melting ice, typically accumulating in depressions created by glacier movement. These lakes are categorized into four types based on their formation:
 - » Moraine-dammed lakes
 - » Ice-dammed lakes
 - » Erosion lakes
 - » Other types

What are Glacial Lake Outburst Floods (GLOFs)?

- GLOFs occur when a glacial lake suddenly releases water due to dam failure, leading to catastrophic flooding downstream. These events have three key characteristics:
 - » Sudden and sometimes cyclic release of water
 - » Short-lived but highly destructive floods (lasting hours to days)
 - » Large downstream river discharges causing severe damage

Notable GLOFs in Recent History:

- 2023 South Lhonak GLOF (Sikkim): Destroyed the Teesta III Dam at Chungthang.
- 2013 Chorabari Glacial Lake GLOF (Uttarakhand): Triggered severe flooding in the Mandakini River, contributing to the Kedarnath disaster.

Conclusion:

The loss of 110 glaciers in Arunachal Pradesh over three decades underscores the severe impact of climate change on the fragile Himalayan ecosystem. The rapid retreat of glaciers threatens freshwater availability, biodiversity, and local communities, while increasing the risk of catastrophic GLOFs. Given that the Himalayas serve as a crucial water source for over 1.3 billion people, urgent climate action and sustainable environmental policies are essential to mitigate further damage and preserve the region's delicate balance.

Green Cardamom's New Relatives

Context:

Recently, an international team of researchers identified six species closely related to Elettaria cardamomum, better known as green cardamom. Of these, four were previously classified under the genus Alpinia, while the remaining two were newly discovered in Kerala's Western Ghats.

The Newly Discovered Species:

- Two new species of Elettaria were found in Kerala's Western Ghats, distinguished by unique morphological traits from their more familiar cousin, Elettaria cardamomum.
- Elettaria facifera: Discovered in the Periyar Tiger Reserve, Idukki district, this species is characterized by sessile leaves and erect flowering shoots, different from the typical leafy shoots.
- Elettaria tulipifera: Found in the Agasthyamalai hills and Munnar, Idukki, this species is known for its striking tulip-shaped inflorescence, with large, bright to dark red whorled bracts that enhance its appearance.

About Cardamom Species:

- Cardamom, often called the "Queen of Spices," is derived from the seeds of the Elettaria cardamomum plant.
- Native to southern India, it belongs to the ginger family, related to other aromatic spices like turmeric and ginger.

Soil and Climate Requirements for Growing Cardamom

- Soil: Cardamom requires forest loamy soils, rich in organic matter and slightly acidic, with an ideal pH range of 5.0 to 6.5. It flourishes in humus-rich soils, with moderate to low phosphorus and medium to high potassium levels.
- Elevation: It is typically grown at elevations of 600 to 1500 meters above sea level, where cooler temperatures and humid conditions benefit its growth.
- Temperature: The optimal temperature range for cardamom is between 10°C and 35°C. It does not tolerate extreme heat or frost.
- Rainfall: Cardamom requires substantial rainfall, ideally between 1500 to 4000 mm annually. Consistent precipitation throughout the year helps maintain moisture levels necessary for healthy plant growth.

Ideal Growing Conditions for High-Yield Cardamom:

 Humus-rich, well-drained soils are essential for healthy root systems and optimal growth.



- Planting under taller trees in shaded areas helps maintain humidity and protects the plants from direct sunlight.
- By meeting the ideal soil, elevation, temperature, and rainfall conditions, farmers can ensure highquality, aromatic cardamom.
- Successful cultivation is most common in tropical and subtropical regions, especially southern India, a major producer of cardamom.

Ramsar Wetlands

Context:

India has recently added four more wetlands to the Ramsar Convention list, bringing the total number of internationally recognized wetlands in the country to 89. This milestone, announced ahead of World Wetlands Day, highlights India's commitment to wetland conservation and sustainable environmental practices.

Newly Designated Ramsar Sites:

- The four newly designated Ramsar sites are:
 - » Sakkarakottai Bird Sanctuary, Tamil Nadu
 - » Therthangal Bird Sanctuary, Tamil Nadu
 - » Khecheopalri Wetland, Sikkim
 - » Udhwa Lake Jharkhand
- With these additions, Tamil Nadu now holds the highest number of Ramsar sites in India (20), while Sikkim and Jharkhand have joined the list for the first time.

India's Position in Global Wetland Conservation:

- Globally, 2,529 wetlands are designated under the Ramsar Convention. India ranks third in the world with 89 Ramsar sites, following the United Kingdom (176) and Mexico (144).
- Over the past decade, India's Ramsar site count has surged from 26 to 89, with 47 sites added in just the last three years, reflecting a strong commitment to wetland conservation.

Significance of Wetlands:

- Wetlands are essential ecosystems that provide critical services such as:
 - » Biodiversity Conservation: Supporting diverse plant and animal species
 - » Flood Control: Absorbing excess rainwater and reducing flood risks
 - » Water Supply: Acting as natural reservoirs
 - » Carbon Sequestration: Helping combat

- climate change
- » Sustainable Livelihoods: Providing food, raw materials, and employment
- By maintaining these ecosystems, wetlands contribute to environmental balance and human well-being.

The Ramsar Convention and India's Commitment:

- The Ramsar Convention is an international treaty created for the conservation and sustainable use of wetlands. The Ramsar Convention was adopted in 1971 in the city of Ramsar, Iran.
- It is an international agreement to conserve wetlands and ensure their sustainable use. India is one of the 172 member countries of this convention and is making continuous efforts to protect its wetlands.

Conclusion:

India's expanding Ramsar wetland count reflects its dedication to ecological sustainability. The recent additions underscore the importance of ongoing conservation initiatives, ensuring the protection of these critical ecosystems for future generations.

Tiger Occupancy in India

Context:

A recent study published in Science has highlighted key findings regarding tiger occupancy in India, revealing a 30% increase in tiger habitats over the last two decades. However, the study also points to significant challenges in regions affected by poverty, armed conflict, and land-use changes, where tiger populations have seen a decline.

Key Findings of the Report:

- Increase in Tiger Occupancy: The study reported a 30% increase in tiger occupancy, covering 138,200 square kilometers, including areas that were previously unoccupied by tigers.
- Preferred Habitats: Tigers were found to prefer regions with low human presence, abundant prey, and minimal urbanization.
- Current Tiger Population: India is home to approximately 3,700 tigers, which account for 75% of the global tiger population, according to the 2023 census.

Regional Variations:



- Positive Growth in Certain Areas: Regions with high prey availability and low human interference saw an increase in tiger populations.
- Decline in Conflict-Affected Areas: Areas like Chhattisgarh and Jharkhand, which are affected by armed conflict, saw a decline in tiger numbers.
- Impact of Poverty: Regions with high rural poverty rates recorded the lowest rates of tiger colonization.
- Local Extinctions: Naxal-affected areas, particularly in Chhattisgarh and Jharkhand, experienced higher incidences of local tiger extinctions due to factors like poaching and bush meat consumption.

Implications of the Findings:

- The study suggests that tiger recovery is more likely in regions with greater political stability and less armed conflict.
- Strong conservation laws and government efforts have played a vital role in the recovery of tiger populations in several regions.
- Investments in eco-development projects that benefit local communities could help in tiger conservation efforts while improving the livelihoods of those living in proximity to tiger habitats.

About the Bengal Tiger:

- The Bengal tiger (Panthera tigris tigris) is the most common tiger subspecies, found across India, Bangladesh, China, Myanmar, Nepal, and Bhutan.
- Key Habitats: These tigers are unique for inhabiting mangrove ecosystems, particularly in the Sundarbans forest, a crucial habitat for the species.
- Population and Conservation Status: The 2023 census recorded 3,682 Bengal tigers in India. The Bengal tiger is listed as Endangered on the IUCN Red List and is protected under CITES Appendix I and Schedule I of the Wildlife Protection Act, 1972.
- Ecological Role: As flagship and umbrella species, Bengal tigers are vital for ecosystem health. Their presence indicates a healthy environment, while their decline can signal broader ecological issues.

Impact of Extreme Climate Events on India's Southwest Coast

Context:

A recent study has revealed a significant increase in extreme rainfall events along India's southwest coast, with an average rise of 0.23 mm per season. The research, conducted by experts from Cochin University of Science and Technology (Cusat), EUMETSAT, and the UK Met Office, used monsoon data from 1990 to 2023 to analyze the changing rainfall patterns.

Key highlights made:

Factors Influencing Rainfall Patterns:

- » The study focused on how vertically integrated moisture flux, particularly influenced by sea surface temperatures (SST), affects rainfall.
- » It highlighted that the warming of SSTs in the southeast Arabian Sea has been a key driver for the intensified moisture transport, leading to increased rainfall over the region.

Role of Sea Surface Temperatures:

- » Since 2014, SSTs in the southeast Arabian Sea have exceeded 28°C, creating favorable conditions for greater moisture flux.
- » This warming has contributed to more extreme rainfall events, making the southwest coast more vulnerable to climate variability.
- » The study finds a direct correlation between warming SSTs and the rise in extreme rainfall.

Comparison with the Northwest Coast:

- While the southwest coast faces heightened extreme rainfall, the northwest coast has shown an increase in average monsoon rainfall.
- » The strengthening of the dynamic component of moisture flux is linked to this increase, suggesting regional variations in climate impacts across India's coastal regions.

Implications for the Future:

The study underscores the vulnerability of the southwest coast, particularly Kerala, to climate change. With the continued warming of the Arabian Sea, extreme rainfall events are expected to intensify in the coming decades. This trend necessitates urgent climate action and adaptation strategies to mitigate the impact of these extreme weather events.

About India's Southwest Coast:

- India's Southwest Coast, also referred to as the Malabar Coast, stretches along the Arabian Sea through Karnataka and Kerala.
- Located between the Western Ghats and the ocean,



it extends from south of Goa to Kanyakumari, the southern tip of India.

 This region features a diverse landscape of beaches, cliffs, and backwaters, renowned for its rich culture, history, and vibrant fishing industry.

Madhya Pradesh became the state with the highest number of vultures in the country

Context:

Madhya Pradesh has earned the distinction of having the highest number of vultures in the country, with a total of 12,981 vultures recorded in the recent statelevel census. This marks a significant increase from the 8,397 vultures counted in 2019 and 10,845 in 2024.

Madhya Pradesh is home to 7 species of vultures, comprising 4 local and 3 migratory species. The state's efforts to conserve vulture populations seem to be paying off, with a steady increase in numbers since the census began in 2016

Vulture Species in India:

- India is home to nine species of vultures, of which four are classified as Critically Endangered, and one is listed as Endangered in the IUCN Red List of Threatened Species.
- Indian Vulture (Gyps indicus)
 - » Conservation Status: Critically Endangered
 - » Known for its long bill, the Indian Vulture is primarily found in the plains of northern and central India.

Indian White-backed Vulture (Gyps bengalensis)

- » Conservation Status: Critically Endangered
- » This species is distinguished by its white back and is commonly found across India. It has faced severe population declines in recent decades.

Red-headed Vulture (Sarcogyps calvus)

- » Conservation Status: Critically Endangered
- » Easily identified by its red head and large body, the Red-headed Vulture is found in southern and central India.

Slender-billed Vulture (Gyps tenuirostris)

- » Conservation Status: Critically Endangered
- » Recognized for its long, slender bill, this species is found mainly in the western parts of India, particularly in Rajasthan and Gujarat.
- Egyptian Vulture (Neophron percnopterus)

- Conservation Status: Endangered
- » Smaller in size compared to other vultures, the Egyptian Vulture is identifiable by its white plumage and yellow face. It is found in parts of northern India.

Cinereous Vulture (Aegypius monachus)

- » Conservation Status: Near Threatened
- This large vulture, with dark plumage and a powerful build, can be found in the Himalayas and parts of northern India.

Bearded Vulture (Gypaetus barbatus)

- » Conservation Status: Near Threatened
- » Known for its distinctive beard-like feathers and large wingspan, the Bearded Vulture is primarily found in the mountainous regions of northern India.

Himalayan Vulture (Gyps himalayensis)

- » Conservation Status: Near Threatened
- » The Himalayan Vulture, a high-altitude species, is found across the Himalayan range and other mountainous areas in India.

Griffon Vulture (Gyps fulvus)

- » Conservation Status: Least Concern
- » This species has a wide distribution across parts of India and is one of the more stable vulture populations in the country.

Issues:

- Despite the positive trend, vultures in India face significant threats, including the use of harmful veterinary drugs like diclofenac, which affects their health and reproductive ability. Though India has banned diclofenac, illegal use of such substances continues to pose a risk to vulture populations.
- Vultures rely on large open spaces and carcasses to survive. Habitat loss due to urbanization, deforestation, and agriculture expansion is a growing concern. Protecting these habitats is essential to sustaining vulture populations.
- Vultures also face threats from poaching and human-wildlife conflicts. Protecting them from these hazards requires strict law enforcement and active monitoring of their populations.

79 _____ www.dhyevaias.com

Science & Technology



India and the Paris AI Summit 2025: Shaping Global AI Governance

Artificial Intelligence (AI) is revolutionizing industries, economies, and societies across the globe. With its growing influence, structured policies and ethical frameworks have become essential to harness AI's potential while mitigating risks. Recognizing this, France hosted the AI Action Summit 2025 in Paris, where India played a crucial role as a co-chair. The summit emphasized equitable AI access, the promotion of open-source AI, and sustainable AI development, particularly for developing nations, reinforcing India's leadership in the global AI discourse.

Paris AI Summit 2025: Key Highlights

The Paris AI Summit 2025 was the third major global AI safety summit, following similar meetings in the UK (2023) and South Korea (2024). This high-profile event convened world leaders, policymakers, and technology executives to shape the future of AI governance.

Key Outcomes of the Summit:

Strengthening the India-France AI Partnership

- » India and France deepened their collaboration in Al governance, research, and policy development.
- » The partnership aimed to promote responsible AI innovation while ensuring technological autonomy for both nations.
- ❖ Global Participation and High-Profile Attendees:

- Leaders from major AI-driven economies, including the US, China, Canada, and the EU, took part.
- » Notable figures included U.S. Vice President J.D. Vance, China's Vice Premier Zhang Guoqing, and top industry leaders such as Sam Altman (OpenAI) and Sundar Pichai (Google).

Investment in AI Research & Development:

- » A \$500 million initial investment in Al research was announced, with projections to grow to \$2.5 billion.
- This funding aims to accelerate Al innovation, particularly in developing economies, ensuring Al's benefits reach all sectors of society.

India's Leadership in AI for Developing Nations:

- » India took the lead in discussions on Al accessibility and fairness, notably through panels like Al4India and CPRG (Collaborative Partnership for Responsible Governance).
- » India advocated for bias reduction in AI models and greater democratization of AI access for the Global South.

Open-Source AI & Sustainable AI Development:

- » The summit underscored the importance of open-source AI models to promote transparency and inclusivity.
- » France championed efforts to integrate clean energy solutions into AI development,



minimizing environmental impact.

Key Themes of the AI Summit 2025

Discussions at the summit revolved around several critical themes shaping the future of AI governance:

* AI for Public Good:

» Al can revolutionize healthcare, education, and governance by optimizing resource allocation and improving quality of life.

❖ The Future of Work:

- » Al is transforming the employment landscape, creating new jobs while displacing others.
- » Reskilling programs are essential to prepare the workforce for AI-driven industries.
- » Human-AI collaboration will enhance productivity across various sectors.

! Innovation & Cultural Transformation:

- » Al is reshaping arts, culture, and digital content by personalizing user experiences.
- » Al-driven platforms are influencing entertainment and media industries globally.

Trust & Ethical AI:

- » The summit emphasized transparency, accountability, and regulatory frameworks to ensure responsible AI use.
- » Tackling data privacy concerns, misinformation, and bias in AI models was a key discussion point.

Global AI Governance:

- » Harmonizing AI policies across nations ensures equitable AI benefits for all.
- » Addressing AI monopolization by a few corporations or countries remains a priority.

India's Leadership in AI Development:

India has emerged as a global AI leader, actively shaping governance frameworks and investing in AI infrastructure. Several initiatives highlight India's commitment to AI-driven progress:

National AI Mission (2024):

- » India launched a National AI Mission, developing an AI model powered by 10,000 GPUs.
- » The government offers a 40% subsidy to ensure cost-effective AI development.

Global AI Summit in New Delhi (July 2024):

- » India hosted an AI summit with 12,000 experts from 50 countries.
- » Discussions focused on ethical AI development and responsible deployment.

& Growth of India's AI Industry:

- » India's AI industry is expanding at 25-35% annually, projected to reach \$17 billion by 2027.
- This growth is fueled by a skilled workforce and a thriving startup ecosystem.

Development of India's AI Infrastructure

India is making strategic advancements in AI infrastructure to strengthen its technological independence:

Domestic GPU Development:

- » India is developing its own GPU using opensource or licensed chipsets.
- » The initiative aims to reduce reliance on foreign chipmakers and establish a competitive domestic AI ecosystem within 3-5 years.
- ❖ Foundational AI Model for India: Under the ₹10,370 crore IndiaAI Mission, India is developing a Large Language Model (LLM). Key objectives include:
 - » Collaboration with six developers for AI models tailored to India's linguistic and cultural diversity.
 - » Bias mitigation to ensure fairness in Algenerated content.

Expansion of AI Compute Infrastructure:

- » The government is procuring 18,693 GPUs from leading companies, including Yotta (9,216 GPUs), Jio Platforms, Tata Communications, and E2E Networks.
- » A Common GPU Compute Facility is being established to support AI startups and researchers.
- » Subsidized GPU access is offered at ₹150 per hour for high-end GPUs and ₹115.85 per hour for lower-end ones, making Al development more affordable.

AI for Workforce Development and Education:



To prepare for an Al-driven future, India is investing in education and skill development:

Centre of Excellence for AI in Education:

- » A₹500 crore allocation will establish a Centre of Excellence (CoE) for AI in Education.
- This builds upon India's 2023 initiative that introduced AI CoEs in Agriculture, Healthcare, and Sustainable Cities.

National Centres of Excellence for Skilling:

- » Five new National Centres of Excellence for Skilling will focus on AI industry training.
- » These centres will promote global collaborations and standardized Al certifications.

Conclusion:

India's leadership at the Paris AI Summit 2025 highlights its increasing influence in global AI governance. By advocating for ethical AI, equitable AI access, and open-source models, India is shaping a responsible and inclusive AI landscape. As AI continues to evolve, balancing technological growth with ethical, economic, and environmental considerations is crucial. India's investments in sustainable AI development, workforce skilling, and international collaboration ensure AI's benefits are widely distributed, fostering innovation and equity worldwide.

Short Issues

Tabletop Experiment to Investigate the Quantum Nature of Gravity

Context:

Recently, a team of scientists, including researchers from the Bose Institute in Kolkata, proposed a new tabletop experiment aimed at investigating whether gravity follows the laws of quantum mechanics.

General Relativity and Quantum Mechanics are two major theories in modern physics, but it has not yet been clear how to understand gravity at the quantum level. This research could be an important step toward incorporating gravity into quantum theory, which could accelerate the search for a unified theory of physics.

About the Tabletop Experiment:

- The scientists have proposed a new experiment to investigate the quantum nature of gravity. This experiment will test whether the behavior of gravity is consistent with the principles of quantum mechanics.
- In this experiment, a mass (Test Mass) is placed on two possible paths, known as superposition. Along with this, another mass (Probe Mass) exerts gravitational influence on it, causing the test mass to collapse onto one path. If gravity itself causes

- the collapse of the mass, it would indicate that the nature of gravity might be quantum.
- Previous experiments studied regions with extremely strong gravity, such as black holes. However, this new experiment focuses on investigating weak gravity, similar to the force exerted by small objects.

Quantum Mechanics and Classical Mechanics Theories:

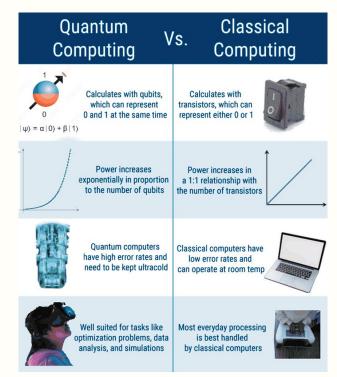
Quantum Mechanics and Classical Mechanics are two major theories in physics used to explain the behavior of objects at different scales.

Classical Mechanics:

- » Classical mechanics is capable of explaining the motion of objects that we observe in everyday life, such as cars, planets, and balls. Its rules are deterministic and predictable, meaning that if the initial position of an object is known, its motion can be fully measured and predicted.
- » Under classical physics, large objects like planets, cars, or balls behave like particles. They do not exhibit wave-like properties or create any wave patterns. For this reason, wave-particle duality applies only at the microscopic level, and it is a significant feature of quantum mechanics.

82 _____ www.dhyeyaias.com





• Quantum Mechanics:

- » On the other hand, quantum mechanics was developed to explain the behavior of particles at the atomic and subatomic levels, where classical rules do not apply. One of the most unique features of quantum mechanics is superposition, where a particle can exist in two or more states at the same time.
- » Additionally, entanglement is another quantum phenomenon, where two particles become so deeply connected that a change in one immediately affects the other, even if they are at opposite ends of the universe.
- » According to quantum theory, microscopic particles, such as electrons and photons, exhibit dual nature. They sometimes behave as particles and sometimes as waves. For example, when electrons pass through two slits in a thin wall (Double-Slit Experiment), they form a wave-like pattern.

Ban of Unapproved Drugs in India

Context:

The Indian government has recently taken decisive action by banning the production and export of drugs

containing Tapentadol and Carisoprodol after reports emerged that unapproved combinations of these drugs were being exported to West African countries. The Central Drugs Standard Control Organisation (CDSCO) conducted an audit at Aveo Pharmaceuticals in Mumbai and found regulatory violations, leading to an immediate halt in operations at the company.

About Tapentadol and Carisoprodol:

- Tapentadol is a prescription opioid analgesic used to treat moderate to severe pain, altering the way the brain and nervous system perceive pain. It shares properties with certain antidepressants and is tightly regulated due to its potential for misuse.
- Carisoprodol is a muscle relaxant used for treating muscle spasms and discomfort linked to acute musculoskeletal conditions. It is typically prescribed alongside rest and physical therapy to aid recovery.
- While both drugs are approved individually in India, their combination is not authorized. Despite this, unapproved formulations were being exported, raising concerns about safety, efficacy, and regulatory oversight.



Key Concerns:

- Opioid Crisis in West Africa: The unregulated export of these drug combinations was contributing to the opioid crisis in the region. Without proper oversight, these drugs pose a serious risk of addiction and health hazards.
- Regulatory Lapses: The illegal export of unapproved drug combinations highlights loopholes in regulatory enforcement. Despite stringent laws under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, unethical manufacturing and export practices were ongoing.

About the Central Drugs Standard Control Organisation (CDSCO):

 The CDSCO is India's national regulatory authority for ensuring the safety, efficacy, and quality of



- drugs, cosmetics, and medical devices.
- It was established under the Drugs and Cosmetics Act, 1940, and is responsible for regulating manufacturing, import, and sale of pharmaceuticals.
- Its functions include approving new drugs, conducting clinical trials, setting drug standards, monitoring imported drug quality, and coordinating with state regulatory bodies.
- Headquartered in New Delhi, the organization is led by the Drugs Controller General of India (DCGI) and operates multiple zonal, sub-zonal, port offices, and laboratories across the country.

Way Forward:

- The Indian government's crackdown underscores its commitment to preventing pharmaceutical misuse and ensuring public safety. Immediate actions—including halting production, suspending exports, and seizing unapproved drugs—are crucial to preventing further harm.
- Industry experts have supported the ban, emphasizing that this combination was unapproved globally, and its prohibition will likely deter unethical pharmaceutical practices.
- To strengthen regulatory oversight, CDSCO has recommended updating the Export No Objection Certificate (NOC) checklist, making it mandatory for drugs to have approval from both India and the importing country before export.
- By tightening regulations and enhancing compliance, India is reinforcing its role as a responsible global pharmaceutical exporter, ensuring that public health and safety remain a priority.

Majorana 1 Quantum Chip

Context:

Microsoft has unveiled Majorana 1, a groundbreaking quantum processor that marks a significant milestone in the journey toward practical quantum computing. This revolutionary chip is powered by topological qubits, which offer greater stability and lower error rates compared to traditional qubits.

About the Chip:

 The Majorana 1 chip features topological core architecture, a major breakthrough in quantum computing. It utilizes a topological superconductor—a combination of indium arsenide (a semiconductor) and aluminum (a superconductor)—creating a new state of matter known as a topoconductor. This novel material enhances the stability and scalability of the chip, setting it apart from previous quantum processors.

Advantages of Majorana 1:

- Compared to rival quantum chips from Google and IBM, Majorana 1 offers several advantages:
 - » Reduced Complexity: Requires fewer qubits to perform calculations, simplifying quantum operations.
 - » Lower Error Rates: Improves reliability and enables more fault-tolerant computing.
 - » Majorana Fermion Technology: Utilizes Majorana fermions, unique subatomic particles that are both their own particle and antiparticle, significantly enhancing error resistance in quantum computing.
- This combination makes the Majorana 1 chip a major step toward developing scalable and practical quantum computers.

Understanding Quantum Computing:

- Quantum computing leverages quantum mechanics to solve complex problems at speeds far beyond classical computers. By harnessing quantum phenomena like superposition and entanglement, quantum computers can unlock capabilities unattainable by traditional systems.
 - » Qubits: Unlike classical bits (which exist as 0 or 1), qubits can exist in multiple states simultaneously due to superposition; allowing quantum computers to perform massive parallel computations.
 - » Entanglement: Qubits can become entangled, meaning their states are interconnected, even across vast distances. This enables faster and more efficient problem-solving, giving quantum computers a significant computational advantage.

Way forward:

The Majorana 1 chip holds immense potential for real-world applications, particularly when integrated with artificial intelligence (AI). This innovation could revolutionize industries, paving the way for the next generation of computing technology. With its fault-tolerant architecture and topological qubits, the Majorana 1 chip is a critical step toward realizing the full power of quantum computing.

84 _____ www.dhyeyaias.com



Bird Flu Outbreak in Andhra Pradesh

Context:

The recent detection of avian influenza (bird flu) cases in certain districts of Andhra Pradesh has prompted the state government to take urgent measures to contain its spread. As a result, four areas—Badampudi in Eluru district, Velpuru and Kanuru in West Godavari, and Gampalagudem in Krishna district—have been declared as Biosecurity Zones, imposing strict security protocols.

Security Measures and Biosecurity Zones:

- The government has implemented a three-layered security system in these zones to control the movement of both people and poultry.
- The Red Zone, within a one-kilometer radius of the infected areas, restricts the movement of both birds and people.
- The Surveillance Area, extending from one to ten kilometers, allows monitoring but does not impose mobility restrictions.

About Avian Influenza (Bird Flu):

- Avian Influenza, commonly known as bird flu, is a viral infection that primarily affects birds but can also spread to mammals, including humans. It is a zoonotic disease, which means it can transfer from animals to humans.
- Transmission: The virus is typically transmitted to humans through close contact with infected birds or contaminated environments, such as in backyard poultry farms or live bird markets.
- It can spread through direct contact with infected birds, their droppings, or contaminated water and surfaces.

Symptoms:

- Respiratory Symptoms: These can include a cough, shortness of breath, difficulty breathing, and sore throat.
- Non-Respiratory Symptoms: Fatigue, muscle aches, and body aches are common.
- Asymptomatic Infection: Some individuals, particularly those exposed to infected animals or environments, may not show symptoms despite being infected.

Examples of Avian Influenza Viruses:

 H5N1: First identified in 1997 in Hong Kong, it has caused significant outbreaks in birds and sporadic

- human infections with high mortality rates.
- H7N9: Emerged in 2013 in China, causing severe respiratory illness in humans.
- **H5N2:** Recently reported for its first human infection case in Mexico.

Differences between H5N1 and H5N2:

Differences between H5N1 and H5N2:				
Point of Difference	H5N1	H5N2		
Origin	Emerged in 1996 from the goose/ Guangdong lineage and has caused widespread bird outbreaks.	Circulating among poultry and wild birds in Mexico since the mid-1990s.		
Spread	Affects both birds and mammals, including humans, with close contact with infected birds being the primary source.	Primarily affects birds; human infections are rare.		
Human- to-Human	No evidence of human-to-human transmission as of now.	Although human infections have occurred, human-to-human transmission is still unlikely.		
Vaccine	No specific vaccines for human infections, but an mRNA vaccine is under development. Poultry vaccines exist.	No human vaccines; poultry vaccines exist, but human protection is limited.		
Symptoms	Severe respiratory illness, including fever, shortness of breath, and difficulty breathing.	Symptoms include fever, shortness of breath, and general discomfort.		

Conclusion:

While immediate containment measures are vital, a sustained effort that combines scientific research, public awareness, support for farmers, and long-term biosecurity strategies will ensure a more resilient



system for managing future outbreaks of bird flu in the state.

Einstein Rings

Context:

The European Space Agency's (ESA) Euclid space telescope recently captured a rare Einstein ring around the galaxy NGC 6505, nearly 590 million light-years away. First discovered in the 19th century, this galaxy now reveals a fascinating cosmic phenomenon.

The photos, taken in September 2023 and released recently, show a bright central spot with a glowing, cloudy ring. This discovery helps scientists understand how gravity bends light and reveals hidden material in the universe.

What is an Einstein Ring?

- An Einstein ring forms when a massive object's gravity, like that of a galaxy, bends the light from an even more distant galaxy. In this case, NGC 6505 bends the light of a galaxy located 4.42 billion light-years away.
- This results in a bright, circular ring surrounding the closer galaxy. First predicted by Albert Einstein, this effect demonstrates how gravity can alter the path of light.



How Light Bending Works:

When light from a distant galaxy passes a massive object, its strong gravity changes the light's direction. This bending makes the background galaxy appear brighter and can sometimes form a ring around the foreground galaxy. Although rare—seen in less than 1% of galaxies—Einstein rings help scientists study the mass and structure of galaxies.

Why this Discovery Matters:

 Studying Dark Matter: Though dark matter does not emit light, its presence is revealed through gravity. The bending of light helps scientists

- determine the amount and location of dark matter around galaxies.
- Observing Distant Galaxies: Gravitational lensing enables the observation of galaxies that would otherwise be too faint to detect, offering insights into the early universe.
- Mapping the Universe: The Euclid space telescope aims to create a detailed cosmic map, making discoveries like Einstein rings essential for understanding the universe's structure.

Euclid's Mission and Future Prospects:

- The Euclid mission is part of ESA's Cosmic Vision programme, dedicated to exploring the universe's origins, components, and fundamental laws. Named after Greek mathematician Euclid of Alexandria, the mission primarily focuses on the universe's dark side—dark matter and dark energy.
- The telescope will construct a three-dimensional map of the universe (with time as the third dimension), by observing billions of galaxies up to 10 billion light-years away. This will help scientists understand:
 - » The distribution of both visible and hidden material in the universe.
 - The forces responsible for the universe's expansion.
 - » The overall structure and history of the cosmos.

Conclusion:

Euclid's capture of an Einstein ring around NGC 6505 marks a major advancement in understanding the universe. It provides a crucial tool for studying hidden cosmic material. As Euclid continues its mission, it promises even more discoveries that will deepen our knowledge of space and the forces shaping it.

Vaccine for Lumpy Skin Disease

Context:

Recently, the vaccine, named BIOLUMPIVAXIN, has received approval from India's drug regulatory authority, the Central Drugs Standard Control Organisation (CDSCO).

About the BIOLUMPIVAXIN:

 Developed by Bharat Biotech in collaboration with the Indian Council for Agricultural Research (ICAR),



it is the world's first vaccine for Lumpy Skin Disease (LSD) in cattle.

- The vaccine has undergone rigorous testing at the ICAR-National Research Centre on Equines (ICAR-NRCE) in Hisar and the Indian Veterinary Research Institute (IVRI) to ensure its quality, safety, and effectiveness meet global standards.
- It is an indigenous live-attenuated marker vaccine, developed using the LSD virus/Ranchi/2019 strain from ICAR-NRCE, in collaboration with Bharat Biotech's Biovet.

About Lumpy Skin Disease (LSD):

- Lumpy Skin Disease is a highly infectious viral disease affecting cattle, characterized by:
 - » Fever
 - » Swelling of the skin
 - » Enlarged lymph nodes
 - » Reduced milk production
- The disease has posed a major threat to the dairy industry, with outbreaks causing extensive economic damage. During the 2022 outbreak, the morbidity rate reached 80%, with case fatality rates as high as 67%. The disease is primarily spread by vector insects, such as mosquitoes and ticks.
- Since its first outbreak in India in 2019, LSD has rapidly spread across multiple states, including Gujarat, Rajasthan, Maharashtra, and Uttar Pradesh. It has led to a significant decline in milk production and financial losses totaling over ₹18,337 crore.



What Are Vaccines?

- A vaccine is a biological preparation that helps the body develop immunity against a specific infectious disease. It contains an agent that resembles a disease-causing microorganism, made from:
 - » A weakened or inactivated form of the microbe
 - » Its toxins
 - » Its surface proteins
- When administered, the vaccine triggers an immune response, allowing the body to recognize and eliminate the pathogen if encountered in the future.

How do Vaccines work?

- Vaccines train the immune system to recognize and fight specific pathogens (viruses or bacteria) without causing illness.
- Initial Infection and Immune Response: When a virus or bacterium enters the body, it begins to multiply, causing an infection. The immune system takes time to recognize and fight it.
- Creation of Memory Cells: Once the body successfully fights off the infection, the immune system retains "memory cells", which remember the pathogen.
- Faster Response Upon Future Exposure: If the body encounters the same pathogen again, the immune system quickly recognizes it and produces antibodies efficiently, preventing or reducing illness severity.

Conclusion:

The approval of BIOLUMPIVAXIN marks a significant breakthrough in controlling LSD and protecting cattle health, ensuring stability in the dairy industry.

Innovative Conductive Textile by IIT Guwahati

Context:

Researchers at the Indian Institute of Technology (IIT) Guwahati have developed a water-repellent, conductive textile capable of converting electricity and sunlight into heat. This breakthrough addresses critical health risks associated with cold exposure, such as blood clotting, breathing issues, and weakened immunity. With potential applications in both outdoor and medical fields, this fabric represents a significant advancement in wearable technology, offering

87 _____ www.dhyeyaias.com



sustained warmth in extreme conditions.

Key Features and Advancements:

- Overcoming Challenges in Conductive Textiles: Traditional conductive textiles often face challenges like poor durability, high power consumption, and water sensitivity. The IIT Guwahati team has tackled these issues by coating cotton fabric with ultra-thin silver nanowires. These nanowires, far thinner than human hair, enable the fabric to conduct electricity efficiently, generating heat while retaining flexibility and softness.
- Water-Repellent and Durable Design: To improve durability, the researchers applied a water-repellent coating inspired by the lotus leaf. This unique microscopically rough texture repels water, ensuring the fabric remains dry and conductive even in damp conditions. The coating also shields against sweat, rain, and spills, making it ideal for daily wear and outdoor use.
- Efficient and Long-Lasting Heating: Powered by a small rechargeable battery or solar energy, this textile can maintain temperatures between 40°C and 60°C for over 10 hours. It has already been tested in wearable knee and elbow bands, showcasing its potential for sustained warmth in extreme weather and therapeutic applications such as arthritis treatment.

About Technical Textiles:

Technical textiles refer to fabrics designed primarily for their functional and technical performance, rather than aesthetics. These textiles serve a wide range of purposes, from agriculture, roads, and railway tracks to sportswear, healthcare, and military applications. They are also used in bulletproof vests, fire-resistant clothing, highaltitude combat gear, and space exploration.

Government Initiatives for Technical Textiles:

- National Technical Textiles Mission (NTTM)
 - » The National Technical Textiles Mission (NTTM) aims to establish India as a global leader in technical textiles.
 - » Implementation Period: FY 2020-21 to 2023-24
 - » Nodal Ministry: Ministry of Textiles
- Key Government Schemes:
 - » Production Linked Incentive (PLI) Scheme for Textiles: Encourages domestic manufacturing.
 - » PM Mega Integrated Textile Regions and

- **Apparel (MITRA) Scheme:** Promotes large-scale textile parks.
- » Scheme for Integrated Textile Parks (SITP): Supports infrastructure development in the textile industry.

Malaria Eradication

Context:

Georgia's recent designation by the WHO as the 45th nation to eradicate malaria marks an important turning point. Malaria continues to kill more than 600,000 people every year and cause over 240 million cases despite decades of international efforts.

Issues Surrounding Malaria Vaccines

- Adaptability of the Malaria Parasite: One of the primary issues is the malaria parasite's remarkable ability to adapt and evolve. Plasmodium, the parasite that causes malaria, frequently changes its surface proteins (antigenic variation), making it difficult for the immune system to recognize and fight it.
- Limited Efficacy of Existing Vaccines: The RTS, S vaccine, although a breakthrough, has limited efficacy. It reduces malaria cases by only about 36% after four doses over four years, far below the 90-95% effectiveness seen in vaccines for other diseases like measles



- Multi-Stage Lifecycle: Malaria's lifecycle involves multiple stages across two hosts—mosquitoes and humans—meaning any vaccine must address various stages of the parasite's development. For example, the RTS, S vaccine targets the liver stage, but it doesn't address the blood stage, where symptoms manifest.
- Logistical Challenges in Distribution: Malaria vaccines like RTS, S require multiple doses, which



poses significant logistical challenges in resourcelimited regions where healthcare infrastructure is often inadequate.

• Underfunding of Research: Malaria vaccine research has faced chronic underfunding, especially due to geopolitical and economic reasons. Malaria primarily affects low-income regions in Africa and South Asia, leading to less investment in vaccine development. Additionally, the high costs of research and uncertain returns have discouraged pharmaceutical companies from investing heavily in malaria vaccines.

About Malaria:

- Malaria is a serious and potentially lifethreatening disease caused by Plasmodium parasites, transmitted to humans through the bites of infected female Anopheles mosquitoes. It primarily affects individuals in tropical regions and can result in severe illness and death if not treated effectively.
- Malaria is most commonly found in tropical and subtropical regions of the world, particularly in sub-Saharan Africa, Southeast Asia, and parts of Latin America.
- Symptoms: The common symptoms of malaria include:
 - » Fever
 - » Chills
 - » Headache
 - » Fatigue
- These symptoms can appear within 10 to 15 days after being bitten by an infected mosquito. Without prompt treatment, the disease can progress to severe malaria, leading to complications such as organ failure, anemia, or even death.

Plasmodium Species:

- There are five species of Plasmodium known to infect humans, causing malaria:
 - » P. falciparum The most dangerous species, responsible for the majority of malaria-related deaths.
 - » P. vivax The most widespread species, but generally less deadly.
 - P. malariae Less common and typically causes a milder form of the disease.
 - » P. ovale Rarer and causes a relapsing form of malaria.
 - » P. knowlesi A zoonotic species primarily found in Southeast Asia, can cause severe

disease in humans.

Malaria Vaccines:

- RTS,S/AS01 vaccine: Approved by the WHO in 2021, this is the first malaria vaccine that has been shown to reduce malaria cases in children.
- R21/Matrix-M vaccine: Approved by the WHO in 2023, this vaccine offers greater efficacy (around 77%) compared to RTS,S.

SRY Gene and Sex Determination

Context:

The recent studies from Renato Dulbecco University Hospital (Italy) and Cincinnati Children's Hospital Medical Center (USA) have identified biological females carrying the SRY gene, challenging traditional understandings of sex determination. These cases raise important questions about genetic mutations and their implications for reproductive health. These findings suggest that SRY translocation does not always result in male development, indicating a more complex interaction between genetics and sex determination.

How the SRY Gene Influences Sex Determination?

- The SRY (Sex-determining Region Y) gene plays a fundamental role in male development. Typically located on the Y chromosome, it triggers a genetic pathway leading to male sex characteristics.
- Sex determination begins at conception, depending on the genetic material contributed by the sperm:
 - If the sperm carries an X chromosome, the embryo develops as a female (XX).
 - » If the sperm carries a Y chromosome, the SRY gene initiates male development (XY), stimulating testosterone production and male-specific traits.
 - » In the absence of the SRY gene, the embryo follows the default female pathway, leading to ovarian formation and female characteristics.

Understanding SRY-Positive Females:

Normally, when the SRY gene translocates to an X chromosome, it triggers male development. However, in these rare cases, a partial deletion of the X chromosome appears to have prevented this effect. The key factors involved include:



- » X chromosome inactivation (XCI): This process naturally silences one of the X chromosomes in females, likely suppressing the SRY gene's activity.
- » Missing Y-linked genes: While the SRY gene initiates male development, other Y chromosome genes are essential for full male differentiation. Their absence could allow normal female development.
- In males, such mutations usually cause infertility, as vital Y chromosome genes needed for sperm production are missing. However, these SRYpositive females developed normally, suggesting that genetic regulation mechanisms played a crucial role in allowing female traits to emerge.

Could the SRY Gene Cause Future Health Issues?

- While the SRY-positive females showed no immediate health complications, researchers have raised concerns about potential risks, such as:
 - » Low-level SRY gene activity influencing pubertal development.
 - » Possible effects on hormonal balance and reproductive health.
- Long-term monitoring is recommended to assess any subtle impacts of the SRY gene in these individuals.

Implications for Genetic Counseling:

- The discovery of SRY-bearing translocations in females has significant implications for genetic counseling, particularly in:
 - » Reproductive health and risk assessment.
 - » Identifying and understanding rare genetic variations.
 - » Providing personalized medical guidance for affected individuals.
- Studying how frequently SRY translocations occur and their long-term consequences will be crucial in refining genetic counseling strategies.

Conclusion

The SRY gene remains central to sex determination, yet these rare cases highlight the complexity of genetic sex differentiation. They challenge traditional biological assumptions and underscore the importance of continued research on genetic translocations. A deeper understanding of these cases will not only enhance genetic counseling but also contribute to broader knowledge in human genetics and reproductive medicine.

Niger Becomes the First African Country to Eliminate Onchocerciasis

Context:

Recently, the African country, Niger, achieved a historic feat by becoming the first country in Africa to completely eradicate onchocerciasis (river blindness). This fact has been confirmed by the World Health Organization (WHO). Niger has completely stopped the spread of the Onchocerca volvulus parasite, which is the main cause of onchocerciasis disease.

About Onchocerciasis (River Blindness):

- Onchocerciasis is a parasitic disease transmitted through the bites of infected black flies, which breed in fast-flowing rivers. It is a major public health concern, particularly in Africa, where 99% of the at-risk population resides.
- The disease causes severe itching, skin rashes, discoloration, visual impairment, and, in its most severe form, permanent blindness. It is the second leading infectious cause of blindness worldwide, after trachoma.
- Before Niger's success, the WHO had confirmed the elimination of onchocerciasis in four countries: Colombia, Ecuador, Guatemala, and Mexico. With this milestone, Niger becomes the fifth country globally and the first in Africa to eliminate the disease.

Neglected Tropical Diseases (NTDs):

- Onchocerciasis is classified as a neglected tropical disease (NTD), a group of 20 conditions that disproportionately affect impoverished populations in tropical and subtropical regions.
- NTDs are caused by a variety of pathogens, including viruses, bacteria, parasites, fungi, and toxins.
- Other examples of NTDs include dengue, chikungunya, rabies, leishmaniasis, leprosy, and lymphatic filariasis.
- These diseases often have devastating health impacts on vulnerable communities, contributing to cycles of poverty and marginalization.

Global Efforts against NTDs:

- India has made significant strides in eliminating certain NTDs, such as guinea worm, trachoma, and vaws.
- Global initiatives, including the Kigali Declaration

90



on NTDs (2022) and the London Declaration on NTDs (2012), have been instrumental in advancing efforts to eradicate these diseases.

- The World Health Organization (WHO) has released a mobile application called "Skin NTDs App" which is designed to assist frontline healthcare workers in diagnosing skin-related neglected tropical diseases (NTDs) through image recognition and decision support features
- Additionally, World NTD Day, observed annually on January 30, serves to raise awareness and promote collective action against these diseases.

Conclusion:

Niger's achievement represents a significant step forward in the global fight against neglected tropical diseases. It highlights the power of sustained interventions and international collaboration in improving public health.

Suzetrigine

Context:

Recently, the United States Food and Drug Administration (FDA) approved suzetrigine, a novel non-opioid painkiller. The drug, manufactured by Vertex Pharmaceuticals and sold under the brand name Journavx, offers a promising alternative to opioid painkillers.

About Opioids:

- Opioids are a class of drugs derived from or mimicking natural substances in the opium poppy plant. They include well-known painkillers such as oxycodone, morphine, codeine, and illicit drugs like heroin and fentanyl.
- Opioids work by attaching to opioid receptors in the brain and nervous system, blocking pain signals

- and creating a sense of euphoria or pleasure.
- While effective in pain management, the pleasureinducing effects can lead to psychological dependence, making opioids highly addictive.
- The U.S. faces a growing opioid epidemic, with tens of thousands of lives lost each year due to opioid overdoses.

How Does Suzetrigine Work?

- Pain starts when specialized nerve endings, known as nociceptors, detect tissue damage. These nociceptors send electrical signals through the spinal cord to the brain, which interprets them as pain.
- Unlike opioids, suzetrigine works by intercepting these pain signals before they reach the brain.
- As a result, suzetrigine prevents the brain from receiving pain signals, even though the tissue injury remains. Unlike opioids, the drug does not induce feelings of pleasure or euphoria.
- By avoiding euphoria, suzetrigine significantly reduces the risk of psychological dependence or addiction

The Benefits of Suzetrigine:

- Suzetrigine offers several advantages over traditional opioids:
 - » Non-Addictive: By not inducing euphoria, it eliminates the risk of psychological dependence.
 - » Targeted Action: The drug intercepts pain signals before they reach the brain, offering a more focused pain management approach.
 - » Scheduled Dosage: The drug is taken as a 50-milligram pill, twice a day after an initial 100-milligram dose.

Conclusion:

The introduction of Journavx (suzetrigine) represents an important development in pain management. It offers an innovative, non-addictive alternative to opioids, providing hope for those suffering from chronic pain while addressing a pressing public health issue. However, the high cost of the drug may be a barrier for widespread use, and efforts to make it more affordable will be crucial in ensuring its accessibility.

91 www.dhyeyajas.con

6 Economy

India's Strategic Role in the Future Global Labour Market

The global labour market is undergoing a paradigm shift, with skill requirements evolving rapidly due to technological advancements and demographic shifts. By 2030, the demand for skilled labour is expected to exceed supply significantly, resulting in substantial economic consequences. According to a FICCI-KPMG study, Global Mobility of Indian Workforce, the world will face a shortage of over 85.2 million skilled workers, potentially leading to \$8.45 trillion in unrealised annual revenue. While this presents a major challenge for economies worldwide, it also provides India with a strategic opportunity to position its skilled workforce as a global asset, contributing to both global economic stability and its own growth trajectory.

Global Workforce Trends and Sectoral Demands:

- Labour shortages will not be uniform across regions but will vary based on demographic trends, industrial requirements, and economic policies. Three key geographic regions are expected to experience critical workforce gaps:
 - » Gulf Cooperation Council (GCC) and Australia: These regions will have high demand for workers in manufacturing and construction, as rapid urbanisation and infrastructure development remain a priority.
 - » Europe (including the United Kingdom): As one of the oldest post-industrial societies, Europe will increasingly depend on service-sector professionals, particularly in healthcare and technology-related services.
 - » Common Sectors Across Regions: The healthcare sector will be in high demand

across all regions, driven by aging populations and rising healthcare needs. Additionally, the demand for expertise in automation, artificial intelligence (AI), big data, predictive analytics, the Internet of Things (IoT), blockchain, resource efficiency, and sustainability will continue to grow, shaping the future workforce landscape.

India's Geopolitical Advantage in the Global Labour Market:

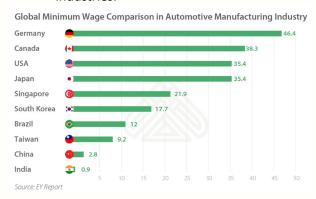
- Unlike certain migrant populations that face hostility in international markets, Indian workers continue to find acceptance and employment opportunities. Even in regions with growing anti-immigration sentiments, skilled Indian professionals remain in demand.
- However, illegal migration remains a concern, posing economic and reputational risks. Strengthening legal migration frameworks will protect workers from exploitation and enhance India's global reputation as a trusted supplier of skilled labour.

India's Demographic Advantage:

- India's population exceeds 1.4 billion, with nearly 65% in the working-age group (15–64 years) and over 27% between 15 and 24 years. This demographic surplus presents a crucial opportunity to bridge global workforce shortages.
 - » Dual Advantage: India's relatively young median age of 28.4 years provides a competitive workforce while also fueling economic growth through domestic consumption.
 - Previous Successes: India's success in the IT



and BPO sectors has demonstrated its ability to leverage skilled manpower for global economic contributions, highlighting its potential to expand into other high-demand industries.



Challenges Hindering Workforce Mobility:

Despite the increasing demand for skilled labour, various structural and systemic barriers hinder efficient workforce mobility. These include:

- Regulatory and Immigration Barriers: Stringent visa processes and work permit regulations limit skilled migration opportunities.
- Recruitment **Malpractices** and Human **Trafficking:** Many migrant workers face exploitative recruitment practices, orchestrated by unregulated intermediaries. During his visit to the U.S., the Indian Prime Minister Narendra Modi highlighted the urgency of addressing human trafficking and unethical hiring practices.
- Policy Barriers and Skill Mismatches: Indian professionals, particularly in medicine, face degree recognition challenges in various countries, leading to underemployment or unemployment despite being highly qualified.
- Language and Cultural Barriers: Workforce integration is often impeded by language proficiency issues and cultural adaptation challenges, affecting efficiency and productivity.

Government Initiatives and Policy Responses:

Recognising these challenges, the Government of India has implemented several initiatives to facilitate smoother workforce mobility. Key interventions include:

Bilateral Agreements and Free Trade Agreements

- (FTAs): India has formal agreements with GCC nations to protect migrant workers' rights. The Joint India-United Arab Emirates Vision highlights the significance of skill cooperation.
- Skill Development Programmes: The government has prioritised aligning workforce training with the needs of the global labour market.
- Digital Platforms for Workforce Support: India has established online recruitment systems to safeguard migrant workers, particularly in GCC nations, from fraudulent intermediaries.

Leveraging India's Demographic Potential

To optimise its large working population, India has undertaken several skill training and migration initiatives:

- Skill Development Initiatives:
 - » Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana (PMKVY) aim to train workers in high-demand global skills.
 - » The National Education Policy (NEP) 2020 integrates vocational education into school curricula, enabling early skill development.
- Migration Agreements: India has signed migration and skill training agreements with nations such as Italy, France, and Germany, facilitating the legal movement of skilled workers.

Strategic Measures for Optimising Workforce Mobility

To further strengthen India's global workforce presence, a comprehensive strategy is required, incorporating:

- Sector-Specific Skill Training: Workforce training should be aligned with target geographies and the demands of emerging industries.
- Regulation of Recruitment Practices: Strict oversight mechanisms must be enforced to combat worker exploitation and trafficking.
- Recognition of Qualifications: International collaborations should focus on mutual recognition of academic and professional qualifications to ease workforce integration.
- Incentivising Public-Private Partnerships (PPPs): Governments at both Central and State levels should encourage private sector participation in training programmes and global



employment facilitation.

 Promoting Circular Migration and Mobility: Implementing temporary work visas and rotational workforce models can help address labour shortages while preventing demographic imbalances.

Conclusion: the Vision for Viksit Bharat

• India's ability to leverage its workforce potential will play a crucial role in its economic growth trajectory. According to Arvind Panagariya, Chairman of the Sixteenth Finance Commission, India's GDP could range between \$6.5 trillion and \$9 trillion by 2030. The extent to which India can capitalise on the \$8.45 trillion in unrealised

- global economic potential will directly influence whether it achieves the upper threshold of this projection.
- By optimising workforce mobility, strengthening international partnerships, and implementing strategic workforce policies, India has the potential to expand its global economic footprint. These efforts will not only contribute to global workforce stability but also move India closer to realising its vision of Viksit Bharat (Developed India). As the world adapts to the evolving labour market, India's skilled workforce is well-positioned to play a pivotal role in shaping the future of global economic progress.

Microfinance in India: Evolution, Challenges, and the Way Forward

Microfinance, also known as microcredit, refers to a broad range of financial services provided to individuals and small businesses who lack access to traditional banking. These services include microloans, savings accounts, insurance, remittances, and other financial products, catering primarily to the economically weaker sections of society. The key objective of microfinance is to promote financial inclusion, enabling marginalized communities to achieve economic independence and social empowerment. Women are the primary beneficiaries of microfinance services, as financial inclusion has been linked to their increased participation in economic activities, improved decision-making power, and enhanced social status.

The microfinance sector in India has evolved over several decades, facing various regulatory changes, financial crises, and structural transformations. Today, microfinance institutions (MFIs) and self-help groups (SHGs) collectively serve 12−14 crore households, with an outstanding loan portfolio of ₹7 lakh crore. Of this, ₹4 lakh crore is accounted for by Joint Liability Group (JLG) lending. Despite its significant contributions, the sector has encountered several challenges, including over-

indebtedness, rising non-performing assets (NPAs), regulatory constraints, and operational inefficiencies. This article explores the historical evolution, current status, challenges, and potential solutions for ensuring the long-term sustainability of microfinance in India.

Evolution of Microfinance in India:

The microfinance movement in India has developed through multiple phases, adapting to socio-economic needs and regulatory frameworks.

- Early Foundations (1970s–1990s): Establishing the Model
 - » 1974: Self-Employed Women's Association (SEWA) Bank, India's first microfinance institution, was established in Gujarat. SEWA pioneered financial inclusion for selfemployed women.
 - » 1984: National Bank for Agriculture and Rural Development (NABARD) introduced the Self-Help Group (SHG) linkage model, which encouraged SHGs to pool savings and access bank credit.
- Regulatory Recognition (2000s–2010s): Scaling Microfinance
 - » 2004: The Reserve Bank of India (RBI) classified microfinance under priority sector lending (PSL), compelling banks to allocate a



percentage of their lending to microfinance activities.

- » 2010: The Andhra Pradesh crisis exposed the risks of aggressive lending, coercive loan recovery, and over-indebtedness, leading to severe restrictions on microfinance activities in the state.
- » 2012: The Malegam Committee was formed to introduce new regulatory norms and ensure responsible lending practices in the microfinance sector.
- » 2015: Micro Units Development and Refinance Agency (MUDRA) Bank was launched, supporting small businesses with easier access to microcredit.

Post-2015 Developments: Expansion and Challenges:

- » 2016: Demonetization caused a liquidity crunch, impacting borrower repayments and the availability of funds for MFIs.
- » 2017: The Goods and Services Tax (GST) implementation created operational hurdles for MFIs.
- » 2018–2019: The IL&FS and DHFL financial crises restricted funding to NBFC-MFIs, hampering their lending capacity.
- » 2020–2021: The COVID-19 pandemic caused large-scale economic disruptions, leading to high loan defaults and operational challenges for MFIs.
- Despite these setbacks, the sector rebounded through technological advancements, improved risk assessment mechanisms, and digital financial services. The post-COVID recovery led to a nearly 50% increase in microfinance loan portfolios and accounts over the last two years.

Microfinance Business Models in India:

India's microfinance sector operates through diverse models that cater to different borrower segments.

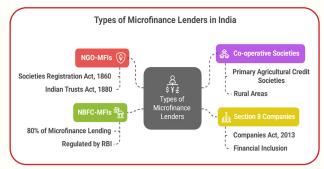
Self-Help Groups (SHGs)

- » SHGs are small groups of 10–20 members who save collectively and borrow from pooled savings.
- » NABARD's SHG-Bank Linkage Programme (SHG-BLP) is the world's largest microfinance initiative, enabling SHGs to access bank credit.
- » SHGs operate under a peer-monitoring model, ensuring loan repayments through

mutual accountability.

Microfinance Institutions (MFIs):

- » MFIs provide credit to Joint Liability Groups (JLGs), where 4–10 members guarantee each other's loans.
- » Structured Repayments: MFIs follow strict repayment schedules, ensuring financial discipline.
- » Regulatory Oversight: NBFC-MFIs dominate the sector and are regulated by the RBI.



Types of Microfinance Lenders:

- » NGO-MFIs: Operate as non-profit organizations under the Societies Registration Act, 1860, or the Indian Trusts Act, 1880.
- » Co-operative Societies: Entities like Primary Agricultural Credit Societies (PACS) provide microfinance services in rural areas.
- » Section 8 Companies: Non-profit companies under the Companies Act, 2013, focusing on financial inclusion.
- » NBFC-MFIs: Account for 80% of microfinance lending and are heavily regulated by the RBI.

Current Status and Growth Trends:

- The microfinance sector currently serves over 3 crore borrowers.
 - » Total loan outstanding: ₹7 lakh crore, with rapid expansion post-pandemic.
 - » Employment Generation: The sector has contributed to 130 lakh jobs and 2% of India's Gross Value Added (GVA).
- However, increasing delinquencies and NPAs are signs of financial stress.

Rising NPAs:

» ESAF Small Finance Bank's gross NPAs surged to ₹1,279.3 crore (6.9%) in September 2024,



- up from ₹399.1 crore (2.6%) a year earlier.
- » CRISIL projects that SFB NPAs will rise from 2.3% in FY24 to 2.9% in FY25.
- Declining Collection Efficiency:
 - » Collection efficiency dropped from 98% in FY24 to 94% in Q2 FY25, reflecting stress in the sector.

Challenges Facing Microfinance in India:

- Operational and Structural Issues:
 - » Over-leveraged Borrowers: Many individuals take multiple loans without adequate repayment capacity.
 - » Weak JLG Model: Declining accountability has led to rising defaults.
 - » Staff Attrition and Fraud: High employee turnover and fraudulent lending practices hinder recoveries.
- Borrower Indebtedness and Credit Stress:
 - » Rising credit card debt: Outstanding balances increased from ₹2.30 lakh crore in 2023 to ₹2.71 lakh crore in 2024.
 - » Regulatory Restrictions: The RBI has imposed restrictions on NBFC-MFIs due to predatory pricing and poor borrower evaluation.
- External Challenges
 - » Election-Year Debt Waiver Promises: Political interventions disrupt repayment discipline.

» Natural Disasters: Floods and droughts severely impact borrower liquidity.

Strengthening Microfinance through Policy Measures:

- Standardized Household Income Assessment: Sa-Dhan is working on a uniform income model to improve credit risk evaluation.
- Real-Time Credit Data Updates: The periodicity of borrower data uploads to credit bureaus should be reduced from fortnightly to weekly.
- Mandatory Aadhaar-Based KYC: Ensuring uniform borrower identification will prevent loan duplication and data mismatches.
- Stronger Regulatory Oversight: The RBI should introduce tighter monitoring mechanisms for NBFC-MFIs to curb predatory lending practices.

Conclusion:

Microfinance has transformed India's financial landscape by bridging the credit gap for millions of low-income households. However, the sector faces rising NPAs, borrower over-indebtedness, and regulatory hurdles that threaten its stability. Strengthening borrower assessment, increasing transparency, and enforcing responsible lending practices are crucial to ensuring the long-term sustainability of microfinance in India. By leveraging technology, data-driven policies, and financial innovations, microfinance can continue to be a powerful tool for economic empowerment and poverty alleviation.

Short Issues

Pension Policy for Gig Workers

Context:

The Ministry of Labour and Employment is developing a transaction-based pension policy aimed at providing social security benefits to gig workers in India. This initiative seeks to address the employment challenges faced by gig workers, who often work across multiple platforms without a fixed wage. Under this policy, pension contributions will be linked to wage

transactions, ensuring a secure financial future for nearly 1 crore gig workers across the country.

How the Pension Policy will Work?

- The proposed pension scheme will function through the e-Shram portal, where each gig worker will be assigned a Universal Account Number (UAN). The key features of this system include:
 - » Pension deductions will be linked to workers' earnings from multiple platforms.
 - » Each platform (employer) will contribute to the pension on a per-bill basis.



- » A standardized contribution structure, similar to the GST system, where both the worker and employer share the pension contribution.
- By integrating this policy with the e-Shram portal, which was launched in 2021 to create a National Database of Unorganised Workers (NDUW), the scheme will offer comprehensive social security. As of January 2025, over 30 crore workers have registered on the portal.
- The UAN system will track workers' employment history across different platforms, ensuring transparency and accessibility to benefits like health insurance and other welfare schemes.

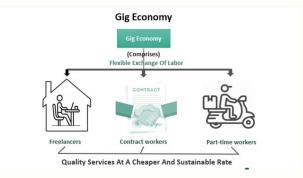
Who Are Gig Workers?

- A gig worker is an individual who takes on temporary, flexible jobs that do not follow the traditional employer-employee relationship. These jobs are often found through online platforms or on a contractual basis instead of permanent employment with a single company.
- Understanding the Gig Economy: The gig economy refers to a labor market driven by shortterm, flexible work arrangements. This sector has grown rapidly, especially with the rise of online platforms like Uber, Amazon, and freelance websites. In India, the gig economy has expanded significantly, offering employment opportunities across diverse sectors.
- Types of Gig Workers: Gig workers can be classified into two main categories:
 - » Platform-based Gig Workers: These workers rely on digital platforms like Uber, Swiggy, Amazon, or Upwork to find jobs. They connect with clients through online services.
 - » Non-platform Gig Workers: These workers engage in contractual or temporary jobs in traditional sectors like construction or manual labor without using digital platforms.

Advantages of Gig Work:

- Flexibility: Gig workers can set their own work hours and choose assignments based on their availability and preferences.
- Diverse Work Opportunities: They can engage with multiple platforms and industries, gaining varied skills and experiences.
- Independence: Many gig workers function as their own bosses, allowing them to control their work-

life balance.



Challenges Faced by Gig Workers:

- Lack of Job Security: There are no guarantees of long-term employment, making financial stability uncertain.
- Inconsistent Income: Earnings fluctuate based on work availability and market demand.
- Limited Social Security: Unlike traditional employees, gig workers often lack benefits like health insurance, paid leave, or retirement plans.
- Risk of Exploitation: Many gig workers have minimal legal protections and may face unfair practices from platforms or employers.

Conclusion:

The proposed pension policy marks a significant step in ensuring financial security for gig workers in India. By linking pension contributions to wage transactions and integrating them with the e-Shram portal, the government aims to standardize benefits for gig workers across multiple platforms. While gig work offers flexibility and independence, challenges like job insecurity and lack of social security persist. This policy is expected to bridge that gap, offering gig workers a structured pension system and a more secure future.

Income-Tax Bill, 2025

Context:

The Income-tax Bill, 2025 was recently introduced in Lok Sabha on February 15, 2025. The Bill aims to simplify India's tax system by removing outdated provisions, making laws easier to understand, and reducing legal complexity. It will replace the Income-tax Act of 1961 and is expected to come into effect from April 1, 2026.

Key highlights of the Bill:



- A Shorter and Simpler Tax Law: The new Bill reduces the word count by half, making it more concise and user-friendly. The number of chapters has been cut from 47 to 23, and sections reduced from 819 to 536. Instead of lengthy explanations, important details like deductions, exemptions, and tax rates are now presented in tables, making them easier to understand.
- New "Tax Year" Concept: The Bill replaces the old Assessment Year (AY) system with a "Tax Year", which aligns with the financial year. This change simplifies tax filing and makes it easier for individuals and businesses to track their tax periods. For businesses or newly established professions, the tax year will start from their date of setup and end with that financial year.
- **Digital Transactions and Cryptocurrency Regulations:** To keep up with modern financial activities, the Bill expands the definition of "virtual digital space" to include email servers, social media, cloud storage, online banking, and digital investment platforms. This allows tax authorities to monitor and investigate transactions in the digital space.
- Additionally, cryptocurrencies and other digital assets are now officially classified as property and will be subject to capital gains tax, just like real estate, stocks, and gold.

Changes in Capital Gains Tax and Deductions:

Some outdated provisions, such as capital gains exemptions on property transfers before 1992, have been removed. Deductions for salary components like standard deduction, gratuity, and leave encashment are now presented in a structured format, making them easier to understand.

Faster and Clearer Dispute Resolution:

 The Bill improves the Dispute Resolution Panel (DRP) by clearly outlining how decisions are made and communicated. This is expected to speed up tax dispute settlements and reduce litigation.

Challenges & Future Implications:

 No Major Structural Reforms: The Bill simplifies provisions but does not introduce major changes to tax rates, penalties, or compliance mechanisms.
 Experts suggest further reforms for a more

- taxpayer-friendly system.
- Transition Challenges: Taxpayers and businesses need time to adapt to the 'tax year' concept. Financial professionals must update tax strategies and systems.

Conclusion:

For years, India's tax laws have been complex and difficult to navigate. Previous attempts to simplify them, such as in 2010 and 2018, were not fully implemented. The Income-tax Bill, 2025 takes a major step toward a clearer, more efficient and transparent tax system by removing unnecessary provisions, simplifying language, and making tax rules easier to follow.

Unemployment in Urban Areas

Context:

The Ministry of Statistics and Programme Implementation recently released the Periodic Labour Force Survey (PLFS) for the October–December 2024 quarter. The survey provides key insights into urban unemployment, labor force participation, and workforce distribution across various employment categories and sectors.

Unemployment Rate in Urban Areas:

- The overall unemployment rate for individuals aged 15 years and above stood at 6.4% during October–December 2024.
- The unemployment rate for males was 5.8%, while for females, it was higher at 8.1%.
- Compared to the same quarter in 2023, this reflects a slight improvement from 6.5%. The female unemployment rate also saw a marginal decline from 8.6% last year.
- In comparison to the previous quarter (July– September 2024), the unemployment rate remained unchanged at 6.4%.

State-wise Unemployment Trends:

- Himachal Pradesh recorded the highest urban unemployment rate at 10.4%.
- Gujarat had the lowest unemployment rate at 3.0%.
- Among females, Himachal Pradesh had the highest unemployment rate at 24%, while Delhi recorded the lowest at 1.3%.

Labour Force Participation Rate (LFPR) in



Urban Areas:

- The Labour Force Participation Rate (LFPR), which indicates the proportion of the population actively engaged in the labor force, was 39.6% for all age groups—an increase from 39.2% in the same quarter last year.
- The LFPR for women saw a marginal rise of 0.1 percentage points, increasing to 20% from 19.9% in the previous year, though it slightly declined from 20.3% in the last quarter.
- Bihar recorded the lowest LFPR, with 30.7% overall and 9.9% for women.

Worker Population Ratio (WPR) in Urban Areas:

- The Worker Population Ratio (WPR) for individuals aged 15 and above increased from 46.6% in October—December 2023 to 47.2% in October—December 2024.
- The WPR for males also saw an increase, rising from 69.8% to 70.9% over the same period.

Employment Categories:

- 39.9% were self-employed, including own-account workers, employers, and unpaid helpers in household enterprises.
- 49.4% were regular employees, i.e., wage/salaried workers.
- 10.7% were casual laborers, engaged in temporary or irregular work.

Sector-wise Workforce Distribution:

- 5.5% of workers were engaged in the agriculture sector.
- 31.8% were employed in the secondary sector, which includes manufacturing, mining, and construction.
- 62.7% of workers were employed in the tertiary sector, which includes services, trade, transport, finance, and other professional activities.

Conclusion:

The report highlights both progress and persistent challenges in urban employment. While overall unemployment has improved slightly, gender disparities remain evident, with female unemployment still significantly higher than that of males. Additionally, state-wise variations emphasize

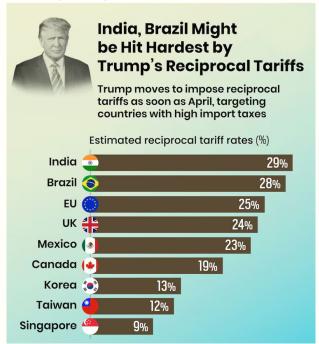
Reciprocal Tariffs

Context:

US President Donald Trump has instructed his economic team to develop plans for reciprocal tariffs on countries that tax American imports, increasing the potential for a global trade war with both allies and adversaries.

What are Reciprocal Tariffs?

- Tariffs are taxes imposed on imported goods to regulate trade and protect domestic industries. Reciprocal tariffs mean a country will impose the same level of tariffs on imports as others impose on its exports.
- This policy challenges traditional trade agreements that allowed developing nations to impose higher tariffs to protect local industries while developed countries maintained lower tariffs.
- Historically, global trade has moved toward reducing tariffs to encourage economic growth. Agreements like the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) promoted freer trade, recognizing its mutual benefits. However, reciprocal tariffs threaten to disrupt this system.



The Basis of Reciprocal Tariffs:

 The US argues that existing trade rules create unfair advantages for some countries. The calculation of



reciprocal tariffs includes tariff rates, subsidies, and other government support for exporters. This could result in countries like India, which offers subsidies through the Production Linked Incentive (PLI) scheme, facing higher tariffs on their exports.

If implemented, reciprocal tariffs could increase import costs and disrupt global supply chains. Developing nations, which rely on protective tariffs to shield domestic industries from cheaper foreign competition, may face severe economic challenges.

Impact on India:

- Increased Costs for Indian Exports: Higher tariffs could make Indian goods less competitive in the US market.
- Rising Imports from the US: To balance trade, India may need to buy more US products like defense equipment, oil, and consumer goods.
- Impact on Domestic Industry: Increased US imports could challenge India's Atmanirbhar Bharat (self-reliance) initiative, making local production less competitive.
- Currency Depreciation: More imports from the US may increase demand for the dollar, leading to a weaker Indian rupee.
- Effect on Consumer Spending: Recent tax cuts in India aimed at boosting domestic consumption may lead to increased spending on US products instead of Indian goods, reducing the expected economic stimulus.

Global Trade Implications

- Potential Trade Wars: Countries affected by US tariffs may retaliate, causing economic disruptions.
- Impact on Developing Economies: Export-driven nations may struggle to compete.
- Threat to International Trade Agreements: This policy undermines WTO principles that promote free trade and economic cooperation.

Conclusion:

Reciprocal tariffs challenge the global trade system by introducing a policy where countries impose tariffs based on their trade partners' policies. While the US sees this as fair, it could disrupt economies dependent on protective tariffs. For India, it poses risks such as higher import costs, weakened domestic industries, and currency depreciation. India must carefully

navigate its response, balancing economic interests while engaging in global trade negotiations. The long-term success of trade policies will depend on how well countries adapt to changing trade dynamics while maintaining economic stability.

RBI Cuts Repo Rate to 6.25% amid Global Economic Pressures

Context

In its latest policy announcement, the Reserve Bank of India (RBI) reduced the repo rate by 25 basis points to 6.25%, marking its first rate cut in nearly five years. This decision, taken by the Monetary Policy Committee (MPC), aims to counter slowing economic growth by leveraging easing inflation. The RBI also revised its growth forecast for FY26 to 6.7%, citing geopolitical tensions, volatile commodity prices, and global financial uncertainties as key challenges.

Implications of the Rate Cut:

- The reduction in the repo rate is expected to provide relief to borrowers, particularly in interest rate-sensitive sectors such as housing, automobiles, and MSMEs, potentially boosting consumption and investment.
- Additionally, lower borrowing costs could spur economic activity, though the RBI has indicated that future rate cuts will depend on inflation trends and economic conditions.
- While financial markets initially responded positively, there were concerns over a lower growth forecast.

Inflation and Liquidity Outlook:

- The RBI highlighted a moderation in inflation, with the Consumer Price Index (CPI) easing from 6.25% in October to 5.22% in December. Inflation projections for FY25 and FY26 have been set at 4.8% and 4.2%, respectively.
- The central bank also reiterated its commitment to maintaining adequate liquidity in the banking system and urged banks to participate more actively in money markets to facilitate effective monetary transmission.

Understanding the Monetary Policy Committee:

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- The Monetary Policy Committee (MPC) is a statutory body established through amendments to the RBI Act in 2016, institutionalizing India's inflation-targeting monetary policy.
- Formed under a Memorandum of Understanding (MoU) between the Government of India and the RBI, the MPC plays a crucial role in setting benchmark interest rates to maintain price stability while fostering economic growth.

Structure and Functioning of the MPC

- The MPC consists of six members:
 - » RBI Governor (Chairperson)
 - » RBI Deputy Governor in charge of monetary policy
 - » One official nominated by the RBI Board
 - » Three external members appointed by the Government of India
- External members serve a four-year term, and meetings require a quorum of at least four members, including either the RBI Governor or, in their absence, the RBI Deputy Governor. Decisions are made by majority vote, with the RBI Governor holding the tie-breaking vote if required.

Conclusion:

The RBI's decision to cut the repo rate marks a significant shift in monetary policy after nearly five years, aimed at stimulating economic growth amid global uncertainties and domestic challenges such as inflation and liquidity tightening. By maintaining a neutral stance, the central bank has signaled its readiness for further rate adjustments if economic conditions warrant. However, the effectiveness of these measures will depend on how both domestic and global factors evolve in the coming months.

Digital Payment Transactions

Context:

While responding in the Lok Sabha, Pankaj Chaudhary, the Minister of State for Finance said that Digital payment transactions in India have grown significantly, reaching over ₹18,000 crore in the financial year 2023-24, with an annual growth rate of 44%. Services like IMPS, NETC, and especially UPI have played crucial roles in this expansion.

UPI ecosystem in India:

- UPI integrates multiple bank accounts into a single mobile app, enabling seamless fund transfers and payments.
- Developed by NPCI in 2016 on the IMPS infrastructure, it is the world's most successful real-time payment system, ensuring secure person-to-person (P2P) and person-to-merchant (P2M) transactions in India.
- With 632 banks on its platform, UPI processed ₹23.49 lakh crore across 16.58 billion transactions in October 2024, marking a 45% year-on-year growth. Its expanding reach highlights its role in India's shift to a cashless economy.

Global Expansion of Digital Payment Systems:

- India's digital payment infrastructure is gaining international recognition. UPI is fully functional in UAE, Bhutan, and Singapore, with pilot tests completed in Nepal, Mauritius, France, and Sri Lanka, where commercial deployment is expected soon.
- RuPay cards are accepted in Nepal, Bhutan, Singapore, and UAE, with technical acceptance in the Maldives.

Challenges in Digital Payment Adoption:

- Online Fraud and Cyber-Crime Threats: Increased digital transactions have led to rising cyber threats like identity theft, phishing, and financial scams. While security measures have improved, fear of fraud persists.
- Maintenance of Transaction Records: Managing digital transaction history is challenging due to a lack of user-friendly tools and occasional technical issues, creating uncertainty.
- Fear of Tax Liabilities: Small business owners and freelancers fear tax scrutiny and unexpected liabilities, discouraging digital transactions.
- Lack of Stringent Laws for Digital Payment Disputes: Resolving disputes like transaction failures or incorrect charges is difficult due to inadequate legal frameworks.
- General Reluctance and Digital Illiteracy: Digital illiteracy, especially in rural areas and among older generations, leads to a preference for traditional payment methods.

National Payments Corporation of India:

NPCI operates India's retail payments and



- settlement systems. Established by the RBI and IBA under the Payment and Settlement Systems Act, 2007, it functions as a "Not for Profit" company under Section 8 of the Companies Act, 2013.
- NPCI has launched key payment products like RuPay Card, IMPS, UPI, BHIM, BHIM Aadhaar, and Bharat BillPay, driving digital payments and financial inclusion in India.

Conclusion:

India's digital payment ecosystem has grown significantly, led by UPI and robust infrastructure. Ongoing global expansion and development will further solidify India's position in digital payments. Addressing security, tax concerns, and digital literacy is essential for broader adoption and sustained growth.

Cryptocurrency

Context:

The Indian government has historically maintained a rigid approach towards cryptocurrency, imposing stringent laws and heavy taxes that have heavily regulated the digital asset market. However, recent reports suggest a potential shift in this stance, influenced by global trends toward digital currency acceptance and regulation.

What is Cryptocurrency?

 Acryptocurrency is a digital form of currency created using encryption algorithms, functioning both as a medium of exchange and as a virtual accounting system. The use of encryption technologies ensures security, making cryptocurrencies an alternative to traditional payment methods.

Expected Reason behind the Shift:

 India's reconsideration of its cryptocurrency policies appears to be driven by the growing global acceptance and regulatory support for digital currencies.

Global Developments:

- Former U.S. President Donald Trump has been a notable proponent of cryptocurrency adoption, including the launch of his meme coin, which contributed to Bitcoin reaching an all-time high of \$100,000.
- The U.S. government has also taken steps to

- establish a cryptocurrency working group, exploring digital asset regulations and setting up a national cryptocurrency reserve.
- These global movements are likely influencing India's reevaluation of its stance on digital currencies.



Impacts of a Policy Shift:

A potential shift in India's cryptocurrency policy could have significant implications for both traders and the broader economy.

Increased Adoption:

- » A more favorable policy could encourage wider adoption of digital currencies and blockchain technology in India.
- » Crypto exchanges might be able to operate more freely, attracting investors and businesses eager to tap into the expanding digital asset market.

Stronger Regulatory Framework:

- » Clearer regulations could help mitigate risks like money laundering and fraud associated with cryptocurrencies.
- » A structured environment could also draw international crypto players, boosting India's economy by integrating it more closely into the global digital asset space.

India's Stance to Date

India's cryptocurrency environment has been



characterized by rigidity, with several regulatory measures hindering market growth.

Enforcement Actions:

- » In 2023, India's Financial Intelligence Unit (FIU) issued show-cause notices to major offshore crypto exchanges, including Binance and Kucoin, for non-compliance with local regulations.
- » In June 2024, Binance was fined for violating the Prevention of Money Laundering Act (PMLA), which mandates that virtual digital asset service providers (VDA SPs) adhere to anti-money laundering protocols.

RBI's Critical Stance:

» The Reserve Bank of India (RBI) has expressed concerns about cryptocurrencies, with former Governor Shaktikanta Das advocating for an outright ban, citing the speculative nature of digital currencies as a key issue.

Conclusion:

India's evolving approach to cryptocurrency reflects global shifts and could lead to a more balanced regulatory environment that fosters both innovation and security in the digital asset market.

RBI Tightens Norms for Payment Systems Penalties

Context:

Recently, the Reserve Bank of India (RBI) has strengthened its regulatory approach under the Payment and Settlement Systems Act, 2007 (PSS Act), enhancing the penalties for non-compliance.

Key Contraventions under the PSS Act:

- The Reserve Bank of India (RBI) has outlined several critical contraventions under the updated Payment and Settlement Systems (PSS) Act. These include operating payment systems without proper authorization, disclosing prohibited information, and failing to pay penalties within the prescribed period. Such violations will now attract significant fines under the new regulatory framework.
- Focus on Material Contraventions: The RBI's revised framework emphasizes enforcement actions for material contraventions. This ensures that penalties are only imposed in cases where

- the violation is substantial, ensuring that fines are proportional to the severity of the offence. This approach encourages greater accountability in the payment systems sector.
- Penalties and Daily Fines: Penalties for violations under the revised rules can now amount to up to ₹10 lakh or twice the value of the contravention, whichever is higher. Furthermore, if the violation persists beyond the first day, an additional penalty of ₹25,000 per day can be levied until the issue is resolved.
- Legal Authority for Penalty Imposition: RBI officials authorized under the PSS Act have the legal authority to impose penalties or compound offences that are not punishable by imprisonment. This streamlined process aims to ensure efficient enforcement while maintaining a fair, transparent regulatory framework for payment system operators.

About Payment System" under the PSS Act, 2007:

- Under Section 2(1)(i) of the Payment and Settlement Systems (PSS) Act, 2007, a "payment system" is defined as any system that enables payments between a payer and a beneficiary.
- This includes systems that facilitate clearing, payment, or settlement services, or all of these services together. Notably, the Act excludes stock exchanges and clearing corporations set up under stock exchanges, as specified in Section 34.

Inclusions in Payment System:

The definition of a "payment system" further encompasses various operations, such as credit card, debit card, smart card operations, and money transfer services, or similar functions that enable the transfer of funds from one party to another.

System Providers:

- Entities that operate payment systems are referred to as "system providers." This includes all organizations that facilitate clearing, settlement, or payment operations, as well as those handling money transfer systems or card-based payment systems.
- These system providers are responsible for the smooth functioning of payment processes within the defined systems.



About PSS Act, 2007:

- The Payment and Settlement Systems (PSS) Act, 2007 was enacted to provide a comprehensive framework for the regulation and supervision of payment systems in India.
- It designates the Reserve Bank of India (RBI) as the central authority responsible for overseeing the functioning and safety of payment systems across the country.

India's Graduate Skill Index 2025

Context:

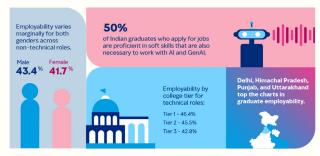
A new report from Mercer Mettl, titled India's Graduate Skill Index 2025, has raised concerns over the declining employability of Indian graduates.

Key Findings of the Report:

- The Decline in Graduate Employability:
 - » The most striking revelation of the Graduate Skill Index 2025 is the 2% drop in graduate employability, a concerning trend amid the fast-growing demand for skilled professionals in India.
 - » India's graduate employability has fallen from 44.3% in 2023 to 42.6% in 2024. This decline is largely due to a widening gap in nontechnical skills, despite a slight improvement in technical proficiency.
 - » The report attributes this drop to several factors, with the lack of proficiency in soft skills—such as communication, creativity, and leadership—being the most significant contributor.

Delhi Leads in Employability:

- » Among all states and Union Territories, Delhi has emerged as the most employable region, boasting an employability score of 53.4%.
- » Delhi is closely followed by Himachal Pradesh and Punjab, both registering an employability rate of 51.1%.



- Technical vs. Non-Technical Skills: While technical roles saw a slight improvement in employability, non-technical roles witnessed a sharp decline.
 - » Technical Roles: Employability in technical positions increased slightly from 41.3% in 2023 to 42% in 2024.
 - Al and Machine Learning jobs showed the highest employability at 46.1%.
 - Data Scientist and Back-End Developer roles recorded much lower employability rates, hovering around 39.8%.
 - » Non-Technical Roles: The most significant decline occurred in non-technical job roles, where employability fell from 48.3% in 2023 to 43.5% in 2024.
 - ➤ HR Associates and Digital Marketers were the worst-hit, with employability rates at 39.9% and 41%, respectively.
- Challenges with Soft Skills: The study underscores the growing importance of soft skills such as communication, critical thinking, leadership, and creativity, particularly as automation and Al increasingly reshape the job market. Competence in Key Soft Skills:
 - » Communication: 55.1% of graduates are considered proficient.
 - » **Critical Thinking:** 54.6% scored well in this area.
 - » Leadership: 54.2% demonstrated capability.
 - » Creativity: Only 44.3% of graduates were deemed employable, highlighting a significant gap.
- As automation eliminates routine tasks, human ingenuity and decision-making will become increasingly valuable. Graduates with strong soft skills are expected to thrive in leadership roles and dynamic careers that require adaptability and



innovation.

Way forward:

- The Mercer Mettl report presents a sobering analysis of India's graduate employability. While there is promise in technical fields like AI and Machine Learning, the overall figures indicate substantial challenges in both technical and nontechnical skills.
- To bridge the employability gap, the report recommends:
 - Non-Technical Skill **Investing** in Colleges and universities **Development:** should prioritize soft skills such communication, leadership, and creativity, alongside technical training.

- **Enhanced Industry Academic Collaboration:** Stronger collaboration between educational institutions and industry players will help align curricula with real-world job demands.
- Focus on Tier 2 and Tier 3 Talent: Expanding training programs and corporate recruitment in Tier 2 and Tier 3 colleges will help unlock untapped potential.
- Promotion of Continuous Learning: With rapid technological advancements, graduates must adopt a lifelong learning mindset to stay relevant in evolving job markets.



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Escalation of Anti-Maoist Operations in Chhattisgarh: Strategic Expansion and Rising Casualties

The recent surge in anti-Maoist operations in Chhattisgarh, particularly in the Bastar region, marks a significant shift in India's counterinsurgency strategy. A strong political will, enhanced coordination among security forces, and infrastructure expansion in Maoist-dominated areas have led to intensified operations. Union Home Minister Amit Shah has reiterated the central government's commitment to eradicating Left-Wing Extremism (LWE) by March 2026, leading to a focused and aggressive approach.

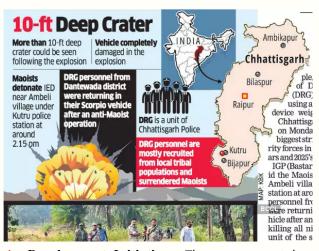
Rising Casualties and Operational Successes:

- The most recent encounter in Bijapur's Indravati National Park on February 9, 2025, resulted in the killing of 31 Maoists, bringing the total number of Maoists killed in Chhattisgarh to 81 within the first two months of 2025 alone.
- In 2024, 219 Maoists were killed, the highest number recorded since the state's formation in 2000. This increase in casualties indicates improved intelligence-gathering mechanisms and more frequent security operations.
- However, security forces have also suffered losses, with two personnel killed in the latest encounter. The ongoing conflict continues to claim lives on both sides, underscoring the intensity of the counterinsurgency campaign.

Three-Pronged Strategy to Eliminate Maoist Insurgency:

Security Measures: A significant component of the anti-Naxal strategy is strengthening the presence of Central and State police forces in LWE-affected areas.

- » Joint operations between state police and central armed forces such as the Central Reserve Police Force (CRPF) and the Commando Battalion for Resolute Action (COBRA) have enhanced operational effectiveness. Capacity building includes upgrading weapons, communication systems, and infrastructure, such as using Mini UAVs, solar lights, and mobile towers.
- » Operation SAMADHAN, a comprehensive approach addressing intelligence gathering, operational strategy, and development, has been pivotal. The acronym stands for Smart Leadership, Aggressive Strategy, Motivation and Training, Actionable Intelligence, Dashboard-Based KPIs and KRAs, Harnessing Technology, Action Plan for Each Theatre, and No Access to Financing.



Development Initiatives: The government has



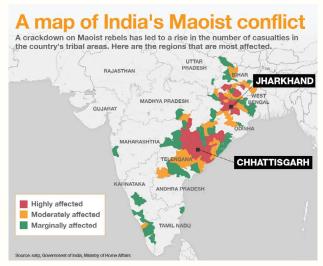
introduced several flagship programs to address the socio-economic factors contributing to Naxalism. The Pradhan Mantri Gram Sadak Yojana (PMGSY) has improved rural connectivity, while the Aspirational Districts Programme focuses on holistic development, including constructing 15,000 houses in Naxal-affected regions.

- » Other initiatives include efforts to ensure 100% saturation of government welfare schemes in every village and the Skill Development in 47 LWE-Affected Districts Scheme, which targets employment generation.
- » The Civic Action Program (CAP) provides financial grants for Central Armed Police Forces (CAPFs) to undertake welfare activities in these regions. The Special Infrastructure Scheme focuses on creating basic infrastructure like roads, bridges, and schools in remote areas, enhancing governance through the recruitment of local personnel.
- Empowerment and Rehabilitation: Building trust between the government and tribal communities is crucial in countering Maoist influence.
 - » Public engagement efforts aim to reduce alienation, while surrender and rehabilitation schemes offer incentives like education, vocational training, and financial aid for former Maoists.
 - » Addressing grievances such as land rights, fair land acquisition policies, and implementing the Forest Rights Act of 2006 are key steps in reducing socio-economic disparities.

Understanding Maoism:

- Maoism, a form of communism developed by Mao Tse Tung, seeks to capture state power through armed insurgency, mass mobilization, and strategic alliances. Maoist ideology revolves around violent revolution, with the People's Liberation Guerrilla Army (PLGA) trained to use extreme violence to spread terror.
- The Communist Party of India (Maoist), formed in 2004, is the most violent Maoist formation in India and is banned under the Unlawful Activities (Prevention) Act, 1967.

• Maoists use propaganda and disinformation against state institutions, mobilizing people over perceived inadequacies of the existing system to indoctrinate them into armed resistance.



Seographical Spread and Influence of Naxalism: The Red Corridor, spanning states like Chhattisgarh, Jharkhand, Bihar, Odisha, Andhra Pradesh, and Maharashtra, remains the stronghold of Naxalite activities due to difficult terrain and socio-economic deprivation. Apart from rural areas, Naxalite ideologies have also influenced urban intellectuals and student organizations, a phenomenon termed 'Urban Naxalism.'

Challenges in Eliminating Maoist Insurgency:

- Several factors contribute to the persistence of Maoist insurgency. Historical marginalization of tribals and Dalits, coupled with inadequate development in interior areas, fuels discontent. Despite significant financial allocations, governance and implementation failures hinder progress.
- The centralized command structure of the CPI (Maoist) enables strategic planning, whereas the government's fragmented response allows Maoists to maintain strongholds like Abhujmadh as logistical bases.
- Additionally, the Naxal-affected regions house 80% of India's coal reserves and 19% of other mineral resources, providing Maoists with



financial leverage.

A trust deficit persists due to ineffective governance, displacement without proper rehabilitation, and the non-implementation of constitutional provisions such as the Fifth and Ninth Schedules.

Government's Counter-Insurgency Strategies:

- ❖ Security infrastructure: A key aspect of the counter-Maoist strategy is the expansion of security infrastructure. The establishment of forward base camps in Maoist strongholds like Abujhmad and south Bastar has facilitated security force movements and restricted Maoist activities. Since 2019, over 100 police camps have been set up in Bastar, with 30 new camps established in 2023 alone.
- Infrastructure development: Infrastructure development has played a crucial role in integrating isolated regions. The expansion of road networks and mobile communication towers, enabled by these security bases, has improved civilian access to essential services. Initiatives such as the Niyad Nellanar scheme aim to provide essential services and build trust among villagers, countering Maoist influence through development.
- Intelligence: Another significant development is the rise in Maoist surrenders and arrests. In 2023, 428 Maoists were arrested and 398 surrendered, while in early 2024, the numbers nearly doubled with 837 arrests and 802 surrenders. Intelligence gathered from surrendered and arrested Maoists has helped security forces dismantle Maoist networks and strategize more effective operations.
- Operational coordination has also improved, with multi-force operations involving the District Reserve Guard (DRG), Special Task Force (STF), Bastar Fighters, CRPF, BSF, ITBP, SSB, and Chhattisgarh Armed Force (CAF). Better coordination and inter-district operations have been key factors in recent successes, alongside adaptive counterinsurgency tactics.

Case Studies:

 Several states have successfully countered Naxalism using tailored strategies. Andhra Pradesh combined aggressive security operations with socio-economic initiatives, while Chhattisgarh's Operation Prahaar disrupted Naxalite networks through intelligence-led strikes. Maharashtra's Project Salam focused on rehabilitating surrendered Naxalites, reducing violence in affected districts.

Way Forward:

- Sustained success against Maoist insurgency requires a balanced approach that integrates security, governance, and socio-economic development. Governance reforms should include the constitution of Tribal Advisory Councils and enforcement of Land Ceiling Acts under the Ninth Schedule to redistribute land to the landless. Economic development initiatives must focus on alternative livelihoods to replace dependence on illegal activities such as opium cultivation.
- Security measures should involve the deployment of specialized paramilitary units to secure tribal areas while empowering local governance structures. Equitable resource management should ensure that tribals are stakeholders in the exploitation of natural resources.
- The escalation of anti-Maoist operations in Chhattisgarh represents a decisive shift in India's fight against Left-Wing Extremism. Increased security deployments, strategic forward bases, infrastructure development, and improved intelligence gathering have contributed to recent successes. As the central and state governments push towards their 2026 target for eliminating Maoist insurgency, continued efforts in security, governance, and socio-economic development will be crucial in determining the long-term outcome of this conflict.

Short Issues

27th meeting of the Western Zonal Council

Context:

Union Home Minister and Minister of Cooperation Shri Amit Shah recently chaired the 27th meeting of the Western Zonal Council at Pune, Maharashtra. It is organized by the Inter State Council Secretariat under the Ministry of Home Affairs in collaboration with the state government.

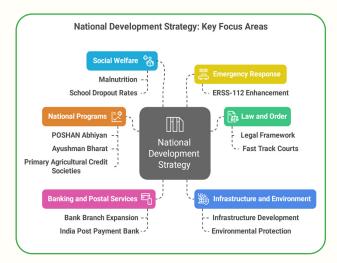
Key Discussion Areas

- Law and Order: Strengthening the legal framework for dealing with sexual offences and ensuring the effective implementation of Fast Track Special Courts (FTSCs).
- Banking and Postal Services: Expanding banking and India Post Payment Bank branches to improve financial inclusion, ensuring that every village has access within a 5 km radius.
- Emergency Response Support System (ERSS-112): Enhancing emergency response mechanisms to improve public safety.
- Infrastructure, Environment, and Mining: Addressing issues related to regional infrastructure development, environmental protection, and resource management.
- Social Welfare and Development: Tackling malnutrition, improving food security, and addressing school dropout rates.
- National Programs: Reviewing the implementation of key initiatives such as POSHAN Abhiyan (nutrition program), Ayushman Bharat (health insurance scheme), and strengthening Primary Agricultural Credit Societies (PACS) to support rural economies.

Understanding the Zonal Councils:

- The Zonal Councils were established in 1957 under the States Reorganization Act, 1956 to encourage cooperation and dialogue among states. Though they are statutory bodies rather than constitutional ones, they play a significant role in addressing interstate and Centre-State issues, promoting national integration, and fostering regional development.
- The Five Zonal Councils: India is divided into five Zonal Councils, each catering to specific states and regions:
 - » Northern Zonal Council
 - » Central Zonal Council

- » Eastern Zonal Council
- » Western Zonal Council
- » Southern Zonal Council
- The North Eastern states are not part of the Zonal Councils and instead fall under the North Eastern Council, established in 1972, to specifically address their unique challenges.
- The Western Zonal Council comprises the states of Gujarat, Goa, Maharashtra and the Union Territories of Dadra and Nagar Haveli and Daman & Diu.



The Evolving Role of Zonal Councils:

- The Zonal Councils have increasingly shifted from being purely advisory bodies to becoming platforms for action, ensuring policy implementation and effective governance.
- This transformation aligns with the broader emphasis on cooperative and competitive federalism, which seeks to strengthen collaboration between the Centre and the states for national progress.
- A greater focus has been placed on enhancing the role of Zonal Councils in resolving inter-state disputes and improving Centre-State relations.
- Additionally, the frequency of Standing Committee meetings has increased, facilitating regular followups on key decisions and ensuring their effective execution.

Conclusion:

The 27th Western Zonal Council meeting is a significant step toward regional cooperation and governance. By addressing critical issues, it fosters inter-state dialogue and national development. These councils remain vital



in ensuring that states collaborate, resolve disputes, and contribute to national growth.

Aero India 2025

Context:

Aero India 2025 was recently held from February 10 to 14 at Yelahanka Air Force Station, Bengaluru. It served as a platform for technological advancements, global partnerships, and innovation in aerospace and defence. The event brought together industry leaders, policymakers, and innovators to explore developments in aviation technology and defence capabilities.

Key Highlights of Aero India 2025

- Su-57 vs. F-35: Comparing Advanced Fighter Aircraft
 - » A significant feature of the event was the presence of the Russian Su-57 and American F-35, two advanced fighter aircraft.
 - » **Su-57:** A fifth-generation fighter with stealth technology and multi-role capabilities.
 - » F-35: A technologically advanced stealth aircraft with integrated electronic warfare systems.
- India's AMCA: Indigenous 5th-Gen Fighter: The event featured India's Advanced Medium Combat Aircraft (AMCA), developed by ADA and HAL. The aircraft is designed as a twin-engine stealth fighter with advanced avionics and supercruise capability, representing advancement in domestic military aviation development.
- 'Manthan' Platform: Supporting Innovation: Aero India 2025 highlighted start-ups through the 'Manthan' initiative, promoting research and development in unmanned aerial vehicles (UAVs), artificial intelligence-based defence systems, and cybersecurity solutions, reflecting the growing role of emerging technologies in defence.

The Future of Indian Naval Aviation

- A Roadmap for Expansion and Technological Advancement: In parallel with Aero India 2025, the Indian Navy has outlined its Naval Aviation Technology Roadmap, 2047, aiming to establish a fleet of 400 aircraft to enhance maritime security and combat capabilities over the next two decades. Key focus areas include:
 - » A 5th-generation twin-engine deck-based fighter aircraft to replace the current fleet

- » Long-range maritime reconnaissance aircraft for monitoring the Indian Ocean Region
- » Medium- and short-range reconnaissance aircraft
- » Aircraft Carrier-Borne Airborne Early Warning & Control Systems
- » Amphibious aircraft for enhanced operational flexibility
- Strengthening Indigenous Manufacturing: The Navy has been prioritizing indigenous development through collaborations with HAL and private sector players. This includes:
 - » Twin-engine Utility Helicopter Maritime (UHM)
 - » Medium-range reconnaissance aircraft (C-295) developed by Tata Advanced Systems Ltd.
 - » Integration of indigenous sensors, air-launched weapons, and advanced missile systems
- Adapting to Emerging Threats: Recent conflicts have demonstrated the growing role of unmanned platforms, loitering munitions, and information warfare in naval operations. The Indian Navy recognizes the need for a fundamental shift in its operational doctrine, focusing not only on acquiring new platforms but also on:
 - » Developing airborne mine detection and sweeping capabilities
 - » Enhancing cyber and electronic warfare strategies
 - » Addressing emerging threats from non-state actors operating in maritime zones
- The roadmap envisions the Indian Navy achieving 100% indigenization in naval aviation systems, ensuring long-term self-reliance in defence production.

Conclusion:

Aero India 2025 provided a platform for showcasing global and domestic advancements in aerospace and defence, facilitating technological exchange and collaboration. With evolving security challenges, there is a growing focus on integrating unmanned platforms, electronic warfare, and advanced missile systems in naval aviation. The roadmap emphasizes self-sufficiency in defence technology through continued research and development.

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Power Packed News

Aadhaar Good Governance Portal

The Ministry of Electronics and Information Technology (MeitY) launched the Aadhaar Good Governance Portal to simplify Aadhaar authentication requests. It allows government and private entities to obtain Aadhaar authentication for public services. The portal will facilitate innovation, knowledge sharing and access to essential services, giving citizens easy access to health, education, e-commerce and hospitality services. The initiative is in line with the recent amendments made under the Aadhaar Act 2016, which will promote good governance.

Tuhin Kanta Pandey becomes SEBI Chairman

- Finance Secretary Tuhin Kanta Pandey has been appointed as the new chairman of SEBI for three years. He is a 1987 batch Odisha cadre IAS officer. Before being appointed as SEBI chairman, Pandey served as the Finance Secretary of India, playing a key role in shaping India's fiscal strategies.
- Tuhin Pandey will replace Madhabi Puri Buch, whose term ended on 28 February 2025. Buch was the first woman chairman of SEBI and assumed office on 2 March 2022. Her appointment was made based on the recommendation of the financial sector regulatory search committee.

'One Nation-One Port' initiative launched

- Union Minister Sarbananda Sonowal launched the 'One Nation-One Port Procedure' (ONOP) to standardise
 operations of major ports. The initiative aims to reduce costs and operational delays by improving documentation
 and processes. He also launched the Logistics Port Performance Index (LPPI) and India Global Ports Consortium.
- The MAITRI App has been launched to simplify business processes and the initiative supports MAITRI for AI
 and blockchain-based trade facilitation.

Anant Ambani's Vantara gets 'Prani Mitra' award

• Anant Ambani's wildlife rescue centre 'Vantara' has been conferred the prestigious 'Prani Mitra' National Award. It is India's highest animal welfare honour. Vantara's elephant care centre houses over 240 rescued elephants, including those from circuses and the timber industry. It is the world's largest elephant hospital and offers state-of-the-art veterinary services.

NASA's Lunar Trailblazer Mission

On February 26, NASA launched the Lunar Trailblazer satellite from Florida, which will search for water sources on the surface of the Moon. It was launched by a SpaceX Falcon 9 rocket. This satellite will measure the temperature of the moon's surface and study the light emission pattern of water. This mission will be helpful in understanding water resources on the moon and provide data for future missions.

The Cayley Fund: Funding for Biodiversity Conservation

The Cayley Fund was launched at the COP16 UN Biodiversity Conference held in Rome on 25 February 2025. The fund will collect financial contributions from businesses that use digital sequence information. It will include pharmaceuticals, cosmetics, and agriculture and biotechnology companies. It aims to promote biodiversity conservation and provide assistance to developing countries. This is the first time the UN will receive financial contributions from the private sector.

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America's new Gold Card Visa program

■ The US launched a 'Gold Card Investor Visa' program for wealthy immigrants, which will replace the existing EB-5 visa. Companies can buy immigration gold cards by paying \$5 million. US President Donald Trump described it as an advanced version of the green card system. Trump's proposal reflects his broader agenda to reshape immigration by favoring financial investment over traditional criteria like family sponsorship or job creation.

Odissi dancer Mayadhar Raut passes away

- Guru Mayadhar Raut, considered the father of Odissi dance, passed away at the age of 92. He was one of the key personalities who played a vital role in the revival and development of Odissi dance. In 1952, he contributed to the establishment of Kala Vikas Kendra in Cuttack. Guru Raut redefined and codified the style of Odissi dance by paying special attention to 'Abhinaya'.
- In 1955, he introduced Mudra Viniyoga and Sancharibhaav to the dance, which further enhanced its expression. He started the tradition of presenting Geetagovinda 'Ashtapadi' on stage, which gave more popularity to Odissi dance
- He received training from Guru Mohan Mohapatra, Yudhishthir Mohapatra, Mohan Sundardev Goswami and Pankaj Charan Das. In recognition of his contributions, he was awarded the Padma Shri in 2010, the Sangeet Natak Akademi Award in 1985 and the Orissa Sangeet Natak Akademi Award in 1977. His departure is an irreparable loss to the Indian dance form, but his legacy will live on forever.

Largest Jhumur event in Guwahati

- Prime Minister Narendra Modi attended the "Jhumoir Binandini 2025" event at Sarusajai Stadium in Guwahati on February 24. It was held to commemorate the 200th anniversary of Assam's tea industry, and saw the participation of 8,600 dancers, making it the largest ever event of Jhumur dance. Heads of missions and ambassadors of 60 countries were present on this historic occasion, making the event a global hit.
- Jhumur dance is part of the folk tradition of the Sadan ethno-linguistic group, which originated in the Chhota Nagpur region. It is mainly performed by tea tribes who came to Assam from Jharkhand, Odisha, Chhattisgarh and West Bengal in the 19th century.
- Women are the main dancers and singers in this dance, while men play traditional instruments like madal, dhol, cymbals and shehnai. The costumes of Jhumur dance are dominated by red and white saris. The event was an important occasion to highlight the cultural heritage of Assam and honour the contribution of the tea tribes.

Datia Airport gets license

- The Directorate General of Civil Aviation (DGCA) has granted license to Datia Airport in Madhya Pradesh as a public airport under category 3C, VFR. In this category, regional aircraft can operate in visual flight conditions. With this approval, Datia Airport became the eighth public airport in the state. The airport is spread over 184 acres, with a 30 meter wide and 1,810 meter long runway.
- The terminal building is spread over 768 square meters. Air travel to Bhopal and Khajuraho will be possible from this airport. This new airport will increase regional connectivity and boost local tourism and business.

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Virat Kohli's new record

- Virat Kohli became the fastest batsman to reach 14,000 ODI runs in the Champions Trophy 2025 match against Pakistan on 23 February. He surpassed Sachin Tendulkar (350 innings) and Kumar Sangakkara (378 innings) by achieving this feat in just 287 innings.
- He also scored his 51st ODI century in this match and led India to a 6-wicket win over Pakistan. Kohli also holds
 the record for taking the most catches for India in ODIs, he now has 158 catches to his name.

Shaktikanta Das appointed as Principal Secretary-2 to PM

- On February 22, the Appointments Committee of the Cabinet appointed Shaktikanta Das as Principal Secretary-2 to Prime Minister Modi. This appointment will be effective from the date he assumes charge and his tenure will last till the tenure of the Prime Minister.
- Shaktikanta Das is a retired IAS officer of Tamil Nadu cadre. He has been the 25th Governor of RBI and has also been India's G-20 Sherpa and member of the 15th Finance Commission. Currently PK Mishra is working as the Principal Secretary.

Witness Protection Scheme of Haryana

- The Haryana government implemented the "Haryana Witness Protection Scheme, 2025" which will ensure protection of witnesses of serious crimes. The scheme will apply to crimes that attract life imprisonment or a term of more than seven years.
- It classifies witnesses into three categories based on the severity of the threat—Category A (threat to life), Category B (threat to property or reputation), and Category C (moderate threat). This initiative is an important step towards strengthening transparency and security in the judicial system.

Kerala's AI-based eye disease screening programme

- The Kerala government launched the world's first AI-powered eye disease screening programme called 'Nayanamritham 2.0'. The initiative has been developed to detect eye diseases early with the help of Artificial Intelligence.
- This version now also includes screening for glaucoma and Age-related Macular Degeneration (AMD). The programme will empower healthcare providers while making quality eye care accessible in the state.

Madhya Pradesh becomes the state with the most vultures

- According to the recent census conducted by the Forest Department in Madhya Pradesh, the number of vultures in the state has increased to 12,981, making it the state with the most vultures in the country. This number was 8,397 in 2019, which increased to 10,845 in 2024.
- 7 species of vultures are found in the state, out of which 4 are local and 3 are migratory. Vultures play an important role in the ecosystem, as they prevent the spread of diseases by eating the carcasses of dead animals.



Mohammed Shami is the second fastest bowler to take 200 ODI wickets

- Indian fast bowler Mohammed Shami has achieved another big feat in ODI cricket. He has crossed the 200 ODI wicket mark by taking 202 wickets in 104 matches at an average of 23.63. With this achievement, he has become the second fastest bowler to take 200 ODI wickets. Before him, only Australia's Mitchell Starc (102 matches) had achieved this feat. The special thing is that Shami achieved this feat in just 5,126 balls, which is the record for taking 200 wickets in the least number of balls by any bowler.
- Apart from this, Shami has achieved the feat of taking five wickets in an innings six times and has become the eighth bowler to take the most ODI wickets for India. He has also completed 60 wickets in ICC tournaments, leaving behind Zaheer Khan (59 wickets). He achieved this feat in the ICC Champions Trophy match between India and Bangladesh in Dubai on February 20. Shami's historic achievement has further strengthened Indian cricket.

Purnima Devi Burman becomes Time Magazine's 'Woman of the Year

- Indian biologist and wildlife conservationist Purnima Devi Burman has been chosen as the 'Woman of the Year' by the prestigious Time Magazine. She is the only Indian woman in this list, which reflects her extraordinary contribution. This list also includes influential women like actress Nicole Kidman and France's Gisele Pellicot.
- Purnima Devi Burman has been honored especially for her efforts in the conservation of the Greater Adjutant Stork (Hargila). The number of this species, which was once on the verge of extinction, has now increased to 1,800 in Assam, whereas earlier it was only 450. The International Union for Conservation of Nature (IUCN) has also reclassified this species from "endangered" to "near threatened" in 2023.
- Her achievement is a great inspiration in the field of environmental conservation in India and shows that endangered species can be saved with dedication and commitment.

CEA Anantha Nageswaran's term extended till March 2027

- The Government of India has extended the term of Chief Economic Advisor (CEA) V. Anantha Nageswaran till March 2027. On 20 February 2025, the Appointments Committee of the Cabinet (ACC) approved the extension of his term for two years. Nageswaran took over as CEA in January 2022, replacing Krishnamurthy Subramanian.
- As the Chief Economic Advisor, his responsibility is to advise the government on various economic policies and prepare the annual economic survey, which is presented in Parliament before the Union Budget. During his tenure, India adopted economic reforms and maintained a stable growth rate.
- This decision of the government will maintain stability in economic policies and strengthen India's growth path. Nageswaran's expertise will help make India's economy more robust.

India launches digital pilot license, becomes second country in the world

- India has taken the important initiative of introducing digital licenses for pilots, making it the second country in the world to adopt this system. Union Civil Aviation Minister Ram Mohan Naidu launched the Electronic Personnel License. This license has been issued after getting approval from the International Civil Aviation Organization (ICAO).
- Under this digital system, the traditional physical license will be replaced with an e-license, which can be accessed through the easyCA mobile application. This initiative will make the pilot licensing process more transparent,



secure and efficient. Also, it will increase employment opportunities for Indian pilots globally.

The Government of India is also implementing several other schemes to promote digital transformation in the aviation sector, including initiatives such as the easyCA portal, Digital Sky Platform and Electronic Flight Folder.

Uttar Pradesh government presents Rs 8.09 lakh crore budget

- Uttar Pradesh Finance Minister Suresh Kumar Khanna presented a budget of Rs 8.09 lakh crore for the financial year 2025-26, the largest budget in the history of the state.
- Research and information technology have been given priority in this budget. 22% of the budget has been allocated for development purposes, 13% to education, 11% to agriculture and 6% to the health sector. The state government has also planned to develop Artificial Intelligence City and Cyber Security Research Park.
- 49.86 lakh smartphones/tablets will be given under Swami Vivekanand Yuva Sashaktikaran Yojana, while scooties will be provided to meritorious girl students under Rani Laxmibai Scooty Yojana.
- Apart from this, 800 beneficiaries will get bank loans and 16,000 people will get employment under Mukhyamantri Gramodyog Rojgar Yojana.
- Rs 461 crore has been allocated for the Defence Industrial Corridor along with Bundelkhand Expressway, which will boost industrial development in Uttar Pradesh.

Rekha Gupta became the Chief Minister of Delhi

- On 20 February 2025, Rekha Gupta took oath as the new Chief Minister of Delhi. She became the ninth and fourth woman Chief Minister of Delhi. She won the post by defeating Bandana Kumari of Aam Aadmi Party by 29,595 votes.
- Rekha Gupta is a leader of the Bharatiya Janata Party (BJP) and a first-time MLA from Shalimar Bagh. On February 19, the BJP declared her as the leader of the Delhi Legislative Party. It was a historic victory for the BJP, as the party won 48 out of 70 seats and gained power in Delhi after 26 years.
- Gupta started her political journey with the Akhil Bharatiya Vidyarthi Parishad (ABVP), the student wing of the Rashtriya Swayamsevak Sangh (RSS) and was the president of the Delhi University Students Union in 1996. Now, under her leadership, new policies and schemes are likely to be implemented in Delhi.

India elected Vice President of IALA

- The International Maritime Navigation Aids Association (IALA) has elected India as its Vice President. The election took place during the IALA General Assembly held in Singapore.
- India was represented by T.K. Ramachandran, Secretary, Ministry of Ports, Shipping and Waterways. This appointment will strengthen India's global position in the field of maritime security and navigation aids.
- The IALA Council meeting will be held in India in December 2025, while the IALA Conference and General Assembly will be held in Mumbai in September 2027. This will help promote India's maritime strategy and global cooperation.

New land law of Uttarakhand government

- The Uttarakhand government has approved a new land law aimed at protecting the cultural identity and natural
 resources of the state. Under this new law, more stringent provisions have been made to protect the resources of
 Uttarakhand and maintain its original identity.
- According to the new law, outsiders will not be able to buy land for agriculture and horticulture in the other 11
 districts of the state except Haridwar and Udham Singh Nagar. This decision has been taken to ensure proper use

March 2025



- of land in hilly areas and prevent encroachment.
- Apart from this, under the new law, District Magistrates will not have the right to give individual permission for land purchase. Now all District Magistrates will have to submit regular reports related to land purchase to the state government and the Revenue Council. This law will repeal the previous land law implemented in 2018.
- This move of the Uttarakhand government is being considered an important step towards preventing illegal land acquisition by outsiders in the state and protecting the natural resources of the state.

Rajasthan's 2025-26 Budget

- Rajasthan Deputy Chief Minister Diya Kumari presented the state budget for 2025-26, with a special focus on job
 creation, increasing water supply and infrastructure development.
- The government aims to make Rajasthan a \$350 billion economy by 2030. According to this budget, the state's GDP is likely to exceed Rs 19.89 lakh crore in 2025-26.
- The budget has announced 5 lakh new domestic electricity connections and 5,000 special agricultural electricity connections. To promote solar energy, households installing solar panels under the PM Surya Ghar Free Electricity Scheme and Mukhyamantri Free Electricity Scheme will get free electricity up to 150 units.
- Apart from this, 1.25 lakh posts will be recruited in government departments and state undertakings.
- In the infrastructure sector, the government will build 9 greenfield expressways at a cost of Rs 60,000 crore and 1,600 settlements will be connected with paved roads under the Pradhan Mantri Gramin Sadak Yojana. The expansion of Jaipur Metro and the removal of BRTS have also been announced in this budget.

Exercise Dharma Guardian 2025

- The joint military exercise 'Dharma Guardian 2025' between India and Japan will be held in the Mount Fuji region of Japan from February 25 to March 9. This will be the sixth edition of this joint military exercise, the main objective of which is to enhance coordination and interoperability between the two armies in urban warfare and counter-terrorism operations under the orders of the United Nations.
- Additionally, 'Cyclone III' exercise was conducted between the special forces of India and Egypt at Mahajan Field Firing Range in Rajasthan from February 11 to February 23. This annual military exercise is held alternately in India and Egypt and its last edition took place in Egypt in January 2024. The main objective of this exercise is to strengthen the military relations of the two countries.

P. D. Singh becomes new CEO of Standard Chartered India

- Standard Chartered Bank has appointed P. D. Singh as its new Chief Executive Officer (CEO) for India. He will replace Zarin Daruwala, who is retiring on March 31, 2025. P. D. Singh's appointment will be effective from April 1. Prior to this, he was the CEO of JPMorgan Chase Bank in India, where he played a key role in shaping the bank's corporate banking franchise.
- Standard Chartered is a leading British multinational bank engaged in wealth management, corporate and investment banking, and treasury services. The largest shareholder of this bank is Singapore government-owned Temasek Holdings.

Gyanesh Kumar is the new Chief Election Commissioner of India

- President Draupadi Murmu has appointed Election Commissioner Gyanesh Kumar as the new Chief Election Commissioner (CEC). He will be the 26th Chief Election Commissioner of India and his term will be till 26 January 2029.
- He replaced Rajiv Kumar on 18 February 2025. Gyanesh Kumar is a former 1988 batch Kerala cadre IAS officer



and had previously served as Secretary in the Ministry of Parliamentary Affairs.

Matsya-6000 test

- India's fourth generation deep-sea submarine 'Matsya-6000' has successfully completed its port testing. It has been developed under the Deep Ocean Mission.
- This 2.1 meter diameter submarine is designed for operation by three people. This test is considered an important step towards testing in shallow water at a depth of 500 meters by the end of 2025.

Multilateral Naval Exercise 'Komodo'

- The fifth edition of the Multilateral Naval Exercise 'Komodo' hosted by the Indonesian Navy was held in Bali, Indonesia from 16 to 22 February 2025.
- More than 30 ships from over 15 countries participated in the exercise, including India, the US, Russia and China.
 Its theme was "Maritime Partnership for Peace and Stability".

British Academy Film Awards 2025

- The papal thriller 'Conclave' won four awards including Best Film at the 78th British Academy Film Awards.
- 'The Brutalist' won four awards including Best Director for Brady Corbet and Best Actor for Adrien Brody. The awards were held at the Southbank Centre in London.

Constantine Tassoulas becomes the new President of Greece

- On February 12, 2025, the Parliament of Greece elected former Speaker Constantine Tassoulas as the new President of the country. He will replace Katerina Sakellaropoulou, the first female President of Greece, whose term ends in March. Tassoulas will be sworn in on March 13.
- Greece is located in southeastern Europe and its capital is Athens. Currently, the Prime Minister of Greece is Kyriakos Mitsotakis and the official currency of the country is the Euro (€).

Foy Sagar and King Edward Memorial renamed as Varun Sagar and Maharshi Dayanand Vishram Grih

- On February 12, 2025, the Ajmer Municipal Corporation decided to change the names of historical sites. The city's major lake, earlier called Foy Sagar, will now be known as Varun Sagar. The lake was built in 1892 by a British engineer, Foy, under a famine relief project and was the main source of drinking water for Ajmer city until 1995.
- Similarly, the King Edward Memorial building built for pilgrims in 1912-1913, will now be called Maharshi Dayanand Vishram Grih. The building was declared an old monument by the state government in 2014.
- Also, RTDC Hotel Khadim was renamed as Hotel Ajaymeru on November 19, 2024. These changes have been made with the aim of giving an Indian identity to cultural heritage sites. Ajmer is a city of historical and religious importance, and these name changes are part of an effort to promote local culture and traditions.

Kashi Tamil Sangamam 3.0

The third edition of Kashi Tamil Sangamam began on 15 February 2025 in Varanasi, Uttar Pradesh. The ten-day

March 2025



- event ran till 24 February and was inaugurated by Union Education Minister Dharmendra Pradhan, Minister of State for Information and Broadcasting Dr. L. Murugan and Uttar Pradesh Chief Minister Yogi Adityanath.
- The event was organized by the Ministry of Education in collaboration with various government departments and the Government of Uttar Pradesh. Kashi Tamil Sangamam 3.0 was attended by about 1000 delegates from Tamil Nadu, divided into five different categories.
- The main theme of this edition focused on the contribution of Sage Agastya to health, philosophy, science, classical Tamil literature and cultural unity.
- The event aims to strengthen the cultural ties between North and South India and highlight the historical links between Tamil and Varanasi. This Sangamam has become an important platform to showcase the unity of Indian culture, where the traditions of Tamil and Kashi are seen confluenced.

38th National Games concluded in Uttarakhand

- The 38th National Games of India were held at various places in Uttarakhand and concluded on 14 February 2025. Players from across the country participated in this prestigious sporting event and showcased their talent in various sports.
- The Services Sports Control Board topped the competition by winning 68 gold, 26 silver and 27 bronze medals. Maharashtra secured the second position with 54 gold, 71 silver and 76 bronze medals, while Haryana stood third with 48 gold, 47 silver and 58 bronze medals.
- Various new sports were also included in this time's games, giving players more opportunities to showcase their abilities.
- The National Games are organized in each state on a rotation basis, and now Meghalaya has got the honor of hosting the 39th National Games in 2026.

Jotham Napat becomes the new Prime Minister of Vanuatu

- On 11 February 2025, Jotham Napat, President of the Vanuatu Leaders Party, was elected as the new Prime Minister of the country. He was elected through secret ballot in Parliament and received 50 votes in the 52-member Parliament. The remaining two votes were declared void.
- Napat was the only candidate in this election and led a coalition of five political parties Leaders Party, Vanuaku Party, Greon Mo Justice Party, Reunification Movement for Change and Iuko Group. After becoming Prime Minister, he appointed Johnny Konapo Rasau as Deputy Prime Minister and Minister of Finance and Economic Management.
- Vanuatu is an island country located in the South Pacific Ocean, where political instability has been common.
 Napat's tenure is considered important for the internal stability and development of the country.

Bengal Budget 2025

- On 12 February 2025, West Bengal Finance Minister Chandrima Bhattacharya presented the budget in the state assembly. Several announcements were made in this budget for road development, river bank protection and social welfare.
- The state government has allocated 1,500 crore for road development under the 'Pathashree Yojana'. Apart from this, an amount of 200 crore was approved to prevent river bank erosion under the "Nadi Bandhan" scheme.
- Dearness Allowance (DA) was increased by 4%, which will provide relief to government employees. A provision of 200 crore has been made to provide smartphones to Asha and Anganwadi workers.
- Heavy budget allocations were also made for Lakshmi Bhandar Yojana, Kanyashree Prakalpa and Sabuj Sathi Yojana. These schemes aim to empower the poor, women and students economically and socially.

118 _____www.dhyeyaias.com



India ranked 38th in World Bank Logistics Performance Index

- India ranked 38th in the World Bank Logistics Performance Index (LPI) 2024 among 139 countries. Singapore
 topped the list, while Finland and Germany ranked second and third respectively.
- The turnaround time of Indian ports has improved to 0.9 days. This is better than the US (1.5 days) and Australia (1.7 days).
- India has moved up to 22nd position in the international shipment category. The government has launched initiatives like PM Gati Shakti and National Logistics Policy to improve logistics, which is expected to put India among the top 25 countries by 2030.
- According to the report, the Indian freight and logistics market is expected to grow from \$317.26 billion in 2024 to \$484.43 billion by 2029.

Pankaj Advani wins 10th men's snooker title

- Pankaj Advani won his 36th national title and 10th men's snooker title at the Indian Snooker Championship. The prestigious tournament was held at the Yashwant Club, where Advani performed brilliantly in the final match.
- He made an impressive break of 84 in the last frame of the final match. However, he had to face defeat against Damani in the group stage.
- The Indian Snooker Championship is the only selection competition for the Asian and World Championships. Pankaj Advani represented India in the Asian Snooker Championship 2025, which started from February 15.

N. Chandrasekaran receives "Most Excellent Order of the British Empire" honor

- Tata Group Chairman N. Chandrasekaran has been awarded the prestigious "Most Excellent Order of the British Empire (Civil Division)" honor by the United Kingdom. It is an honorary civilian award given to foreign citizens. Chandrasekaran has been given this honor for his significant contribution to UK-India business relations.
- This award is given to individuals who have made significant contributions in the arts, science, charitable works
 and public service. Foreign recipients of this honor include eminent names like Dagmar Dolby, Eric Schmidt,
 Jason Furman and Rajinder Dhatt.
- Chandrasekaran has been the chairman of Tata Sons since 2017 and chairs the boards of major Tata Group companies including Tata Steel, Tata Motors, Tata Power and Air India. His leadership ability and business acumen have further strengthened the Tata Group at the global level. His honor will further strengthen India's international business image and give further impetus to UK-India economic relations.

RBI allows pre-approved credit lines to small finance banks

- The Reserve Bank of India (RBI) has allowed small finance banks (SFBs) to provide pre-approved credit lines. In September 2023, RBI launched the credit line facility on UPI for banks and third party apps. Now, customers of small finance banks will also be able to avail this facility.
- The UPI system already facilitates payments through savings accounts, overdraft accounts, prepaid wallets and credit cards. The credit line will be an additional funding source for this. Customers can use it without applying for a loan separately, but they will have to give explicit consent first.
- This will provide quick financial assistance to small businesses and individual customers. This facility will be useful for those who want short-term loans for immediate needs. This move will promote digital payments and encourage financial inclusion. The inclusion of small finance banks in this facility will further strengthen digital banking and UPI based transactions in India.

Minimum Market M



Romania's President Klaus Iohannis resigns

- Romania's President Klaus Iohannis has resigned from his post amid fears of impeachment. He had been president
 since 2014 and had completed his maximum two terms. His resignation came at a time when the country's top
 court annulled the presidential election, leading to political instability.
- Thousands of Romanian citizens protested against the cancellation of the election in January 2025 and demanded Iohannis' resignation. Following this, three far-right opposition parties, which control 35% of the parliament, filed an impeachment motion against him.
- After Iohannis' resignation, Romania's Senate chief will be made the interim president. This development has increased political turmoil in the country. Opposition parties allege that Russia is interfering in the elections, threatening Romania's democratic process. Iohannis' removal from the presidency could prove to be a turning point for the country's stability.

Bharat Biotech's Lumpy Skin Disease Vaccine Approved

- India's drug regulator has approved the Lumpy Skin Disease (LSD) vaccine, "BioLumpivaxin," developed by Bharat Biotech. The vaccine is designed to protect dairy cattle and buffaloes against Lumpy Skin Disease.
- It is the world's first DIVA marker vaccine, which can differentiate between infected and vaccinated animals. It has been developed at the Indian Council of Agricultural Research-National Research Centre on Equines (ICAR-NRCE), Hisar. The vaccine was tested by the Indian Veterinary Research Institute (IVRI), where its quality and efficacy were found to be at par with global standards.
- Lumpy skin disease is an infectious animal disease, spread by mosquitoes, ticks and other insect bites. It causes lumps on the skin of cattle, fever and a drop in milk production. In the last two years, about 2 lakh cattle have died in India due to this disease and milk production capacity of lakhs has been affected. This vaccine will play an important role in protecting India's dairy industry.

FAO launches "Ugbaad" climate-resilient agriculture project

- The Food and Agriculture Organization of the United Nations (FAO) launched a climate-resilient agriculture project called "Ugbaad" in Somalia. The seven-year, \$95 million project focuses on climate adaptation and enhancing resilience for vulnerable communities.
- "Ugbaad," which means "symbol of hope," will support major investments to strengthen agricultural food systems and address challenges posed by climate change. The project was approved in October 2024. The agriculture sector in Somalia is the main economic activity for about 65% of the population, but is badly affected by problems such as climate change, drought and floods.
- The initiative will be an important step towards reviving productive landscapes and empowering local farmers and communities. The project aims to ensure food security and improve agriculture-based incomes.

India introduces new HS code for GI-recognised rice exports

- The Indian government has introduced a new HS (Harmonised System) code to facilitate export of Geographical Indication (GI) recognised rice varieties. Finance Minister Nirmala Sitharaman announced amendments to the Customs Tariff Act, allowing for the first time a separate HS code for GI-tagged rice.
- India has 20 GI-tagged rice varieties, including Navara, Palakkadan Matta, Pokkali, Wayanad Jeerakasala, Kalanamak. The code will boost exports of GI-tagged rice, especially when general rice export policies are changed. These varieties can now be shipped to global markets without any additional barriers.
- The decision will help strengthen the identity and global competitiveness of India's distinctive agricultural products, directly benefiting farmers and exporters.



India ranked 96th in Corruption Perceptions Index 2024

- According to a report by Transparency International, India has been ranked 96th out of 180 countries in the 2024 Corruption Perceptions Index (CPI), with its score falling one point to 38. The index gives countries a score between 0 and 100 based on their perceived levels of corruption in the public sector, with 0 being highly corrupt and 100 being the least corrupt.
- The global average score in 2024 was 43, while India's score was 39 in 2023 and 40 in 2022. Among India's neighbours, Pakistan (135), Sri Lanka (121), and Bangladesh (149) were ranked lower, while China was ranked 76th. Denmark topped the list of least corrupt countries, followed by Finland, Singapore, and New Zealand. The report raises concerns about global corruption and emphasises the need to promote transparency.

Chief priest of Ayodhya Ram temple, passes away

- Acharya Mahant Satendra Das, the chief priest of Ram temple in Ayodhya, passed away on 12 February 2025.
 He was a member of the Nirvani Akhara, which belongs to the Dashnami sect founded by Adi Shankaracharya.
- Mahant Satendra Das was serving as the chief priest of the Ram temple even before the Babri Masjid demolition on 6 December 1992. He was suffering from diseases like high blood pressure and diabetes for a long time. After the stroke, he was admitted to the Sanjay Gandhi Post Graduate Institute of Medical Sciences, but he could not survive.
- His death has caused a wave of mourning in Ayodhya and the saint community. His life was deeply associated with
 the observance of religious traditions and the Ram temple construction movement. He played an important role
 from the construction of the temple to its worship.

India to host next global AI summit

- India will host the next international summit on artificial intelligence (AI). The AI Summit held in Paris was co-chaired by Prime Minister Narendra Modi and French President Emmanuel Macron, where India was given the responsibility of hosting the next summit. Participation of the Global South will be a priority in this summit.
- India's focus will be on AI innovations and their practical effects, which will increase productivity and create employment opportunities. India has already been a part of five major working groups related to AI, including global governance, security, innovation and cultural initiatives.
- 61 countries agreed that AI will be made ethical, transparent and trustworthy. The US and the UK did not sign the summit's "Inclusive and Sustainable AI" statement. The event will give India an important role in AI leadership.

Lebanon forms its first full government

- Lebanon's new Prime Minister Nawaf Salam formed the country's first full government since 2022. President Joseph Aoun accepted the resignation of the former caretaker government, taking a major step towards political stability in the country.
- Salam's cabinet of 24 ministers is equally divided between Christian and Muslim sects, maintaining the country's
 constitutional balance. This new government is committed to tackling Lebanon's severe economic crisis and
 implementing necessary reforms.
- Prime Minister Nawaf Salam is a veteran diplomat and former President of the International Court of Justice. His government marks a move away from leaders close to Hezbollah, which could see a change in the political balance in the country. This government will make a significant effort towards reforms and economic revival.

Coal India conferred with Golden Peacock Award

March 2025



- Coal India Limited (CIL) was awarded the prestigious Golden Peacock CSR Award 2024 at the 19th International Corporate Social Responsibility (CSR) Conference. CIL Chairman PM Prasad received the award at a ceremony organised by the Institute of Directors.
- The honour reflects CIL's sustained social commitment, which has positively impacted the lives of over 35 million people. Over the last five years, CIL has been the highest CSR spender among public sector companies.
- The company spends over 70% of its CSR budget on healthcare, sanitation, nutrition, education and livelihood programmes. CIL has also constructed over 50,000 toilets under the 'Swachh Vidyalaya Abhiyan'. The award reflects CIL's significant role in social welfare and sustainable development in India.

RBI to introduce 'bank.in' and 'fin.in' domains

- The Reserve Bank of India (RBI) announced the introduction of exclusive internet domains 'bank.in' and 'fin.in' for banks and financial institutions. The initiative aims to tackle rising cyber frauds and security threats in online financial transactions.
- The 'bank.in' domain will be exclusively for Indian banks, which will ensure secure access to financial services and increase consumer confidence in digital banking. The 'fin.in' domain will be for other non-bank entities in the financial sector. The Institute for Development and Research in Banking Technology (IDRBT) has been appointed as the exclusive registrar for these domains.
- This move is an important effort towards preventing cyber crimes and providing secure financial services to consumers. Through these domains, it will be easier for customers to identify legitimate financial institutions and the digital payment system will become more secure.

Bangladesh launches Operation 'Devil Hunt'

- The interim government of Bangladesh launched 'Operation Devil Hunt' to stop the increasing violence in the country. This campaign has been launched to stop the attacks on Awami League leaders and properties. Under this operation, security forces have arrested more than 1,300 suspects so far.
- The government has expressed commitment to root out those spreading violence. Prime Minister Sheikh Hasina was removed from office in August 2024 due to violent protests in Bangladesh, which increased instability in the country. A special command center has been set up to monitor Operation Devil Hunt.
- Meanwhile, the Bangladesh Nationalist Party (BNP) has decided to start a series of rallies across the country from February 11. This move of the government is being considered an important effort towards restoring law and order.

First kangaroo embryo made with IVF technology

- Australian scientists have succeeded in developing a kangaroo embryo using IVF technology for the first time.
 Researchers at the University of Queensland created eastern grey kangaroo embryos using intracytoplasmic sperm injection (ICSI) technology, which is also used in human fertility treatments.
- This success has opened up new possibilities for the conservation of endangered marsupial species. The research team has so far created more than 20 kangaroo embryos, for which sperm and eggs were collected from dead kangaroos. This discovery is considered a major step in Australia's wildlife conservation efforts.
- Lead researcher Dr. Andres Gambini called it an important achievement in preserving wildlife biodiversity. This technique can also be used in breeding other endangered species, which will strengthen biodiversity conservation.

Namibia's first president Sam Nujoma dies

Namibia's first democratic president Sam Nujoma died at the age of 95. He is known as the "founding father"

22 _____ www.dhyeyaias.com



of Namibia. Nujoma led the country after independence in 1990 and remained president until 2005. He paved the way for him to become president for the third time by amending the Constitution of Namibia. He played an important role in the struggle against South African colonialism, due to which he was declared the "Founding Father of the Nation of Namibia" under the Parliament Act, 2005. Nujoma's death is an occasion to remember his contribution to the African freedom struggle, which helped him make Namibia an independent and self-reliant nation.

 About Namibia: Windhoek is the capital of Namibia and its currency is the Namibian dollar. Currently Nangolo Mbumba is the President of the country, while Sarah Kugongelwa is the Prime Minister.

Argentina exits World Health Organization

- Argentina has announced its departure from the World Health Organization (WHO). President Javier Milei directed Foreign Minister Gerardo Werthein to initiate the process.
- Milei accused the WHO of being under political influence and failure in health management, particularly
 questioning the role of the organization in dealing with the Covid-19 pandemic. Milei termed the WHO a
 "harmful organization".
- Argentina's annual contribution to the WHO was about \$8 million. The US is the largest contributor to the WHO and has provided funding of about \$950 million in 2024. The decision may impact Argentina's global health policy and its collaboration with other countries.

Surajkund International Crafts Mela 2025

- The 38th Surajkund International Crafts Mela started on February 7 in Faridabad, Haryana, which will run till February 23. The theme of the fair this year is 'Shilp Mahakumbh', inspired by the Mahakumbh Mela 2025.
- For the first time, Odisha and Madhya Pradesh have been designated as theme states. The event will feature 648 artisans from 42 countries and over 1,000 stalls.
- The fair will feature exhibitions of handlooms, handicrafts, music, dance, and multi-cuisine food. A Memorandum of Understanding (MoU) has also been signed between Haryana Tourism Corporation and Delhi Metro Rail Corporation (DMRC), which will facilitate travel for tourists. BIMSTEC countries have been included as partner nations.
- Surajkund Mela provides a global platform to Indian art and culture and creates new opportunities for artisans.

North India's first green hydrogen plant in Himachal Pradesh

- Himachal Pradesh Chief Minister Sukhwinder Singh Sukhu laid the foundation stone of North India's first 1 MW green hydrogen plant at Dabhota in Solan district. The project will be developed in collaboration with Himachal Pradesh Power Corporation Limited (HPPCL) and Oil India Limited, at a cost of Rs 9.04 crore.
- The state government is committed to make Himachal India's first green energy state by 2026. The plant will promote the use of renewable energy sources and strengthen the state's energy self-sufficiency.
- The government has signed a Memorandum of Understanding (MoU) with Oil India Limited for the development of solar energy, green hydrogen, geothermal energy and biogas. The project is an important step towards India's green energy goals.

National Commission for Safai Karamcharis extended till 2028

- The central government has extended the term of the National Commission for Safai Karamcharis for three years till 31 March 2028. Its term was to end on 31 March 2025, but it has been extended at a cost of 50.91 crore.
- The National Commission for Safai Karamcharis monitors the implementation of the Manual Scavengers



Prohibition and Rehabilitation Act of 2013 (MS Act 2013). The Act is made to ensure the safety of Safai Karamcharis and make arrangements for their rehabilitation.

- The Commission takes suo motu cognizance of issues related to Safai Karamcharis and gives appropriate advice to the Central and State Governments. It was established in 1993 and was formally implemented in 1994.
- This step of the government is an important initiative towards ensuring the rights and welfare of Safai Karamcharis.

Prince Rahim al-Hussaini becomes Aga Khan V

- On February 5, Prince Rahim al-Hussaini was announced as the new spiritual leader of Ismaili Muslims. His
 father, Aga Khan IV, died on February 4 in Portugal at the age of 88. Prince Rahim, 53, was named Aga Khan V
 in accordance with his father's will, making him the 50th hereditary Imam of the Ismailis.
- The Ismaili community regards him as a direct descendant of the Prophet Muhammad and he will be the social, economic and spiritual guide of the community. Under the leadership of Aga Khan IV, the Ismaili community made significant contributions in the fields of education, health and development.

Niger, Mali and Burkina Faso leave ECOWAS

- Niger, Mali and Burkina Faso formally announced their exit from the West African regional bloc ECOWAS. The
 decision came after military rule was established in these countries, which led to a deterioration in their ties with
 ECOWAS.
- There were coups in Mali in 2020, Burkina Faso in 2022 and Niger in 2023. ECOWAS had imposed sanctions on these countries and urged them to restore democratic rule. ECOWAS has 15 member countries and aims to promote economic integration. The organisation said it would keep its doors open for these countries, but their exit could affect regional stability.

Gujarat declares first biodiversity heritage site

- The inland mangrove area of Guneri village in Kutch district of Gujarat has been declared the state's first biodiversity heritage site. It is spread over an area of 32.78 hectares and was given this status on the recommendation of the Gujarat Biodiversity Board.
- The state government made this declaration under the Biodiversity Act 2002, which will ensure conservation of flora and fauna in the area. Inland mangroves are found at only eight places in the world, and it is believed to be the last remnant in India.
- The site is located 45 km from the Arabian Sea and 4 km from Kori Creek. The local Biodiversity Management Committee will conserve the area.

India's first AI University in Maharashtra

- India's first Artificial Intelligence (AI) University will be set up in Maharashtra. A task force has been formed for this, which will be headed by the Principal Secretary of the Department of Information Technology.
- This university will promote research and development in AI and related fields. It aims to make Maharashtra a
 hub of AI education and innovation. The project will encourage collaboration between industry, academia and
 government.
- The university will focus on skill development, technological innovation and policy making. The initiative is in line with the BJP's election manifesto, which emphasizes the use of technology for development.

124 ______ www.dhyeyaias.com



US withdraws membership from UNHRC

US President Donald Trump signed an executive order for the US' exit from the United Nations Human Rights Council (UNHRC). The US also stopped sending funds to the United Nations Relief and Works Agency for Palestinian Refugees (UNRWA). The US accused UNRWA of being anti-Semitic and anti-Israel, as well as claimed that its facilities are used by terrorist groups. The US also plans to review its participation in UNESCO. The UNHRC was set up in 2006 and is headquartered in Geneva, Switzerland.

Karnataka declared 'Naxal free'

Karnataka's last Naxal Lakshmi surrendered, leading to the state being declared 'Naxal free'. She has been placed in the 'A' category, which will get her a surrender package of 7 lakh from the government. The amount will be given in phases over three years. Lakshmi was named in three cases in Udupi district and has appealed to the authorities for legal relief. The Karnataka government is providing rehabilitation, education and employment opportunities to surrendered Naxalites. According to the state government, Lakshmi's surrender has ended Naxalism in Karnataka.

Sahitya Akademi Award 2024 to Late Chaman Arora

Late Chaman Arora, eminent writer of Dogri literature, was posthumously awarded the Sahitya Akademi Award 2024 for his book "Ik Hor Ashwatthama". The selection was made on the recommendation of a three-member jury (Dr. Sushma Rani, Dr. Veena Gupta, Dr. Jitendra Udhampuri). The award consists of Rs 1 lakh and a casket (copper plaque). The honour will be presented to his family in New Delhi on 8 March 2025. The award recognises his contribution to literature in the Dogri language.

Bart de Wever, the new PM of Belgium

Bart de Wever, leader of the Flemish nationalist N-VA party, was sworn in as Prime Minister of Belgium. He will replace Alexander De Croo, who was the caretaker PM after the June 2024 elections. This government, formed by a coalition of five parties, is led by a Flemish nationalist for the first time. Belgium, whose capital is Brussels and currency is Euro, is considered an important step towards political stability in Europe.

India: World's second largest mobile manufacturer

Starting from just 2 units in 2014, India has today reached the second position in the world with an annual production of 330 million. 99.2% of mobiles are now made domestically. Exports to reach Rs 1.29 lakh crore and total value Rs 4.22 lakh crore in 2024. 'Make in India' and semiconductor mission have boosted the production of components like chargers, batteries. This sector has created 12 lakh jobs.

India's first white tiger breeding center in Rewa

The white tiger breeding center will be set up in Rewa district of Madhya Pradesh, which will promote wildlife tourism in the Govindgarh area. The Central Zoo Authority approved the project, which is part of the Maharaja Martand Singh Judev White Tiger Safari. The project will enhance the conservation of white tigers and local employment. Rewa is historically considered the last natural habitat of white tigers.

One Liners

- Indian Women's Under-19 Cricket Team defeated South Africa by nine wickets to win the second ICC Women's Under-19 T20 World Cup. The final was played on 2 February 2025 at Bayuemas Cricket Oval, Kuala Lumpur, Malaysia.
- 2. The 13th edition of India-Maldives Military Exercise 'Ekuverin' was held in Maldives from 2-15 February 2025. 'Ekuverin' means 'friend' in Dhivehi language. It is an annual bilateral exercise, which is held alternately in India and Maldives since 2009.
- 3. Chief Minister Sukhwinder Singh Sukhu laid the foundation stone of North India's first 1 MW green hydrogen plant at Solan, Himachal Pradesh. The plant costing Rs 9.04 crore will produce 423 kg of green hydrogen per day using renewable energy.
- 4. Union Minister of State for Home Affairs Shri Nityanand Rai led the Indian delegation at the 4th No Money for Terror (NMFT) Conference. The conference was held in Munich, Germany on 13 February 2025. The conference discussed terrorism financing, financial inclusion, risk-based approach and organized crime.
- **5.** Recently the Ministry of Electronics and Information Technology (MeitY) has launched the Aadhaar Good Governance Portal. The initiative aims to streamline the approval process for Aadhaar authentication requests.
- **6.** Recently NASA has launched the Lunar Trailblazer, which aims to detect water on the Moon. This mission is important for future lunar exploration.
- 7. The Indian Army has recently contracted 223 Automated Chemical Agent Detection and Alarm (ACADA) systems from L&T Limited. This purchase worth Rs 80.43 crore is part of a broader initiative to modernize the army's capabilities against chemical warfare threats.
- **8.** Recently, the Defense Research and Development Organization (DRDO) and the Indian Navy successfully conducted flight tests of the Naval Anti-Ship Missile Short Range (NASM-SR) at the Integrated Test Range in Chandipur, Odisha.
- **9.** Recently, Government e Marketplace (GeM) celebrated six years of its SWAYATT initiative. Launched in 2019, SWAYATT aims to increase the participation of women and youth in public procurement.
- 10. The National Geospatial Knowledge-Based Land Survey of Urban Habitats (NAKSHA) was launched on February 18, 2025 by Union Rural Development Minister Shivraj Singh Chouhan. The initiative aims to modernise urban land records in India, addressing the long-standing issue of outdated mapping in many urban areas.
- 11. The Telecom Regulatory Authority of India (TRAI) has recently introduced a comprehensive framework for broadcasting services under the Telecom Act, 2023. This new framework aims to modernise the broadcasting sector by simplifying authorisation processes and reducing regulatory burden.
- 12. The Indian Ministry of Defence has recently signed a contract with Bharat Electronics Limited (BEL) for the procurement of 149 Software Defined Radios (SDRs). The contract, worth 1220.12 crore, was finalised on 20 February 2025.
- **13.** Group Captain Shubhanshu Shukla will be the pilot of NASA's Axiom Mission 4 and will become the first Indian astronaut to visit the International Space Station (ISS).
- 14. The Securities and Exchange Board of India (SEBI) has launched the iSPOT portal for reporting technical problems at stock exchanges and other market institutions. It will ease the process of submitting preliminary and final root cause analysis (RCA) reports.



- 15. Ladakh topped the Khelo India Winter Games 2025 by winning seven medals, including four gold medals. The first phase of the Games concluded in Leh on January 27. Ladakh's women's ice hockey team defeated ITBP 4-0 to win the gold medal, while Indian Army retained their title in men's ice hockey.
- 16. Diya Chitale and Manush Shah won the women's and men's singles titles respectively at the 86th Senior National Table Tennis Championships, which was held in Surat. Diya defeated Sreeja Akula, while Manush defeated Payas Jain to clinch the title. Diya and Sreeja also won the doubles title, while Akash Pal and Poimanti Baisya won the mixed doubles title.
- 17. Gyanesh Kumar became the 26th Chief Election Commissioner. He replaced Rajiv Kumar, who resigned from the post of Chief Election Commissioner on 18 February 2025. Kumar's term as the new Chief Election Commissioner will last till 26 January 2029.
- 18. India's first wildlife biobank has been set up at the Padmaja Naidu Himalayan Zoological Park (PNHZP) in Darjeeling, West Bengal. The biobank, also known as a "frozen zoo", aims to collect and preserve DNA, cellular and tissue samples of endangered species.
- 19. Indian biologist and wildlife conservationist Purnima Devi Burman has been included in Time Magazine's "Women of the Year 2025" list. She is the only Indian woman to be included in this prestigious list, demonstrating extraordinary leadership to make the world more inclusive and better.
- 20. The Jharkhand government has imposed a complete ban on the sale and consumption of gutkha and pan masala in the state. The ban will be effective for one year from the date of notification, which may be extended on a review basis. The ban has been imposed under the Food Safety and Standards Act, 2006.
- 21. The Emir of Qatar, Sheikh Tamim bin Hamad Al Thani, arrived on a formal two-day visit to India, where he was received by President Draupadi Murmu and Prime Minister Narendra Modi.
- 22. PhonePe has launched a tokenization solution to enhance the security of digital payments. The solution, called "device tokenization", allows users to store their credit or debit card information securely on their device, replacing sensitive card details with unique tokens.
- 23. The 38th National Games concluded on 14 February 2025 in Haldwani, Uttarakhand. More than 10,000 athletes from 37 teams from India participated in the 18-day extravaganza. The sporting event featured 35 sporting disciplines and four demonstration sports.
- 24. ISRO has achieved a significant milestone by developing the world's largest 10-tonne Vertical Planetary Mixer for solid propellant production. This indigenous mixer has been built in collaboration with Bengaluru-based Central Manufacturing Technology Institute (CMTI) and will help enhance the efficiency and safety of solid rocket motor manufacturing.
- **25.** DRDO and Indian Navy successfully test fired the NASM-SR missile, which was fired from a Seaking 42B helicopter. The test was conducted on 26 February 2025 at the Integrated Test Range (ITR) at Chandipur, Odisha. The NASM-SR missile is India's first indigenously developed air-launched anti-ship missile system with sea-skimming capability, allowing it to evade enemy radars.
- 26. Donald Trump has introduced plans for a "Gold Card" program, which will provide a new path for wealthy individuals to obtain US citizenship by paying a fee of \$5 million. The program will replace the existing EB-5 visa program, which has received criticism for abuse and fraud. The "gold card" will offer the same benefits as a green card, including an expedited process for obtaining permanent residency and US citizenship.

MCQs Based on Current Affairs

1. Consider the following statements:

- 1. Recently, Chhattisgarh High Court ruled that marital rape exception also be applicable on section 377 of IPC.
- 2. Section 377 criminalised unnatural sex with anyone without his consent.
- 3. Marital rape exception has been given in section 375 of the IPC, which stated that husband would not charge for rape on non-consensual sexual intercourse between a husband and his major wife.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None of these

2. Consider the following statement with reference to Indian Ocean Conference (IOC)

- 1. Recently, External minister of India has addressed the 8th Indian Ocean Conference (IOC), held in Iran.
- 2. India, in partnership with Singapore and Oman, is hosted the Eighth Indian Ocean Conference.
- 3. Indian Ocean is a crucial trade route, handling 70% of the world's container traffic.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None of these

3. Which of the following can be best economic impact of reciprocal tariffs on global trade?

- A: Encourages tariff-free trade between nations
- B: Reduces price volatility in global commodity markets
- C: Enhances multilateral trade agreements and WTOled negotiations
- D: Leads to increased protectionism and potential trade wars

4. What are the potential impacts of Reciprocal Tariffs on India's economy:

1. Increase in the cost of Indian exports to the U.S.

- 2. Strengthening of WTO-led trade dispute resolution mechanisms.
- 3. Decline in India's trade surplus with the U.S. How many of the above impacts are likely to occur due to Reciprocal Tariffs?

A: Only one

B: Only two

C: All three

D: None

5. Consider the following statements regarding the India-US TRUST Initiative:

- 1. The TRUST Initiative aims to enhance collaboration in critical minerals, pharmaceuticals, and advanced materials.
- 2. It is a part of India's Sagarmala Programme, focusing on maritime infrastructure development.
- 3. One of its primary objectives is to reduce dependence on China for rare earth elements (REEs) and semiconductor supply chains.

How many of the above statements are correct?

A: Only one

B: Only two

C: All three

D: None

6. Consider the following statements with reference to Capital Punishment in India:

- 1. Capital punishment in India is primarily carried out by hanging.
- 2. India has executed over 1,000 prisoners in the last decade.
- 3. The death penalty is imposed only in the "rarest of the rare cases" as per the guidelines laid down by the Supreme Court of India.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None of these

7. Consider the following statements with reference to the NAKSHA Project:

1. The NAKSHA project was launched by the



- Ministry of Rural Development to modernize rural land records using geospatial technology.
- 2. NAKSHA is currently in its pilot phase, which covers 152 Urban Local Bodies (ULBs) across 26 states and 3 Union Territories.
- 3. The Survey of India is the technical partner responsible for conducting aerial surveys and providing orthorectified imagery for NAKSHA.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None of these

- 8. Consider the following statements with reference to the significance of digitizing land records through the NAKSHA project:
- 1. NAKSHA ensures citizens have legal documentation of land ownership, thereby empowering them with clear, legal rights over their properties.
- 2. Digitizing land records under NAKSHA significantly reduces judicial burden related to land disputes, as it minimizes conflicts over land ownership.
- 3. The digitization of land records under NAKSHA enhances governance by improving urban planning and decision-making.
- 4. NAKSHA's initiative is expected to have a minimal impact on attracting investment, as it does not influence the ease of doing business in urban areas.

How many statements are correct?

A: Only 1

B: Only 2

C: Only 3

D: All four

- 9. Consider the following statements with reference to the Digital India Land Records Modernization Programme (DILRMP):
- 1. DILRMP was launched in 2008 by the Government of India with the aim of digitizing and modernizing land records and developing a centralised land record management system.
- 2. The DILRMP is funded entirely by state governments (100% state funding).
- 3. One of the key components of DILRMP includes the integration of land records with Aadhaar for

- authentication and land ownership verification.
- 4. The tenure of DILRMP has been extended until 2030, with its duration now running from 2021 to 2030.

Which of the above statements are correct?

A: Only 1

B: 1 and 3

C: 1, 3, and 4

D: All four

- 10. Consider the following statements with reference to the recent developments in India-Qatar relations:
- Prime Minister Narendra Modi and the Amir of Qatar, Sheikh Tamim Bin Hamad Al-Thani, held talks in New Delhi in February 2025 and agreed to elevate India-Qatar relations to a "strategic partnership."
- 2. Both nations discussed accelerating talks on an investment protection pact and enhancing cooperation in sectors like energy and technology.
- 3. A revised agreement for the avoidance of double taxation was exchanged between India and Qatar, expected to facilitate trade and investment.
- 4. India and Qatar have not made any significant progress in defense cooperation since the maritime defense agreement signed in 2008.

Which of the above statements are correct?

A: Only 1

B: 1, 2, and 3

C: 2, 3, and 4

D: All of the above

11. Consider the following statements:

- 1. Gyanesh Kumar was appointed 26th Chief Election Commissioner of India (CEC).
- 2. The appointment process was governed by Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service, and Term of Office) Act, 2023.
- 3. This is the first appointment after the new act come into force.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None of these

12. What was the main issue addressed by the Supreme Court in the case of Anoop Baranwal vs Union of India?

- A: Appointment of judges to the Supreme Court
- B: Election of the President of India
- C: Appointment of the Chief Election Commissioner (CEC) and Election Commissioners (ECs)
- D: Formation of a new political party

13. Consider the following statements regarding the unemployment rate in urban areas based on the Periodic Labour Force Survey for October-December 2024:

- 1. The unemployment rate for persons aged 15 years and above in urban areas stood at 6.4% during the October to December 2024 period.
- The unemployment rate for males in urban areas during the same period was higher than that of females.
- 3. The unemployment rate in urban areas showed a slight improvement compared to the same period in 2023.
- 4. The unemployment rate remained stable at 6.4% in both the October-December 2024 quarter and the July-September 2024 quarter.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: Only 3
- D: All of these

14. Consider the following statements:

- 1. The Indian government recently introduced the Peatland Conservation and Restoration Act, 2025, to improve peatland protection.
- 2. Peatlands cover around 10% of the world's land surface.
- 3. Peatlands play a significant role in carbon sequestration, storing more carbon than all of the world's forests combined.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: All three

D: None of these

15. Consider the following statements:

- 1. Peatlands store more carbon than all the world's forests combined.
- 2. According to a recent study, 27% of the world's peatlands are located on indigenous peoples' lands.
- 3. Peatlands are the second most protected ecosystem, after mangroves.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None of these

16. Consider the following statements regarding India's new draft regulations on predatory pricing:

- 1. The Draft Competition Commission of India (Determination of Cost of Production) Regulations, 2025, aim to update the methodology for determining production costs in predatory pricing cases.
- 2. The 2025 draft regulations propose to replace the existing CCI (Determination of Cost of Production) Regulations, 2009.
- 3. The consultation period for stakeholders is open from January 1 to March 31, 2025.
- 4. The primary objective of the regulations is to regulate predatory pricing and ensure fair competition in India's markets.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: Only 3
- D: All four

17. What is the IUCN status of the African Cheetah?

- A: Critically Endangered
- B: Vulnerable
- C: Endangered
- D: Least Concern

18. Consider the following statements regarding Project Cheetah:

1. Project Cheetah is an initiative by the Government

March 2025



- of India to reintroduce cheetahs, which went extinct in India in 1952.
- 2. The project began in 2020 with cheetahs arriving from South Africa.
- 3. One of the goals of Project Cheetah is to promote tourism and restore ecological balance in the areas where cheetahs are being reintroduced.

Which of the above statements are correct?

- A: Only 1
- B: 1 and 3
- C: All three
- D: Only 3

19. Consider the following statements:

- 1. The United Nations Climate Change Conference (COP30) will be held in India in 2025.
- 2. India has committed to achieving net-zero emissions by 2070.
- 3. The Paris Agreement aims to limit global warming to 2°C above pre-industrial levels, with efforts to limit it to 1.5°C.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None

20. Consider the following statements about 27th meeting of the Western Zonal Council:

- 1. The 27th meeting of the Western Zonal Council will be chaired by the Union Home Minister, Shri Amit Shah, in Pune, Maharashtra.
- 2. The Zonal Councils were established under the States Reorganization Act, 1956, to promote interstate cooperation and foster regional development.
- 3. The Western Zonal Council includes the states of Gujarat, Goa, and Maharashtra, but not Dadra and Nagar Haveli and Daman & Diu.
- 4. The North Eastern states are part of the Zonal Councils.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: Only 3
- D: All four

21. Consider the following statements:

- 1. Recently, The Ministry of Mines has reclassified Barytes, Felspar, Mica, and Quartz from minor minerals to major minerals.
- 2. The reclassification decision aims to unlock critical minerals like Lithium and Tantalum.
- 3. The transition period for the reclassification of these minerals is six months.

How many statements are correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None

22. Consider the following statements about classification of minerals:

- 1. Major minerals in India are listed in the First Schedule of the Mines and Minerals (Development and Regulation) Act, 1957.
- 2. Minor minerals are generally managed at the central government level with rigid extraction procedures and high royalty fees.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None

23. What is the name of Microsoft's groundbreaking quantum processor?

- A: Majorana 1
- B: Quantum Core
- C: Topological Chip
- D: Qubit Processor

24. What is the conservation status of the Indian Vulture (Gyps indicus) according to the IUCN Red List of Threatened Species?

- A: Endangered
- B: Vulnerable
- C: Critically Endangered
- D: Least Concern
- 25. Assertion (A): The Enforcement Directorate (ED) imposed a penalty of 3.44 crore on BBC World Service India for violating the Foreign



Exchange Management Act (FEMA).

Reason (R): BBC WS India allegedly violated the 26% Foreign Direct Investment (FDI) cap for digital media companies in India.

Choose the correct option:

- A: Both Assertion (A) and Reason (R) are correct, and Reason (R) is the correct explanation for Assertion (A).
- B: Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation for Assertion (A).
- C: Assertion (A) is correct, but Reason (R) is incorrect.
- D: Assertion (A) is incorrect, but Reason (R) is correct.

26. Consider the following statements regarding FEMA (Foreign Exchange Management Act) and the role of the Enforcement Directorate (ED):

- FEMA was introduced in 1999 to replace the Foreign Exchange Regulation Act (FERA) of 1973, with an aim to promote lawful external trade transactions and regulate the foreign exchange market.
- 2. Unlike FERA, FEMA operates as a criminal law, where offenses are punishable by imprisonment, rather than fines or penalties.
- 3. The Enforcement Directorate (ED) investigates violations of FEMA, imposes penalties, and has the authority to seize assets in cases of serious financial violations like money laundering.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None

27. Consider the following statements regarding the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO):

- 1. The BOBP-IGO, established in 2003, aims to improve the livelihood opportunities and quality of life of small-scale and artisanal fisherfolk in the Bay of Bengal region.
- 2. The current members of the BOBP-IGO include Bangladesh, India, Maldives, Sri Lanka, Indonesia, Malaysia, Myanmar, and Thailand.

3. One of the key objectives of BOBP-IGO is to promote women's participation in the marine fisheries value chain.

How many statements are not correct?

A: Only 1

B: Only 2

C: All three

D: None

28. Consider the following statements regarding the Bay of Bengal Inter-Governmental Organisation (BOBP-IGO):

- India assumed the Chairmanship of BOBP-IGO from Bangladesh at the 13th Governing Council Meeting held in Malé, Maldives, on February 21, 2025.
- 2. The primary focus of India's leadership in BOBP-IGO will be addressing Illegal, Unreported, and Unregulated (IUU) fishing and promoting regional cooperation.

Which of the above statements are correct?

A: Only 1

B: Only 2

C: Both

D: None

29. Assertion: Soft skills like communication, critical thinking, leadership, and creativity are becoming increasingly important due to the rise of automation and AI in the job market.

Reason: As automation takes over routine tasks, human capabilities in problem-solving and decision-making are more essential than ever.

Options:

- A: Both assertion and reason are correct, and the reason is the correct explanation for the assertion.
- B: Both assertion and reason are correct, but the reason is not the correct explanation for the assertion.
- C: The assertion is correct, but the reason is incorrect.
- D: The assertion is incorrect, but the reason is correct.

30. With reference to Central Drugs Standard Control Organization (CDSCO), consider the following statements:

1. It is responsible for granting licenses for certain specialized categories of critical drugs.



2. It also has regulatory control over the import of drugs, approval of new drugs, and clinical trials.

Which of the statement(s) given above is/are not correct?

A: Only 1

B: Only 2

C: Both

D: None

31. Consider the following statements:

- 1. Recently, the 2024 Panchayat Devolution Index (PDI) was released by the Union Ministry of Panchayati Raj provided comprehensive study on panchayat system of India.
- 2. Karnataka, Kerala, and Tamil Nadu have emerged as the top three states in the Index
- 3. Uttar Pradesh and Bihar have emerged as a bottom states in the Index.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None

32. Which state reported having no panchayat with internet access?

A: Arunachal Pradesh

B: Odisha

C: Haryana

D: Andhra Pradesh

33. Consider the following statements with reference to Graduate Skill Index 2025.

- The graduate skill index was released by Mercer Mettl Company.
- 2. The report noted 2% drop in graduate employability in India from 2023 to 2024.
- 3. Among all states and Union Territories, Delhi has emerged as the most employable region.

How many statements are correct?

A: Only 1

B: Only 2

C: All three

D: None

34. Consider the following statements regarding

the Saras Aajeevika Mela 2025:

- The Saras Aajeevika Mela 2025 was organized by the Ministry of Rural Development at New Delhi.
- 2. The Mela is focusing exclusively on handloom products made by SHGs.
- 3. The event included cultural performances and arrangements for senior citizens, children, and mothers.

How many of the above statements are correct?

A: Only 1

B: Only 2

C: All three

D: None

35. Consider the following statements regarding internet shutdowns in India:

- 1. India has the highest number of internet shutdowns in 2024 among democratic nations, with 84 shutdowns recorded.
- 2. Internet shutdowns in India were primarily linked to government job placement exams and educational purposes.
- The revised Telecommunications Act 2023 and Telecom Suspension Rules 2024 introduced an independent mechanism for reviewing internet shutdown orders in India.

How many of the above statements are correct?

A: Only 1

B: Only 2

C: All three

D: None

36. Consider the following statements regarding the Solid Waste Management Rules, 2016:

- 1. The rules mandate that biodegradable waste must be processed on-site through composting or biomethanation, with residual waste handed over to local authorities.
- 2. Producers are required to collect back the packaging waste generated by their products under the Solid Waste Management Rules, 2016.
- 3. In hilly areas, the rules mandate that no specific provisions need to be made for waste management as they are exempt from special requirements.

How many of the above statements are correct?

A: Only 1

March 2025



- B: Only 2
- C: All three
- D: None

37. Consider the following statements:

- Recently, the Supreme Court directed NCR states "Delhi, Haryana, Uttar Pradesh, and Rajasthan" to submit compliance reports by March 2025 on waste segregation practices.
- 2. The Central Pollution Control Board was mandated by the Court to assess the environmental impact of waste-to-energy plants.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None

38. Consider the following statements regarding the proposed tabletop experiment to investigate the quantum nature of gravity:

- 1. The proposed experiment aims to test whether gravity follows the principles of quantum mechanics.
- The experiment focuses on studying the effects of strong gravitational fields, such as those near black holes.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None

39. Consider the following statements regarding the National Education Policy 2020:

- 1. NEP 2020 retains the three-language formula, with greater flexibility.
- 2. The policy mandates that the three languages must include English, Hindi, and the local regional language.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None

40. Consider the following statements regarding the Time Use Survey (TUS) 2024:

- 1. The TUS 2024 reveals a rise in women's participation in paid employment, with 25% of women aged 15-59 engaged in employment-related activities, up from 21.8% in 2019.
- 2. According to survey, Men spend more time than women on unpaid domestic tasks.
- 3. The survey indicates a decline in children's engagement in learning activities.

How many of the above statements are correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None

41. Consider the following statements regarding the United Nations General Assembly (UNGA):

- 1. The UNGA is the main deliberative, policymaking, and representative organ of the United Nations, where all member states have equal representation.
- 2. The UNGA's resolutions, including those related to peace and security, are legally binding on the member states.
- 3. The General Assembly can take action on matters of peace and security if the Security Council fails to act due to the veto of a permanent member, according to its "Uniting for Peace" resolution.

How many of the above statements are not correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None

42. Assertion (A): The UN resolution titled "Advancing a Comprehensive, Just, and Lasting Peace in Ukraine" passed despite the opposition of both the US and Russia.

Reason (R): The resolution was supported mainly by European countries and the G7 members, reflecting the strong backing for Ukraine from Western powers.

- A: Both Assertion (A) and Reason (R) are correct, and the Reason is the correct explanation for the Assertion.
- B: Both Assertion (A) and Reason (R) are correct, but



- the Reason is not the correct explanation for the Assertion.
- C: Assertion (A) is correct, but Reason (R) is incorrect.
- D: Assertion (A) is incorrect, but Reason (R) is correct.

43. Consider the following statements regarding the office of the Comptroller and Auditor General (CAG) of India:

- 1. The CAG is the head of the Indian Audit and Accounts Department and is responsible for overseeing the financial system of the country at both the Centre and State levels.
- 2. The CAG's primary duty is to ensure the financial accountability of the executive through audits.
- 3. The CAG's reports related to government accounts are submitted directly to the Parliament.

How many of the above statements are correct?

- A: Only 1
- B: Only 2
- C: All three
- D: None

44. Consider the following statements regarding Panchayati Raj Institutions:

- 1. According to the 73rd Amendment Act, 1/3rd of the total seats in Panchayat Raj bodies are reserved for women.
- 2. Clause (3) of Article 243D of the Constitution mandates at least one-third reservation for women in offices of the chairpersons of Panchayats.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None
- **45. Assertion (A):** The Union government-appointed advisory committee recommended exemplary penalties for male relatives who take over leadership positions in Panchayats on behalf of women.

Reason (**R**): The advisory committee's recommendations aimed to ensure that women elected to Panchayats are able to exercise their leadership roles without interference from male relatives.

Which of the following is correct?

- A: Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A).
- B: Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).
- C: Assertion (A) is true, but Reason (R) is false.
- D: Assertion (A) is false, but Reason (R) is true.

46. Consider the following statements regarding Gharial:

- 1. Madhya Pradesh is home to over 80% of India's gharial population.
- 2. The gharial is primarily found in brackish water habitats.

Which of the above statements are correct?

- A: Only 1
- B: Only 2
- C: Both
- D: None

47. Consider the following statements regarding the Automatic Chemical Agent Detection and Alarm (ACADA) system:

- 1. The ACADA system was developed by the Defence Research and Development Organisation (DRDO).
- 2. The ACADA system uses Ion Mobility Spectrometry (IMS) technology to detect hazardous substances by continuously sampling surrounding air.
- 3. The Indian Army's contract for 223 ACADA systems aligns with the "Atmanirbhar Bharat" initiative.

Which of the above statements are correct?

- A: Only 1 and 2
- B: Only 2 and 3
- C: Only 1 and 3
- D: All three

48. Consider the following statements regarding the SPHEREx Mission:

- The SPHEREx mission, launched by NASA, aims to study cosmic inflation, star formation, and lifeforming molecules in the Milky Way galaxy.
- 2. SPHEREx will create a highly detailed map of the universe by detecting only optical light, providing



insights into the formation and evolution of galaxies.

3. SPHEREx mission is to measure the 3D positions of 450 million galaxies to understand the expansion of the universe.

Which of the above statements are correct?

- A: Only 1 and 2
- B: Only 1 and 3
- C: Only 2 and 3
- D: All three

49. With reference to United Nations Human Rights Council (UNHRC), consider the following statements:

- 1. Recently, United States has withdrawn from UN Human Rights Council (UNHRC).
- It is a United Nations body whose mission is to promote and protect human rights around the world.
- 3. The members of the Council serve for a period of three years and they are not eligible for immediate re-election after serving two consecutive terms.

How many of the above statements is/are correct?

- A: Only 1
- B: Only 2
- C: All three

D: None

50. Consider the following statements:

- 1. The Indian Constitution guarantees fundamental rights such as equality (Article 14), abolition of untouchability (Article 17), and the right to life (Article 21), to manual scavenger people.
- The Prohibition of Employment as Manual Scavenger Act, 2013, focuses on the rehabilitation of manual scavengers but does not ban the practice itself.
- 3. The NAMASTE scheme encourages mechanized sanitation and aids in the rehabilitation of manual scavengers, providing an essential step toward eliminating the practice.

Which of the statements given above is/are correct?

- A: 1 only
- B: 2 and 3 only
- C: 1 and 3 only
- D: All of the above

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1	В
2	В
3	D
4	В
5	В
6	В
7	В
8	С
9	В
10	В

11	С
12	С
13	C
14	Α
15	В
16	С
17	В
18	В
19	В
20	С

21	С
22	Α
23	Α
24	C
25	Α
26	В
27	В
28	С
29	Α
30	С

31	В
32	С
33	С
34	В
35	Α
36	В
37	С
38	Α
39	Α
40	В

41	В
42	Α
43	В
44	С
45	Α
46	Α
47	D
48	В
49	В
50	С







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