



# INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION

## SPACE DEBRIS

Man-made objects in Earth's orbit that are no longer functional.

1 JULY - 6 JULY 2024

# WEEKLY CURRENT AFFAIRS

[WWW.INSIGHTSONINDIA.COM](http://WWW.INSIGHTSONINDIA.COM)

# INSIDE

## GENERAL STUDIES – 1

Topics: Post-independence consolidation and reorganization within the country.

1. 50th anniversary of the Emergency 4

Topics: Women and women related issues.

2. Gender Discrimination at the Workplace 5

## GENERAL STUDIES – 2

Topics: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

1. Demand of restoring 'Education' to the State list 7

Topics: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.

2. Agenda for the 16th Finance Commission 9

Topics: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

3. Smart Cities Mission extended till 2025 10
4. Three criminal laws become effective from July 1 11

Topics: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes.

5. Social Security to Vulnerable sections 12

Topics: India and its neighbourhood- relations.

6. India-Myanmar Relations Amidst Evolving Situation in Myanmar 14

Topics: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

7. Tibet-China Dispute Act Passed by US Congress 15

## GENERAL STUDIES – 3

Topics: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

1. RBI's Draft Foreign Exchange Management Regulation, 2024 18

Topics: Inclusive growth and issues arising from it.

2. Inclusive Growth of the North-East Region of India 19

3. PM Lauds 9 Years of Digital India Initiative 21

Topics: Major crops cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

4. National policy on Farmer Producer Organisations (FPOs) proposed 23

Topics: Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

5. Legalising Minimum Support Price in India 25

Topics: Disaster and management.

6. Hathras Stampede: Causes and Prevention 27

## GENERAL STUDIES – 4

1. Issues with the Medical Ethics in India 29
2. Humility in Public Discourse 30

## CONTENT FOR MAINS ENRICHMENT

1. James Lawson 31
2. 'Jadui Pitara' 31
3. Franz Kafka 32

## FACTS FOR PRELIMS

### GS-1

#### Art & Culture

1. Abhaya Mudra 32

#### History

2. Santhal Hul 32

#### Geography

3. Palm Trees 33

### GS-2

#### Salient features of Indian Constitution

4. Constitutional right to a speedy trial 34

#### Governance

5. Bhuvan Panchayat Portal and National Database for Emergency Management 34
6. Sampoonata Abhiyan 34

#### International Relations

7. International North-South Transport Corridor 34
8. Colombo Process 35

### GS-3

#### Indian Economy

9. Ways and Means Advances (WMA) 35
10. eSankhyiki portal 35
11. Project Nexus 36
12. Producer Price Index 36
13. Stablecoins 37

#### Science & Technology

14. AI washing 37
15. Space Debris 37
16. Eco-friendly supercapacitors 37
17. Snowblind malware 38
18. Zinc's role in making legumes resilient to climate change 38
19. Desert Moss: Syntrichia caninervis 38

20. Li-Fi technology 39
21. Aditya-L1 Mission 39
22. 3D hologram technology 39

#### Environment & Ecology

23. Senna spectabilis 40
24. Great Indian Bustard (GIB) and Lesser Florican conservation 40
25. Megafauna 40
26. Global Conclave on Plastic Recycling and Sustainability (GCPRS) 41

#### Defence

27. Rudram-1 42
28. NOMADIC ELEPHANT 42
29. INDIA- THAILAND JOINT MILITARY EXERCISE MAITREE 43

#### Internal Security

30. Money Mule 43
31. Reports in News 44

## MAPPING

#### INTERNATIONAL

1. Minami-Torishima island (Japan) 45

#### INDIAN

2. Shyok River (Ladakh) 46

## GENERAL STUDIES - 1

Topics: [Post-independence consolidation and reorganization within the country.](#)

### 1. 50TH ANNIVERSARY OF THE EMERGENCY

#### Context:

On June 25, India marked the 50th anniversary of the [Emergency](#), a 21-month period from 1975 to 1977, during which Prime Minister Indira Gandhi suspended civil liberties, curtailed press freedom, made mass arrests, cancelled elections, and ruled by decree.

#### What is an “Emergency”?

**An Emergency refers to legal measures in a country’s constitution** or laws that enable swift government response to crises like war or rebellion threatening national stability, security, or sovereignty.

**Provisions in Constitution:** These are outlined in [Articles 352 to 360 under Part XVIII](#) of the Indian Constitution, drawing inspiration from Germany’s Weimar Constitution.

#### What was a National Emergency?

Emergency in India was a **period of 21 months from 1975 to 1977** declared by the then [Prime Minister Mrs Indira Gandhi](#) and officially issued by [President Fakhruddin Ali Ahmed](#) under Article 352 of the Constitution of India because of the prevailing “internal disturbances”.

This gave the Prime Minister the **authority to Rule by decree** leading to the suspension of elections and curbing of civil liberties.

#### National Emergency has been proclaimed three times in India:

- **Indo-China War (1962):** Declared due to “external aggression” during the Sino-Indian War.
- **Indo-Pak War (1971):** Imposed on the grounds of “external aggression” during the Indo-Pakistani War.
- **(1975-1977):** The third and most controversial national emergency was declared due to “internal disturbance” amidst internal political unrest, significantly suspending civil liberties.

#### Reasons for declaration of Emergency in 1975:

1. **Internal Disturbances:** Growing political dissent and protests against Prime Minister Indira Gandhi’s government created significant internal instability. **Eg:** Jayaprakash Narayan’s Sampoorna Kranti or “Total Revolution”.

2. **Electoral Malpractice Allegations:** The Allahabad High Court found Indira Gandhi guilty of electoral malpractices and invalidated her 1971 election victory in the **Indira Gandhi vs Raj Narain case**.
3. **Economic Challenges:** The country faced severe economic issues, including high inflation, food shortages, and labor strikes. Also, post-liberation war hardship persisted along with a national emergency already in place.
4. **National Security Threats:** Indira Gandhi’s government argued that there were threats to national security from both internal and external sources. **Eg:** Threats from the Cold war and post-liberation war tensions.

#### It was criticized as the darkest phase of post-independent India:

1. **Suspension of Civil Liberties:** Fundamental rights, including freedom of speech and expression, were suspended.
2. **Arbitrary Arrests and Detentions:** Thousands of opposition leaders, activists, and dissidents were detained without trial. **Eg:** Key political figures such as Jayaprakash Narayan and Morarji Desai were imprisoned under the Maintenance of Internal Security Act (MISA).
3. **Human Rights Violations:** The Emergency witnessed a disregard for human rights. **Eg:** The mass sterilization program, targeting low-income populations, was coercive and unethical.
4. **Centralization of Power:** The 38th and the 42nd Amendment significantly curtailed the powers of the judiciary and centralized authority in the executive. **Eg:** Limitations on judicial review.
5. **Press Censorship and Information Blackout:** The Emergency witnessed a severe crackdown on press freedom. Media outlets faced strict censorship, and critical reporting of the government’s actions was banned. **Eg:** The Indian Express publishing a blank editorial in protest.

#### Lessons that were learnt and checks and balances put in place to prevent a recurrence:

1. **Constitutional Safeguards:** Later, the newly formed Janata government brought about 43rd and 44th amendments in 1977 and 1978 respectively to restore the earlier constitution to some extent. **Eg:** Written recommendation of the cabinet for national emergency, “armed rebellion” in place of internal disturbance et al.
2. **Judicial Activism:** The Supreme Court evolved the basic structure doctrine to strike down 39th Amendment some parts of the 42nd This paved the way for restoration of democracy. **Eg:** The landmark Minerva Mills case (1980) established the power of judicial review over proclamations of emergency.
3. **Parliamentary Oversight:** Efforts were made to strengthen parliamentary oversight over the executive branch. **Eg:** Passage of subsequent amendments by Parliament, Parliamentary committees were empowered.

4. **Ensuring Fair Elections:** Reforms were introduced to make the electoral process more transparent and fairer. **Eg:** ECI became multi-member body, reforms like Model Code of Conduct were brought in.
5. **Civil Society and Grassroots Mobilization:** The Emergency galvanized civil society, highlighting its role in protecting democracy. **Eg:** Significance of JP's Sampurna Kranti, the post-emergency rise of activist organizations like the People's Union for Civil Liberties (PUCL).

#### Conclusion:

The Emergency of 1975-77 serves as a powerful reminder of the need for robust democratic safeguards to prevent the abuse of power. Looking ahead, constant vigilance by citizens, a robust civil society, and strong democratic institutions are essential to prevent a return to such a dark chapter.

#### Insta Links:

- [The Big Picture - Today's India and Lessons from Emergency](#)

#### Mains Link:

**Q) Under what circumstances can the Financial Emergency be proclaimed by the President of India? What consequences follow when such a declaration remains in force? (UPSC 2018)**

#### Prelims Link:

**Q) With reference to the constitution of India, prohibitions or limitations or provisions contained in ordinary laws cannot act as prohibitions or limitations on the constitutional powers under Article 142. It could mean which one of the following? (UPSC 2019)**

- (a) The decisions taken by the Election Commission of India while discharging its duties can not be challenged in any court of law.
- (b) The Supreme Court of India is not constrained in the exercise of its powers by laws made by the parliament.
- (c) In the event of grave financial crises in the country, the President of India can declare Financial Emergency without the counsel from the cabinet.
- (d) State Legislatures can not make laws on certain matters without the concurrence of the Union legislature.

**Ans: (b)**

[Topics: Women and women related issues.](#)

#### Context:

The [article](#) criticizes Foxconn for not hiring married women due to concerns about family duties and absenteeism.

#### What are the Issues?

**Foxconn, an Apple supplier, reportedly does not hire married women**, citing family duties and higher absenteeism as reasons. This highlights a broader issue where women's careers are hindered by traditional gender roles, as they often manage household responsibilities, allowing men to excel at work. Data suggests that **India's Female LFPR has decreased from 30% to 24%** in the past two decades, despite an increase in girls' enrolment in Class 10.

#### Issues with Foxconn's Action

1. **Gender Discrimination:** Excluding married women from employment based on family duties and absenteeism.
2. **Reinforcing Gender Roles:** Perpetuating traditional roles where women are expected to handle household responsibilities.
3. **Inequality in Opportunities:** Denying married women equal access to job opportunities and career advancement.
4. **Workplace Diversity:** Reducing workplace diversity by not hiring a significant segment of the population.
5. **Economic Impact:** Limiting married women's financial independence and economic contributions.
6. **Violation of Rights:** Potentially breaching anti-discrimination laws and equal employment rights.
7. **Unfair Assumptions:** Making broad assumptions about married women's work performance without individual assessment.

#### Other key issues that impact workplace gender inclusivity

- **Cultural Norms and Stereotypes:** Indian society perpetuates **traditional gender roles** where women are expected to **prioritize family over career**.
  - **Example:** The **gender pay gap** in India persists, with women earning 19% less than men, reflecting these biases.
  - **Solution: Promote gender-neutral upbringing,** challenge stereotypes through media campaigns, and emphasize equal opportunities.
- **Patriarchal Organizational Structures:** Many workplaces in India maintain **hierarchies dominated by men**, making it challenging for women to ascend to leadership roles.
  - **Example:** A study found that **only 15% of board seats** in NSE-listed companies


## 2. GENDER DISCRIMINATION AT THE WORKPLACE

were held by women in 2021.

- **Solution:** Implement quotas or targets for female representation in leadership roles and foster mentorship programs.
- **Implicit Bias and Stereotype Threat:** Implicit biases against women persist in performance evaluations and decision-making processes.
  - **Example:** Studies have shown that **women receive less credit for their work** compared to men in similar positions.
  - **Solution:** Implement **unconscious bias training for managers** and use **standardized performance evaluation criteria**.
- **Harassment and Safety Concerns:** Workplace harassment is a major deterrent for women, often going **unreported due to fear of retaliation**.
  - **Example:** The **#MeToo movement** highlighted the widespread prevalence of harassment in Indian workplaces.
  - **Solution:** **Enforce strict anti-harassment policies**, provide safe reporting mechanisms, and sensitize employees through training.
- **Lack of Work-Life Balance:** Balancing work and family responsibilities remains challenging for women due to inadequate support systems.
  - **Example:** **Maternity leave policies** in India are not uniform, leading to disparities.
  - **Solution:** **Encourage flexible working arrangements**, affordable childcare facilities, and extended parental leave.
- **Education and Skills Gap:** Gender bias in education and vocational training limits women's access to high-paying jobs.
  - **Example:** Women are **underrepresented in STEM fields** and emerging industries.
  - **Solution:** Promote STEM education for girls, offer scholarships, and collaborate with industries for skill development.
- **Cultural Sensitivity Training:** Cultural biases and insensitivity towards diversity often hinder inclusivity.
  - **Example:** **Insensitive comments or practices** can create hostile work environments.
  - **Solution:** **Regular cultural sensitivity training** for employees and management can foster a more inclusive atmosphere.

**POSH Act 2013**

**Context:** The Indian Supreme Court has expressed concern over the "sorry state of affairs" in the implementation of the act.

Major Provisions of POSH Act 2013	
Sexual harassment defined	Sexual harassment includes "any one or more" of the following "unwelcome acts or behaviour" committed directly or by implication: <ul style="list-style-type: none"> <li>• Physical contact and advances</li> <li>• A demand or request for sexual favours</li> <li>• Sexually coloured remarks</li> <li>• Showing pornography</li> <li>• Any other unwelcome physical, verbal, or non-verbal conduct of a sexual nature</li> </ul> 
Obligation	Every employer is required to constitute an <b>Internal Complaints Committee (ICC)</b> at each office or branch with 10 or more employees.
Complaint Committees	ICC has powers similar to those of a <b>civil court</b> in respect of summoning and examining any person on oath and requiring the discovery and production of documents.
Members	It needs to have a <b>minimum of four members with at least half of them women and one external member</b> , preferably from an <b>NGO or an association</b> that works for women's empowerment or a person familiar with issues related to sexual harassment, like a lawyer.
Time	The complaint must be made " <b>within three months from the date of the incident</b> ".
Conciliation	The ICC may (at the request of the aggrieved woman) allow the matter to be settled through conciliation (but <b>no monetary settlement allowed</b> )
Punishment	Non-compliance shall be punishable with a <b>fine of up to Rs 50,000</b> .
Compensation	Compensation is determined <b>based on five aspects</b> : <ul style="list-style-type: none"> <li>• Suffering and emotional distress caused to the woman</li> <li>• Loss of career opportunity</li> <li>• Her medical expenses</li> <li>• Income and financial status of the respondent</li> <li>• The feasibility of such payment</li> </ul>
Domestic Worker	Domestic workers are <b>protected under the Act</b> and have the right to seek redressal from the <b>Local Complaints Committee (LCC)</b>

Visit Insights IAS Daily Current Affairs

**Measures to Address the Issue:**

Key Recommendations	Description
<b>Legislation and Enforcement</b>	<b>Strengthen and enforce existing laws</b> related to workplace gender inclusivity, including anti-discrimination and anti-harassment laws.
	Stricter enforcement of laws such as the <b>Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act of 2013</b> .
	Increase fines and penalties for <b>non-compliance and expedite cases</b> to set deterrent examples.
	In 2017, <b>the Maternity Benefits Amendment Act</b> was passed which increased the stipulated <b>maternity leave period</b> in India from <b>12 weeks to 26 weeks</b> in organisations that have at least 10 employees.
<b>SC Judgement</b>	The <b>Supreme Court of India declared (in Selina John's case) rules penalizing women employees for getting married as unconstitutional</b> , citing gender discrimination and inequality.

<b>Corporate Initiatives</b>	Encourage companies to <b>adopt inclusive policies, diversity training</b> , and transparent reporting of gender-related data.
	Promote initiatives like the <b>Tata Group’s “Second Career Internship Program”</b> for women’s re-entry into the workforce.
<b>Women’s Networks</b>	Support and promote <b>women’s networks within organizations</b> to provide mentorship and networking opportunities.
	Adopt models like <b>“Lean In Circles” to create peer groups</b> for women to support each other’s career growth and mentorship.
<b>Media Campaigns</b>	Use media to challenge <b>stereotypes and promote positive portrayals</b> of women in the workplace.
	Draw inspiration from campaigns like <b>Dove’s “Real Beauty” to challenge</b> unrealistic standards and depict women as competent professionals.
<b>Collaboration</b>	Encourage <b>partnerships between government, NGOs, and the private sector</b> to create a cohesive approach to gender inclusivity.
	Highlight <b>successful initiatives like the “Mahila Shakti Kendra”</b> collaboration that empowers women through skill development, education, and healthcare.

**Conclusion**

By addressing these dimensions and implementing these strategies, India can foster a workplace environment that **embraces diversity and gender inclusivity**, ensuring that women have **equal opportunities to thrive professionally**.

**Insta Links:**

- [Prevention of sexual harassment or POSH Act](#)

**Mains Links:**

Q. “Though women in post-Independent India have excelled in various fields, the social attitude towards women and the feminist movement has been patriarchal.” Apart from women’s education and women empowerment schemes, what interventions can help change this milieu?” (UPSC 2021)

**Prelims Links:**

Which of the following gives the ‘Global Gender Gap Index’ ranking to the countries of the world? (UPSC 2017)

- (a) World Economic Forum
- (b) UN Human Rights Council
- (c) UN Women
- (d) World Health Organization

**Ans: A**

**GENERAL STUDIES – 2**

Topics: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

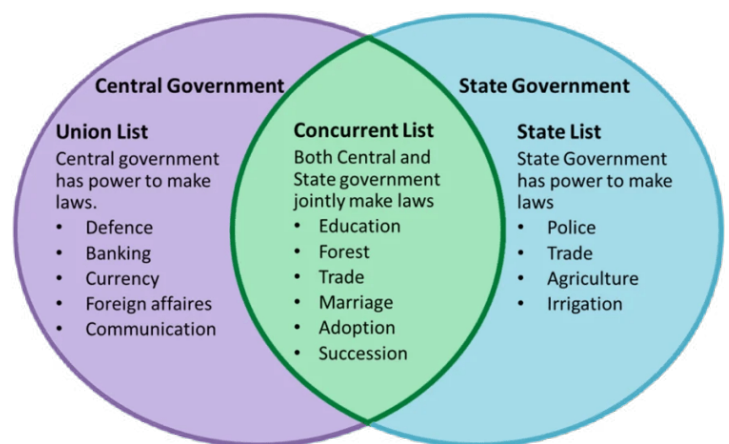
**1. DEMAND OF RESTORING ‘EDUCATION’ TO THE STATE LIST**

**Context:**

The [article](#) discusses whether should **education** be brought back to the **State list**.

What is a State List?

**The State List is a category under the 7th Schedule of the Constitution of India** that enumerates **subjects on which individual State Governments have the exclusive power** to legislate. These subjects include areas such as **police, public health, agriculture, and local governance**. This division of powers ensures that states can manage and address local issues effectively without interference from the central government. Currently, **Education is under the concurrent List**.



**Background on Education Listing:**

- Pre-Independence:** Under the [Government of India Act, 1935](#), education was under the Provincial Legislative List.
- Post-Independence:** Initially, education was on the State List of the Seventh Schedule.
- 1976 Change:** The [42nd Constitutional Amendment](#), following the [Swaran Singh Committee's recommendation](#), moved education to the Concurrent List without explicit reasons.
- The [44th Constitutional Amendment](#) attempted to revert some of these changes but was not fully implemented.

**Education Should Be on the State List**

- Original Design:** Initially in the constitution, **education was a state matter**, as local governments are better suited to address educational needs.
- Will Restore Federal Balance:** The 42nd Amendment shifted education to the Concurrent List, undermining federalism. Returning it to the State List would restore the intended balance of power.
- State-Specific Policies:** States can tailor education to their unique cultural and socio-economic contexts, improving literacy and educational outcomes.
- Resource Allocation:** States fund 85% of education expenses and should control their investments.
- Merit Determination:** Centralized exams like [NEET](#) do not reflect diverse student potential. States need flexibility in admission criteria.
- Accountability:** State control ensures better accountability for educational quality.
- Policy Conflicts:** Central policies often clash with state policies, causing inefficiencies. State control would reduce these conflicts.

**Education should remain on the Concurrent List:**

Reason	Explanation
<b>Ensuring Minimum Standards and Equity</b>	Keeping education concurrent allows the Centre to monitor implementation, <b>ensuring disadvantaged sections have access to quality education.</b>
<b>Standardisation of Skills and Employability</b>	A standardised national curriculum ensures graduates have skills required by a pan-India job market, as highlighted by FICCI.
	A concurrent list facilitates this by <b>establishing a common framework</b> while allowing states to tailor vocational training.

<b>Addressing National Concerns and Emergencies</b>	A concurrent list allows the <b>Centre to develop curricula for national challenges like climate change</b> while accommodating state-specific concerns.
<b>National Integration and Mobility</b>	A common educational framework fosters national integration and cultural exchange, as <b>emphasized by the Kothari Commission (1964-66)</b>
	A concurrent list allows the Centre to <b>set core standards while states adapt them to local contexts</b> , promoting unity and diversity.
<b>Poor Status of Primary Education</b>	States have shown <b>poor governance in primary education</b> , as highlighted by the ASER 2023 Report. Most rural kids of 14-18 can't do Class 3 math, and over 25% can't read.
<b>Regulation of National Institutions</b>	The Centre can regulate institutions like IITs and AIIMS to maintain high standards.

**International Practices:**

Country	Education Governance
<b>U.S.</b>	State and local governments set overall educational standards and supervise colleges and universities. The federal education department focuses on policies for financial aid.
<b>Canada</b>	Education is managed by the provinces.
<b>Germany</b>	Legislative powers for education reside with states (landers).
<b>South Africa</b>	National departments manage schools and higher education, with provinces implementing national policies and addressing local educational needs.

**The way forward and Conclusion:**

**Focus on "Collaborative Federalism"** as suggested by [the Kothari Commission \(1964-66\)](#) to ensure national standards with state flexibility. Implement **outcome-based funding** as recommended by NITI Aayog. Promote **decentralized school management** per the Right to Education Act (RTE) 2009. Reform teacher training and transfer policies based on the [TSR Subramanian Committee Report \(2009\)](#). Develop standardized national assessments with state-specific benchmarks.

**Insta Links:**

- [Issues related to Education Sector](#)

**Mains links:**

**Q. Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. (UPSC 2021)**

**Q. How have digital initiatives in India contributed to the functioning of the education system in the country? Elaborate on your answer. (UPSC 2020)**

**Prelims Links:**

**Q. Which of the following provisions of the Constitution does India have a bearing on Education? (UPSC 2012)**

1. Directive Principles of State Policy
2. Rural and Urban Local Bodies
3. Fifth Schedule
4. Sixth Schedule
5. Seventh Schedule

**Select the correct answer using the codes given below:**

- (a) 1 and 2 only
- (b) 3, 4 and 5 only
- (c) 1, 2 and 5 only
- (d) 1, 2, 3, 4 and 5

**Ans: (d)**

Topics: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.

## 2. AGENDA FOR THE 16TH FINANCE COMMISSION

**Context:**

The [16th Finance Commission \(FC\)](#) focuses on the devolution of the consolidated fund, with a mandate to support panchayats and municipalities as per [Article 280 and the 73rd and 74th constitutional amendments](#).

**What is a Finance Commission?**

The Finance Commission in India is a **constitutional body established under Article 280 of the Indian Constitution**. Its primary function is to recommend the distribution of financial resources between the central government and the state governments. [The Fifteenth Finance Commission constituted on 27th November 2017](#), made recommendations covering six years from 1st April 2020 through its Interim and Final Reports. These recommendations are valid **up to the financial year 2025-26**.

**About 16th FC:**

The Government of India, **under Article 280(1) of the Constitution**, established the **Sixteenth Finance Commission, with Dr. Arvind Panagariya**, former Vice-Chairman of NITI Aayog and Professor at Columbia University,

as its Chairman.

**Major Terms of Reference for the 16th Finance Commission:**

- **Division of Tax Proceeds:** Recommend tax distribution between Union and States, including State shares.
- **Principles for Grants-in-Aid:** Establish principles for grants from the Consolidated Fund of India to States, particularly under Article 275.
- **Enhancing State Funds for Local Bodies:** Suggest measures to boost State funds for Panchayats and Municipalities, based on State Finance Commission recommendations.
- **Evaluation of Disaster Management Financing:** Review and recommend improvements for disaster management funding under the Disaster Management Act, 2005.

**Recommendations that can be made by the 16th Finance Commission for Local bodies:**

1. **Revisit 15th FC's Principles:**
  - Enhance property tax collection linked to state GST.
  - Improve maintenance of accounts.
  - Allocate resources for pollution mitigation.
  - Focus on primary health care, solid waste management, and drinking water.
2. **Recognize Urbanization Dynamics:**
  - Acknowledge India's dynamic urbanization.
  - Ensure intergovernmental transfers to urban areas are at least doubled.

**Insta Links:**

- [16th Finance Commission](#)

**Mains Link:**

**Q. Discuss the recommendations of the 13th Finance Commission which have been a departure from the previous commissions for strengthening the local government finances. (UPSC 2013)**

**Prelims Link:**

**Q. Consider the following: (UPSC 2023)**

1. Demographic performance
2. Forest and ecology
3. Governance reforms
4. Stable government
5. Tax and fiscal efforts

**For the horizontal tax devolution, the Fifteenth Finance Commission used how many of the above as criteria other than population area and income distance?**

- (a) Only two  
 (b) Only three  
 (c) Only four  
 (d) All five  
**Ans: (b)**

Topics: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

### 3. SMART CITIES MISSION EXTENDED TILL 2025

#### Context:

The Smart Cities Mission has received an extension until March 31, 2025, following an appeal by the Chief Minister of Telangana A Revanth Reddy.

#### About SCM:

**The SCM (Smart Cities mission) was launched in 2015**, with the expressed objective of promoting cities that provide **core infrastructure** and give a **decent quality of life** to their citizens. A clean and **sustainable environment** and the application of **'smart' solutions** were the promises made.

**The six fundamental principles on which the concept of Smart Cities is based are:**



#### Objectives of SCM:

The Smart Cities Mission aims to **enhance urban life by focusing on core infrastructure, sustainability, and smart solutions**. It seeks to create replicable models for compact, inclusive development, acting as a beacon for other cities to follow. The mission sets **examples for both local and national replication**, catalyzing the development of smart cities across regions in India.

#### City-wise Progress Report as of December 2023:

- Madurai:** Completed 100% of projects.
- 56 cities:** Completed over 80% of work.
- Lagging behind:** 14 cities at 50% progress or below.
- Lagging cities primarily from the northeast, Union Territories, and hilly areas.** Examples include Gangtok, Atal Nagar, Shillong, Silvassa, Itanagar, Puducherry, Saharanpur, and Port Blair with completion percentages ranging from 16% to 39%.

#### Achievements of SCM:

- Digital Transformation:** Implementation of smart technologies for efficient governance and service delivery, such as Integrated Command and Control Centres (ICCCs) in all 100 Smart Cities.
- Alignment with Sustainable Development Goals (SDGs):** Over 70% of projects align with UN SDGs, particularly SDG11 (inclusive, safe, resilient, and sustainable cities).
- Infrastructure Development:** Improvement of urban mobility through metro lines, BRTS, and pedestrian-friendly pathways.

#### Smart Cities Mission Success Stories:

- Ahmedabad:** Sensor-based water network monitoring increased supply by 50 MLD.
- Indore:** Gravity-based network prevented 205 MLD of untreated sewage from entering water bodies.
- Visakhapatnam:** Mudasarlova Reservoir Floating Solar Plant generated 3,613 MWh annually, preventing over 3,000 tonnes of CO2 emissions.

#### Issues with the SCM:

- Behind deadlines:** As per the recent mission director's statement, the SCM has completed **only about 66% of the projects**. Protests and criticisms have been laid against many SCM projects like Warangal and Ludhiana SCMs.
- Challenges in Project Management and Implementation:** Frequent changes and dropping of projects, insufficient financial progress, and varying physical progress among cities.
- Lack of integrated monitoring mechanism and cross-city learning.** Insufficient emphasis on core infrastructure projects like social infrastructure and smart energy.
- Governance and Capacity Issues:** Frequent transfer of Smart City CEOs, undefined governance structure, and monitoring capacity.
- Mission Deadline Extension:** The current phase was originally set to conclude by June 2023, but was extended until June 2024 to complete pending projects.
- Funding Challenges:**
- Less funds received:** Some regions, including Lakshadweep, Daman and Diu, Puducherry, and Port Blair, received less than 50% of pledged central funds. **Only 28 cities received 100% of their share** from states/ULBs, with funds released below 60% in 14 cities.
- Fund utilization:** The SCM has been taking in more funds against the current progress and has utilized 90% of the funds (while completing only 66% of the projects)
- Failure in Fundraising Mechanisms:** Only 6% of

projects are funded through Public-Private Partnerships (PPPs), with about 50 cities unable to generate any funding through this avenue.

10. **Ineffective Advisory Forum Meetings:** State-level advisory forum meetings are irregular, with an average of 1-8 meetings in the first five years. Some cities, like Amravati and Imphal, had no meetings.
11. **Absence of Master Plans:** Master plans, crucial for urban development, are absent in 65% of recognized urban entities, according to a report by NITI Ayog.
12. **Low capacity of local bodies:** The functionaries at local bodies are of inadequate strength and lack the skills to implement the scheme
13. **Scarcity of land within the central part of cities** and other prime locations where the scheme is to come up

**Recommendations of the parliamentary committee:**

1. **Union ministry to lead the master plan** for Greenfield development.
2. **Implement fixed tenure for CEOs** of Smart Cities' Special Purpose Vehicles (SPVs).
3. **Conduct third-party assessments** of Smart Cities Mission (SCM) projects.
4. **Launch Phase II of SCM** covering more cities, utilizing SPVs' experience.
5. **Focus more on Pan City projects**, emphasizing technology-driven solutions for holistic development.
6. There is a need to **protect digital infrastructure from misuse and cyber-attacks**, ensuring privacy rights.
7. **Leverage the expertise gained by Special Purpose Vehicles (SPVs)** and expand the role of **Integrated Command and Control Centres (ICCCs)** in providing various city services.
8. **International Collaboration:** E.g., India is supporting the **Gelephu Smart City Project** in Bhutan, while also seeking lessons from Singapore Smart City.

**Conclusion**

The foremost idea of smartness in smart cities should be to **make cities resource-neutral or resource-positive**. This means that the city should **collect and process all the aftermaths of consumption** within the city or consume resources within its ability to **replace or regenerate**. This needs attention across all micro sectors to bring forth a **holistic change and 'smartness' to cities**.

**Insta Links:**

- [Smart Cities Mission](#)

**Mains Links:**

**With a brief background of the quality of urban life in India, introduce the objectives and strategy of the 'Smart City Programme.'** ( UPSC 2016)

**4. THREE CRIMINAL LAWS BECOME EFFECTIVE FROM JULY 1**

**Context:**

Three new criminal laws—**Bharatiya Nyaya Sanhita, Bharatiya Nagarik Suraksha Sanhita, and Bharatiya Sakshya Adhinyam**—replacing colonial-era laws, came into effect on July 1, 2024.

**About Three Criminal Laws:**

Reforms in Indian Criminal Law			
Provisions	Bhartiya Nyaya Sanhita Bill 2023	Bharatiya Nagarik Suraksha Sanhita Bill 2023	Bharatiya Sakshya Bill 2023
Replaces	Indian Penal Code, 1860	Criminal Procedure Code, 1898	Indian Evidence Act, 1872
Focus	Reflects Indian ethos, justice-oriented	Enhances citizens' protection	Modernizes evidence presentation
Sections	356 sections (replacing 511)	533 sections (160 changed)	170 sections (23 changed)
Women and Children	A separate chapter dedicated to them; New offence: false promise of marriage, Employment etc.; Initiating children into crime made punishable.	Sexual intercourse on false promise of marriage, employment, etc., is a new offence.	
Digital Integration	Expanded definition of documents; Address newer crimes, cyber offences	Digitization of processes	Accepted documents include electronic and digital records, video recordings, emails, etc.
Speedy Trials	Summary trials, time limits	Trial expedited; 90-day window for investigation after chargesheet filing; Witness protection scheme to be made by states; Bail after serving 1/3rd of the maximum sentence for first-time offenders.	Video recording of search and seizure operations by the police
Victim Support	Compulsory status updates of victim support	Protection, timely information	Video recording of search and seizure operations by the police
Terrorism and Organized Crime	New definitions of Terrorism for 1 <sup>st</sup> time; Armed rebellion, separatist activities, organized crimes, etc.; Mob lynching made an offence explicitly	Harsher provisions against gangs	Define and address organized crimes
Fugitive		Trials for fugitives in absentia	
FIR	Zero FIR, e-FIR introduced	Zero FIR, e-FIR introduced; community service as punishment	Mandatory digitization of FIR, chargesheets; Mandatory use of Forensic services for offences punishable with 7 or more years
Sedition Law	Repealed		

**Exception:** Section **106(2) of the Bharatiya Nyaya Sanhita (BNS)**, which provides for punishment in hit-and-run cases, has been **put on hold**.

**The positive aspects of the proposed criminal law reforms (Bharatiya Nyaya Sanhita and Bharatiya Nagarik Suraksha Sanhita):**

1. **Modernization of Criminal Justice System:** E.g., using e-FIR, Zero FIR, new cyber offences, and modernised evidence collection.
2. **Update of Outdated Laws**
3. **Stringent Provisions for Women and Children:** The Bharatiya Nyaya Sanhita (BNS) has dedicated a separate chapter to these matters and introduced new forms of offence.
  1. **Sexual intercourse with a minor**

**wife** has been brought under the ambit of rape.

4. **Innovations:** Innovations such as trial in absentia and the introduction of community service as a penalty for minor offences are noteworthy.
5. **Gender Inclusivity:** The reforms have reviewed language for gender neutrality and replaced outdated terms such as 'insanity' with 'mental illness.'
6. **Specific Definitions and Offenses:** The act defines and addresses offences like terrorism, organized crime, mob lynching, and negligent acts, adding new dimensions to criminal law.
7. **Protection for Victims:** protection and rights of victims, including provisions related to victims' participation, and rights.
8. **Expedited Justice:** Eg., Requirement for judgments to be given within 30 days after the trial concludes and limitations on adjournments.
5. **Legal Aid Reform:** Increase funding and create performance-based incentives for legal aid providers to ensure effective representation for disadvantaged defendants.
6. **AI in Case Management:** Integrate AI for case management, scheduling, and pretrial risk assessment, ensuring transparency and preventing biases.
7. **Prison Administration Reform:** Implement mandatory segregation of undertrials, convicts, and first-time offenders, and enforce national health insurance schemes in prisons, following the **Justice Amitava Roy Committee recommendations**.
8. **Gender Sensitization:** Mandatory training for judicial officers on gender sensitivity, and establishing accountability mechanisms for gender-biased comments, referencing the **SC Handbook on Gender Stereotypes**.
9. **Victim-Centric Justice:** Provide comprehensive victim support services, including counselling, legal aid navigation, and a guaranteed right to be heard in court.
10. **Promoting Restorative Justice:** Adopt restorative justice practices focusing on **healing harm caused by crime**, as recommended by the **Madhav Menon Committee (2007)**.

#### Steps being taken to implement the three laws:

1. **Operational training:** The Bar Council of India mandates new laws in university curricula from 2024-25.
2. **Publicity/awareness campaign:** BPR&D coordinates efforts for a coordinated publicity campaign through the Inter-Ministerial Group.
3. **Tech upgradation:** NCRB modified the CCTNS application for tech compatibility, including FIR registration; NIC developed applications like eSakshya, NyayShruti, and eSummon for crime scene documentation, judicial hearings, and electronic court summons.
4. **Capacity building:** BPR&D developed 13 training modules for police, prisons, prosecutors, judicial officers, forensic experts, and central police organizations.

#### What more needs to be done:

1. **Bail Reform: Supreme Court directive:** Bail should be the rule (Balchand v. State of Rajasthan, 1978). Implement the **Law Commission's 268th Report (2017)** to reduce undertrial detention and ensure bail is the norm, not the exception.
2. **Victim and Witness Protection:** Fully implement the Witness Protection Scheme (2018) with proper funding and oversight, as recommended by the Malimath Committee (2003).
3. **Revamping Fast-Track Courts:** Assign dedicated judges, improve infrastructure, set binding timelines, and introduce case management systems to expedite cases.
4. **Combatting Criminalization of Politics:** Establish an institution to tackle political criminalization, investigate the political-criminal nexus, and take decisive action, as suggested by the **Vohra Committee (1993)**.

#### Insta Links:

- **India's Criminal Justice System**

#### Mains Link:

**Q. We are witnessing increasing instances of sexual violence against women in the country. Despite existing legal provisions against it, the number of such incidences is on the rise. Suggest some innovative measures to tackle this menace. (UPSC 2014)**

**Q. Mob violence is emerging as a serious law and order problem in India. By giving suitable examples, analyze the causes and consequences of such violence. (UPSC 2015)**

[Topics: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes.](#)

## 5. SOCIAL SECURITY TO VULNERABLE SECTIONS

#### Context:

Karnataka has introduced **new social security and welfare rules for unorganized transportation workers** (under Karnataka Motor Transport and Other Allied Workers Social Security and Welfare Act 2024), aiming to cover approximately **5.4 million** workers across various

sectors. This initiative, a first in India, includes **workers in ancillary roles such as tyre repair and wheel balancing.**

**What is Social Security?**

Social Security refers to a system of public programs **designed to provide economic support and protection to individuals and families** facing various life circumstances that may lead to income loss or financial hardship. It typically includes measures such as pensions for retirement, disability benefits, unemployment benefits, healthcare coverage, maternity and parental benefits, and survivor benefits.

**Issues with India's Social Security system:**

- Lack of Coverage:** Around 53% of India's salaried workforce and most gig workers lack access to social security benefits.
- Budgetary Allocation:** Initial funding for the National Social Security Fund was inadequate, far below estimated needs.
- Poor Fund Utilization:** Funds allocated often remain unspent or underutilized, indicating inefficiencies in management.
- Corruption and Leakage:** Funds are sometimes misused or diverted, with instances of fraud and improper beneficiary management.
- Inadequate Benefits:** Some schemes offer minimal benefits or have restrictive eligibility criteria, leaving out many deserving recipients.
- Budgetary Cuts:** Reductions in allocations for key schemes like MGNREGA reflect lower priority for social welfare.
- Digital Divide:** Transition to digital platforms for benefits distribution excludes those without access to technology.
- Informal Sector:** The vast informal labour sector, comprising 91% of India's workforce, lacks formal social security coverage and benefits.

**Government of India's schemes:**

**Programmes for Social Security Cover**

**Context:** Pradhan Mantri Suraksha Bima Yojana (PMJJBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJSBY) and Atal Pension Yojana (APY) complete 8 years of providing social security cover

The three schemes were launched in May 2015, to ensure affordable insurance and security for people from the unorganized sector of the country.

**Comparison of the three schemes:**

Scheme	Pradhan Mantri Suraksha Bima Yojana	Pradhan Mantri Jeevan Jyoti Bima Yojana	Atal Pension Yojana
Type of Scheme	Accidental insurance	Life insurance	Pension scheme. The minimum pension is guaranteed by the Government.
Objective	To provide insurance against accidental death and disability at affordable rates	To provide life insurance at affordable rates	To provide a pension to unorganized sector workers
Eligibility Criteria	Age between 18 to 70 years	Age between 18 to 50 years	Age between 18 to 40 years
Insurance Coverage	Rs. 2 lakh for accidental death and full disability, Rs. 1 lakh for partial disability	Rs. 2 lakh for natural or accidental death	Depends on the contribution made by the subscriber
Premium	Rs. 12 per annum	Rs. 330 per annum	Depends on the age and contribution of the subscriber
Tax Benefits	No tax benefits are available	Tax benefits available under Section 80C	Tax benefits available under Section 80CCD
Achievement	More than 34 crore enrolment	More than 16 crore enrolment	More than 5 crore enrolment

Visit Insights IAS Daily CA

**Steps to Improve Social Security in India:**

- Universal Social Security:** Consolidate existing schemes and provide universal coverage to all labourers.
- Expand EPFO Contribution:** Increase contributions to EPFO for formal workers, both employers and employees.
- Government Support:** Provide subsidies or assistance to vulnerable workers unable to contribute.
- Digitization and e-Shram Platform:** Invest in digital platforms for efficient registration and delivery of social security services.
- Mandatory Social Security for Employers:** Enforce mandatory social security entitlements for employees through their employers.
- Raise Awareness:** Increase awareness about social security rights and available benefits among workers.

**Insta Links:**

- [Assessing India's Social Security Programs](#)

**Prelims Links:**

**Q. Who among the following can join the National Pension System (NPS)? (UPSC 2017)**

- (a) Resident Indian citizens only
- (b) Persons of age from 21 to 55 only
- (c) All State Government employees joining the services after the date of notification by the respective State Governments
- (d) All Central Government employees including those of Armed Forces joining the services on or after 1st April, 2004

**Ans: (c)**

**Q. Regarding 'Atal Pension Yojana', which of the following statements is/are correct? (UPSC 2016)**

- It is a minimum guaranteed pension scheme mainly targeted at unorganized sector workers.
- Only one member of a family can join the scheme.
- Same amount of pension is guaranteed for the spouse for life after the subscriber's death.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (c)**

Topics: India and its neighbourhood- relations.

## 6. INDIA-MYANMAR RELATIONS AMIDST EVOLVING SITUATION IN MYANMAR

### Context:

The conflict between **ethnic armed organisations (EAOs) and the military junta** in Myanmar has created a serious humanitarian crisis, which the United Nations Security Council took up for discussion on July 3.

### Background of the crisis:

**The crisis in Myanmar originated primarily from the military’s seizure of power in a coup on February 1, 2021.** The military, known as the Tatmadaw, detained civilian leaders including **Aung San Suu Kyi** and declared a state of emergency. This action reversed a tentative transition towards democracy that had begun in 2011. The **coup sparked widespread protests across Myanmar**, met with severe military crackdowns resulting in significant civilian casualties. **Ethnic armed groups**, long in conflict with the military, intensified resistance efforts, leading to a complex humanitarian crisis with implications for regional stability and international relations.



Fig: Myanmar: Arrow shows Refugees escaping from Myanmar

### India- Myanmar relationship:

Dimension	Examples and Details
<b>Geopolitical Importance</b>	Myanmar serves as <b>a land bridge linking India’s northeastern states to Southeast Asia</b> , facilitating regional connectivity. Also, India’s engagement with Myanmar counters China’s influence in the region.
<b>Strategic Significance</b>	Developments in Myanmar impact neighbouring countries including China, Laos, Thailand, Bangladesh, and India.
	<b>Neighbourhood First Policy:</b> India prioritizes Myanmar in its diplomatic initiatives.
	<b>Act East Policy:</b> Myanmar is pivotal in India’s efforts to enhance ties with the Asia-Pacific region

<b>Areas of Collaborative Cooperation</b>	<b>Trade:</b> India is Myanmar's <b>fifth-largest trading partner</b> , focusing on sectors like agriculture, pharmaceuticals, IT, and energy.
	<b>Energy Cooperation:</b> Significant investments in Myanmar's oil and gas sector support India's energy security
	<b>Infrastructure Projects:</b> Projects like <a href="#">Kaladan Multi-Modal Transit Transport</a> and <a href="#">India-Myanmar-Thailand Trilateral Highway</a> promote connectivity and trade
	<b>Defense Partnership:</b> Joint military exercises and training initiatives strengthen defence ties.
<b>Capacity Building Measures</b>	India has extended <b>USD 2 billion in soft loans and supports</b> Myanmar's educational and agricultural research institutions. India provides timely aid during crises such as natural disasters and health emergencies.
<b>Cultural Connectivity</b>	Shared Buddhist heritage and historical ties foster mutual understanding and cultural exchange.
	<b>Indian Diaspora:</b> A significant Indian-origin population contributes to Myanmar's economy through businesses and investments.

### Issues between the two countries:

- India suspended Free Movement Regime (FMR) with Myanmar:** India's suspension of the Free Movement regime (FMR) was prompted by **security concerns such as insurgent activities, trafficking**, and mass immigration from Myanmar, which posed risks to national security. This measure **restricts the movement of refugees seeking safety and asylum in India**.
- Internal Security Threats:** The India-Myanmar border is porous and poorly guarded, situated in a remote, insurgency-prone area close to opium-producing regions. This vulnerability has been exploited by terrorist and insurgent groups from India's northeastern states, who have established camps in Myanmar.
- China's Influence:** China's substantial economic influence in Myanmar poses a challenge for India, impacting bilateral relations.
- Delays in joint infrastructure projects and the Rohingya crisis** further strain ties, reflecting broader security and humanitarian concerns.

### Conclusion:

**Amidst challenges like regional security threats and China's influence**, India must pursue strategic diplomacy, accelerate joint infrastructure projects, and enhance security cooperation to mitigate tensions and promote stability in the region.

Also, **there are compelling reasons to reconsider this suspension**. Reinstating FMR could provide immediate humanitarian relief to affected communities and enhance India's reputation as a responsible regional power committed to humanitarian principles.

### Insta Links:

- [India-Myanmar relations](#)

### Mains Links:

**Q. Analyze internal security threats and transborder crimes along Myanmar, Bangladesh and Pakistan borders including Line of Control (LoC). Also, discuss the role played by various security forces in this regard. (UPSC 2020)**

### Prelims Links:

**Q. In the Mekong-Ganga Cooperation, an initiative of six countries, which of the following is/are not a participant/ participants? (UPSC 2015)**

- Bangladesh
- Cambodia
- China
- Myanmar
- Thailand

**Select the correct answer using the code given below:**

- 1 only
- 2, 3 and 4
- 1 and 3
- 1, 2 and 5

**Ans: C**

[Topics: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.](#)

## 7. TIBET-CHINA DISPUTE ACT PASSED BY US CONGRESS

### Context:

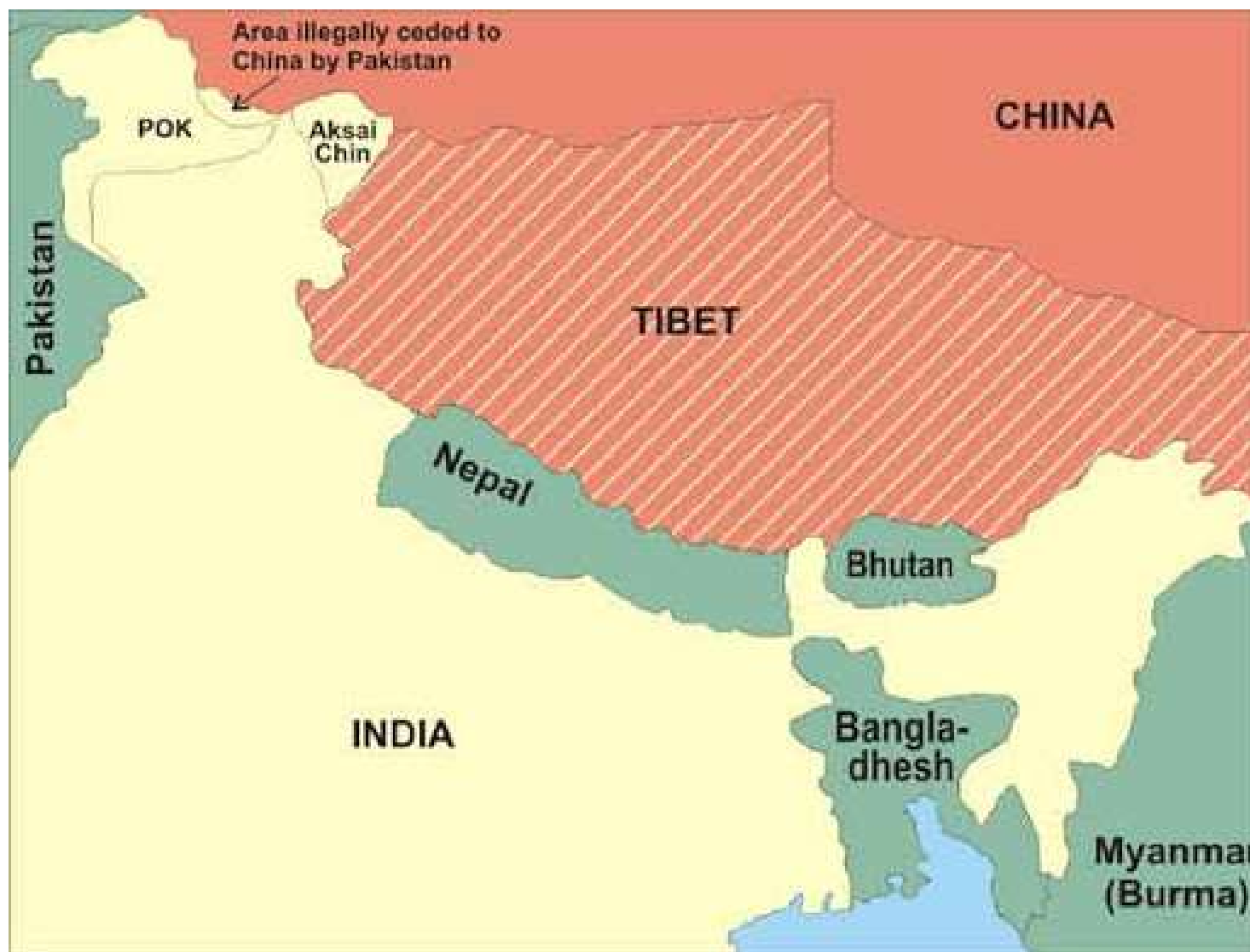
US Congress recently, passed the "**Promoting a Resolution to the Tibet-China Dispute Act**," aimed at countering China's historical claims over Tibet and promoting dialogue between Beijing and the Dalai Lama.

**What does the Policy say?**

The Act states that US policy requires **the Tibet-China dispute** to be resolved peacefully through dialogue, in accordance with international law and the UN Charter. It supports the **Dalai Lama’s “Middle Way Approach,”** which envisions Tibet remaining part of China while granting Tibetans meaningful autonomy.

**What is the History of the Issue between China and Tibet?**

The China-Tibet issue centres on **Tibet’s historical quest for independence and China’s claim of sovereignty over the region.** Tibet, located on the **Tibetan Plateau,** has been the traditional **homeland of the Tibetan people** and other ethnic groups. In 1913, the **13th Dalai Lama declared de facto independence for Tibet,** which China never recognized, asserting its own sovereignty. **In 1951, after the Chinese Communist Party’s takeover,** Tibet’s leaders were coerced into signing the **Seventeen Point Agreement,** ostensibly granting autonomy **but allowing Chinese military presence.** The agreement, rejected by many Tibetans, marked the beginning of tensions culminating in the **1959 Tibetan Uprising.** Following the **Dalai Lama’s flight to India** and the establishment of the **Central Tibetan Administration,** China intensified control over Tibet, suppressing freedoms and imposing demographic changes that challenged **Tibetan cultural survival** despite infrastructure developments.



**India’s Tibet Policy:**

Aspect	Details
Historical Boundaries between India and Tibet	Defined under the <b>Simla Convention of 1914</b> between Tibetan representatives and British India.
Chinese Annexation (1950)	China’s full control over Tibet led to disputes over boundaries, including <b>the Mc-Mahon Line.</b>

<b>1954 Agreement</b>	India signed an agreement with China <b>recognizing Tibet as part of China.</b>
<b>Tibetan Refugees (1959)</b>	India provided <b>refuge to the Dalai Lama</b> and his followers after the Tibetan uprising.
<b>Official Policy</b>	India recognizes the <b>Dalai Lama as a spiritual leader</b> ; and restricts political activities of Tibetan exiles.
<b>Policy Shifts</b>	<b>Since 2003, the Government of India has recognised Tibet Autonomous Region as part of the People's Republic of China</b> following the signing of the Declaration on Principles for Relations and Comprehensive Cooperation between India and China
<b>Balancing Act</b>	India maintains Tibet is part of China while <b>supporting Tibetan cultural identity cautiously</b>

### **Impact of Tibet and the Dalai Lama on India-China relations:**

1. **Geopolitical Significance:** Tibet historically neighbored India, influencing boundaries and the Line of Actual Control (LAC) over 3500 km.
2. **Strategic Importance:** Tibet's plateau is crucial for water resources and holds geopolitical significance, complicating India-China-Tibet dynamics.
3. **Diplomatic Agreements:** India recognized Tibet as part of China in a 1954 agreement (and again in 2003), altering its stance from historical conventions.
4. **Dalai Lama's Presence:** China views the Dalai Lama, residing in India, as a separatist, straining bilateral relations persistently.

### **Conclusion:**

India faces **complex challenges in its Tibet policy, balancing humanitarian concerns with geopolitical realities.** As it navigates relations with China, maintaining a strategic yet compassionate approach towards Tibetans in India while addressing legal and leadership issues post-Dalai Lama will be crucial for stability and regional cooperation.

### **Insta Links:**

- [India-China relations](#)

### **Mains Link:**

**Q. The China-Pakistan Economic Corridor (CPEC) is viewed as a cardinal subset of China's larger 'One Belt One Road' initiative. Give a brief description of CPEC and enumerate the reasons why India has distanced itself from the same. (UPSC 2018)**

### **Prelims Link:**

**Q. "Belt and Road Initiative" is sometimes mentioned in the news in the context of the affairs of: (UPSC 2016)**

- (a) African Union
- (b) Brazil
- (c) European Union
- (d) China

**Ans: D**

## GENERAL STUDIES – 3

Topics: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

# 1. RBI'S DRAFT FOREIGN EXCHANGE MANAGEMENT REGULATION, 2024

## Context:

The RBI has proposed draft regulations (**Draft Foreign Exchange Management (Export and Import of Goods and Services) Regulations, 2024**) to streamline export-import transactions, enhancing ease of business for small exporters and importers.

## Key Highlights of the Draft Regulation:

- **Exporters must declare the full export value** of goods or services to the specified authority.
- **The full export value must be realized and repatriated to India** within nine months from the date of shipment for goods and the date of invoice for services.
- **Authorized Dealers (AD)** may extend the specified period for reasonable and sufficient cause.
- **No advance remittance** for the import of gold and silver is permitted unless specifically approved by RBI.

**Aim of the Draft:** The draft regulations **aim to enhance business convenience**, particularly for small exporters and importers, while enabling **Authorized Dealer Banks** to offer faster and more efficient services to foreign exchange clients. These **regulations align with India's progressive liberalization policies** governing foreign exchange transactions under FEMA.

## What is FEMA?

Aspect	Details
	<b>FEMA, or the Foreign Exchange Management Act, 1999</b> , is Indian legislation that regulates foreign exchange transactions, payments, and dealings
<b>Enactment Date</b>	June 1, 2000
<b>Objective</b>	Facilitate external trade and payments, promote orderly development of foreign exchange market.
<b>Scope</b>	Regulates foreign exchange transactions, acquisitions, payments, exports, imports, and related activities
<b>Regulatory Authority</b>	<a href="#">Reserve Bank of India (RBI)</a>
<b>Nature of Offence</b>	Civil offence
<b>Penalties</b>	Penalties and fines for violations
<b>Applicability</b>	Entire India; includes agencies and offices managed by Indian citizens outside India.
<b>Entities Covered</b>	Foreign exchange, foreign securities, export and import of commodities/services, securities under the Public Debt Act 1994, banking, financial, and insurance services
<b>Control of Foreign Exchange</b>	RBI controls through Authorized Persons: authorized dealers, money changers, offshore banking units, etc.

**Under FEMA all foreign exchange transactions are categorized into two types: current account transactions and capital account transactions.**

1. **Current Account Transactions:** These include transactions that do not significantly impact the resident's assets or liabilities outside India. Examples include payments for foreign trade, expenses related to foreign travel, and educational expenses abroad.
2. **Capital Account Transactions:** These involve transactions that alter the resident's assets or liabilities outside India, such as investments in foreign securities or acquisition of immovable property overseas

**Resident Indians:** Defined under Section 2(v) of FEMA, 1999, a resident in India typically includes individuals residing in India for more than 182 days during the preceding financial year, Indian-registered corporations, and offices or agencies in India owned or controlled by non-residents or vice versa.

## Mains Link:

**Q. Discuss how emerging technologies and globalisation contribute to money laundering. Elaborate measures to tackle the problem of money laundering both at national and international levels. (UPSC 2021)**

**Prelims Links:**

**Q. Which one of the following groups of items is included in India's foreign exchange reserves? (UPSC 2013)**

- (a) Foreign-currency assets, Special Drawing Rights (SDRs) and loans from foreign countries
- (b) Foreign-currency assets, gold holdings of the RBI and SDRs
- (c) Foreign-currency assets, loans from the World Bank and SDRs
- (d) Foreign-currency assets, gold holdings of the RBI and loans from the World Bank

**Ans: (b)**

[Topics: Inclusive growth and issues arising from it.](#)

## 2. INCLUSIVE GROWTH OF THE NORTH-EAST REGION OF INDIA

### Context:

Despite its natural wealth, the **North East region in India** struggles with infrastructure, market access, and social disparities. This underscores the urgent need for India to enhance integration efforts, unlocking the region's potential in culture, economy, and environment.

### What is the North-East Region of India?

**North-East India, known as the land of seven sisters**, is a distinct geographic and political division of India. It boasts diverse physiographic and ecoclimatic conditions, serving as a gateway for India's unique flora and fauna.



### Significance of North-East Region:

Significance	Example
Strategic Geopolitical Location	Economic corridors like the India-Myanmar-Thailand Trilateral Highway
	'Act East' policy
Rich Biodiversity and Natural Resources	Biodiversity hotspots
	Oil, natural gas, and coal reserves
Cultural Diversity and Ethnic Mosaic	Over 220 ethnic groups and dialects
	Cultural tourism potential
Agricultural and Horticultural Potential	Organic farming, high-value crops
	Cultivation of medicinal plants

<b>Hydroelectric Power Generation</b>	58,000 MW hydropower potential
	Contribution to renewable energy goals
<b>Tourism Potential</b>	Kaziranga, Meghalaya's living root bridges
	Adventure tourism opportunities
<b>Human Resource Development</b>	High literacy rate and young population
	Potential for innovation and entrepreneurship

**Issues with the North East:**

- Economic Underdevelopment and Unemployment:** The region's economy remains largely agrarian with limited industrialization.
  - High youth unemployment fuels social unrest and out-migration, creating a brain drain.
- Infrastructure Deficit and Connectivity Issues:** Despite efforts like the Act East Policy, the region lags in infrastructure development. **Example:** Slow progress of projects like the India-Myanmar-Thailand Trilateral Highway hampers economic integration.
- Agricultural Challenges:** Limited success in promoting organic farming despite initiatives.
- Climate Change and Environmental Degradation:** **Example:** The devastating 2022 Assam floods affected millions, showcasing the region's vulnerability.
- China's Growing Influence and Border Disputes:** **Example:** clashes in Tawang (December 2022) and Dokh-lam highlight tension.
- Drug Trafficking and Cross-border Crime:** Vulnerability to drug trafficking from the Golden Triangle.
- Political Instability and Governance Issues:** Frequent changes in government leadership hinder policy continuity. **Example:** Political instability in states like Manipur and Arunachal Pradesh affects governance and development planning.

**Government Initiatives:**

Initiative	Description
<b>Infrastructure</b>	
<a href="#">Bharatmala Pariyojana</a>	National highways development project aimed at improving road connectivity across the country.
<a href="#">Regional Connectivity Scheme (RCS)-UDAN</a>	Enhances air connectivity to underserved regions, including Northeast India, promoting tourism and trade.
<b>Connectivity</b>	
<a href="#">Kaladan Multi-Modal Transit Project</a>	Aims to connect India's Northeast with Myanmar's Sittwe Port to facilitate trade and economic activities.
<a href="#">India-Myanmar-Thailand Trilateral Highway</a>	Strategic highway project to improve road connectivity between India, Myanmar, and Thailand.
<b>Tourism</b>	
<a href="#">Swadesh Darshan Scheme</a>	Promotes integrated development of tourism infrastructure in theme-based circuits, including Northeast destinations.
<b>Other</b>	
<a href="#">Digital North East Vision 2022</a>	Aims to digitally empower Northeast India through improved connectivity and access to digital services.
<a href="#">National Bamboo Mission</a>	Promotes bamboo cultivation and utilization to enhance livelihoods and economic growth in the region.

**Way forward:**

Solutions	Description
<b>Act-East from Northeast</b>	Implement Act East policy comprehensively, collaborating closely with Northeastern state governments.

<b>Enhancing Connectivity</b>	Prioritize air links and road projects like the India-Myanmar-Thailand Trilateral Highway for economic integration.
<b>Development of Tourism</b>	Promote tourism at sites like Kaziranga National Park; develop infrastructure under the Swadesh Darshan Scheme.
<b>Promoting Entrepreneurship</b>	Conduct capacity building for local entrepreneurs; support initiatives like the National Bamboo Mission.
<b>Education and Digital Connectivity</b>	Establish centres of excellence for higher education; extend digital connectivity under Digital North East Vision 2022.
<b>Infrastructure Development</b>	Research viability for physical infrastructure; focus on disaster-resilient road and bridge construction.
<b>Land Record Management</b>	Improve land record systems to resolve disputes; for example: implementing a credible land record maintenance system.
<b>Sports and Cultural Promotion</b>	Support sports talents as exemplified by athletes like Mary Kom and Mirabai Chanu; promote regional sports infrastructure.

**Mains Link:**

Q. "The simmering North East India has awaited a healing touch since Independence". Explain. (10M)

**Prelims Link:**

Q. Which Schedule of the Constitution of India contains special provisions for the administration and control of Scheduled Areas in several States? (UPSC 2008)

- (a) Third
- (b) Fifth
- (c) Seventh
- (d) Ninth

Ans: (b)

### 3. PM LAUDS 9 YEARS OF DIGITAL INDIA INITIATIVE

**Context:**

The Prime Minister praised the successful completion of **9 years of the Digital India initiative**, highlighting its role in enhancing 'Ease of Living' and transparency.

**What is the Digital India Initiative?**

**Launched in 2015, the Digital India Initiative (DII)** aims to transform India into a digitally empowered society and knowledge economy. It covers various projects from **Central Ministries, Departments, and States/UTs**.

**Key focus areas include:**

1. Digital infrastructure
2. Governance
3. Services on demand
4. Digital empowerment of citizens

The initiative **encompasses nine pillars of growth**, with the **Department of Electronics and Information Technology (DeitY)** as the main coordination agency, along with other ministries and a monitoring committee led by the Prime Minister.

#### **Role of the Digital India programme in bridging the digital divide and foster a digitally empowered society in India**

1. **Bridging the rural-urban divide:** Digital India focuses strongly on expanding digital infrastructure and access to rural areas through initiatives like **BharatNet for internet** connectivity. This helps bridge the technology access gap.
2. **Financial inclusion: Mobile and Aadhaar-linked payment** systems, DBT schemes under Digital India are

enabling cashless transactions, direct benefit transfers and preventing leakage. This is expanding digital financial inclusion.

- a. **E.g. more than 40% of all payments done in India are digital.**
3. **Accessible digital services:** [Digital locker](#), [e-Sign frameworks](#), and online registration platforms make government services more easily accessible for citizens by simplifying processes.
4. **Universal digital literacy:** [Digital Saksharta Abhiyan initiatives](#) under Digital India aim to make at least one person e-literate in every household and help promote adoption at the grassroots.
  - a. E.g. initiatives like "[SWAYAM](#)," offering online courses, and the "[National Digital Library](#)," providing access to a vast collection of academic resources.
5. **Job opportunities:** Digital infrastructure enhancement and digital skill development are helping create employment and entrepreneurship opportunities including in smaller towns.
6. **Mobile Connectivity and Mobile Apps:** The initiative has promoted the development of mobile apps for various government services, enhancing accessibility and convenience for citizens. E.g. [UMANG app](#).

**Limitations of the Digital India programme:**

1. **Digital Divide:** Despite progress, the digital divide persists, with rural areas having limited access to the internet and technology. Around **50% of the population** is still not online.
2. **Lack of customization:** High diversity in adoption readiness and pace across different parts of the country demands flexibility in implementation design rather than one size fits all.
3. **Variable success of digital skilling:** Digital literacy-focused initiatives are not uniformly successful due to a lack of qualified trainers, customized vernacular content and monitoring mechanisms.
4. **Affordability barriers:** High costs of devices, and data plans restrict sustainable adoption for economically weaker segments even if infrastructure exists.
5. **Rural infrastructure gaps:** Issues like inadequate electricity, and broadband connectivity obstruct rural adoption even as **urban pivots to 5G and fiberization**.



**Digital India Act 2023 (DIA)**



Feature	Description
The Digital India Act (DIA) 2023 is a <b>proposed legislation</b> aimed at updating the legal framework to address digital challenges and opportunities. It will replace the outdated <b>Information Technology Act of 2000</b>	
Objective	Formulate rules adaptable to changing technology trends. Provide <b>accessible adjudicatory mechanisms</b> for online civil and criminal offenses. Deliver <b>timely remedies for citizens, resolve cyber disputes, and enforce the rule of law online.</b>
Key Components	Responsible use of " <b>New-Age technologies</b> " such as Artificial Intelligence and Blockchain
	<b>Open Internet:</b> Ensures choice, competition, diversity, fair market access, and ease of doing business. • Open Internet is <b>free and open to all</b> , and not under the control of any government or organization
Salient Features	<b>Online Safety and Trust:</b> Focuses on safeguarding users against cyber threats and digital rights. <b>Accountable Internet:</b> Introduces legal mechanisms for complaint redressal, transparency, and norms for data. • Promote <b>ethical AI practices, data privacy in blockchain applications, and mechanisms for accountability.</b>
	<b>Replaces the outdated Information Technology Act of 2000 to address contemporary digital challenges.</b> Focuses on <b>online safety, trust, and accountability</b> , ensuring an open internet and regulating new-age technologies. <b>Reviews the 'safe harbor' principle</b> for online platform accountability (Safe Harbor rule shields platforms from liability related to user-generated content) <b>Mandates stringent Know Your Customer (KYC) requirements</b> for wearable devices with criminal law sanctions. Aligns with <b>Digital India Goals for 2026</b> to establish a USD 1 trillion digital economy.

**Way forward:**

1. **Infrastructure Development:** Invest in comprehensive rural broadband infrastructure. e.g. **BharatNet project** aims to connect over **250,000 village panchayats** with high-speed broadband.
2. **Launch targeted digital literacy programs,** especially in rural and marginalized communities. E.g. The **National Digital Literacy Mission (NDLM)** and **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)**
3. **Public-Private Partnerships:** Encourage collaborations between government and private sectors for digital inclusion. **E.g. Initiatives like 'Digital Village' projects**
4. **Subsidized schemes or partnerships** with private companies can provide **cost-effective smartphones and data plans** to economically disadvantaged populations.
5. **Impact assessment:** Regular surveys and feedback mechanisms can gauge the impact of digital initiatives on different segments of the population.
6. **Multilingual Digital Initiatives:** Develop and promote digital content in **regional languages**.

**Conclusion**

While Digital India has laid the foundations, achieving holistic digital empowerment needs patient stakeholders addressing demographic and regional realities via sustainable models rather than rushing purely for numbers.

**Insta Links:**

- [Digital transformation](#)

**Practice Questions:**

**Q. Implementation of Information Technology-based projects/programmes usually suffers in terms of certain vital factors. Identify these factors, and suggest measures for their effective implementation. (UPSC 2019)**

**Prelims Link:**

**Q. In India, the term “public key infrastructure” is used in the context of (UPSC 2020)**

- Digital technology
- Food security infrastructure
- Healthcare and education infrastructure
- Telecommunication and transportation infrastructure

**Ans: (a)**

Topics: Major crops cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

## 4. NATIONAL POLICY ON FARMER PRODUCER ORGANISATIONS (FPOS) PROPOSED

**Context:**

The draft National Policy on **Farmer Producer Organisations (FPOs)** has been put for public comment by the Ministry of Agriculture and Farmers Welfare

**Who are Farmer Producer Organisations (FPOs)?**

**Farmer Producer Organisations (FPOs) are voluntary collective entities** formed by farmers to enhance their bargaining power and access to inputs, markets, and technology. They enable **small and marginal farmers to pool resources**, share risks, and collectively undertake farming and marketing activities. **Currently, 5000 FPOs** have been registered on the Open Network for Digital Commerce portal for selling the produce online.

**The key objectives of the proposed policy include:**

- Promoting Formation:** To consolidate existing FPOs and establish 50,000 new FPOs, **benefiting 2.50 crore farmers.**
- Assessment:** Assessment of all schemes, including the 2021 Central sector scheme ‘Formation and promotion of 10,000 FPOs’.
- Capacity Building:** Emulation of the AMUL model with a 3-tier structure emphasizing collective business goals, capacity building, and professional management.
- Market Linkages:** End-to-end value chain ap-

proach to boost farmers’ income from production to marketing.

- Financial Support:** Offering financial assistance and incentives to FPOs to strengthen their operational capabilities and sustainability.
- Policy Framework:** Developing a supportive policy framework at national, state, and local levels to create an enabling environment for the growth and success of FPOs.
- Technology Adoption:** Promoting the adoption of modern agricultural technologies and practices through FPOs to enhance productivity and efficiency.

**Details of the Policy:**

- FPO Eligibility:**
  - Minimum 300 members** (100 in North East/hilly/UTs).
  - Registered as a legal entity under** Companies Act 2013 or Cooperative Society Act.
  - Must register with the FPO Registry Portal** maintained by the Central Government.
- Central Nodal Department (CND) Role** (Department of Agriculture and Farmers’ Welfare (DA&FW)): Allocate funds for FPO development through convergence of central government schemes; Facilitate institutional loans to FPOs at subsidized interest rates.
- Central Nodal Agency:** Small Farmers’ Agribusiness Consortium, New Delhi (under DA&FW).

**The potential of FPOs to transform Indian agriculture.**

- Reducing the cost and increasing the income** – FPOs can help farmers reduce costs through bulk purchases of inputs, marketing of their farm products, Aggregation of produce, and bulk transport.
- Modernization of agriculture** – 86% of Indian farmers are small and marginal farmers who don’t have enough money to access modern equipment. Since FPOs collectively use modern farm equipment, they will promote the modernization of agriculture.
- Collective farming** – Present Average land holding size is 1.08 hectares in 2015-16, FPOs can engage farmers in collective farming and address productivity issues emanating from small farm sizes.
- Compete with large enterprises** – It has the potential of enhancing the farmers’ bargaining power and income levels so they can compete with large corporate enterprises.
- Access to technology** – Access to modern technologies, credit, facilitation of capacity building, extension and training on production technolo-

- gies, and ensuring traceability of agricultural produce.
6. **Easy access to credit** – Easy access to funds and other support services by the government/donors/service providers.
  7. **Eliminating intermediaries** – In agricultural marketing, the presence of a large number of intermediaries who work non-transparently leads to lower incomes for farmers. FPOs are going to eliminate these intermediaries.
  8. **Value addition** – Post-harvest losses will be minimized through value addition and efficient management of value chain facilities provided by FPOs.
  9. **Collective strength** – FPOs help in the collectivization of such small, marginal, and landless farmers to give them the collective strength to deal with issues like crop failure, and access to the market.
  10. **Price fluctuation can be managed**; if there are practices like contract farming, agreements, etc.
  11. **Easy in communication** for dissemination of information about price, volume, and other farming-related advisories.

#### Issues facing FPOs.

1. **Lack of/ Inadequate Professional Management** – Trained manpower is presently not available in the rural space to manage and supervise FPO business professionally.
2. **Weak Financials** – FPOs are mostly represented by Small and marginal farmers with poor resource bases hence, initially they are not financially strong enough to deliver vibrant products and services.
3. **Lack of Risk Mitigation Mechanism** – Presently, while the risks related to production at the farmers' level are partly covered under the existing crop/livestock / other insurance schemes, there is no provision to cover the business risks of FPOs.
4. **Inadequate Access to Market** – Lack of linkage with Industry/ other market players, and large retailers by the FPOs.
5. **Inadequate Access to Infrastructure** – Like transport facilities, storage, value addition (cleaning, grading, sorting, etc.) and processing, brand building, and marketing.
6. **Lack of technical Skills/ Awareness** – Inadequate awareness among the farmers about the potential benefits of collectivization & non-availability of competent agencies for providing hand-holding support.

#### Government steps to address these issues.

1. **Equity Grant Fund Scheme** for Enhancing viability, sustainability of FPOs and Increasing credit

worthiness of FPCs.

2. **Credit Guarantee Fund Scheme** to provide collateral-free credit to FPOs.
3. **Scheme for the Creation of Backward and Forward Linkages** to bridge the gaps in the supply chain in terms of the availability of raw materials and linkages with the market.
4. **Operation Greens (TOP to TOTAL)** will promote FPOs, agri-logistics, processing facilities, and professional management.
5. **100% tax deduction for FPOs** with an annual turnover of up to Rs. 100 crores.

#### Success Stories of Farmer Producer Organisations (FPOs):

1. **Oriental FPO**: Developed cold chain infrastructure and launched a branded product called 'Safe N Fresh' in Jammu and Kashmir UTs.
2. **Prayag Raj Farmer Producer Company Limited**: Established input retail outlets benefiting farmers and consumers in Uttar Pradesh.
3. **Rameshwar Farmer Producer Company Limited**: Established wholesale counters for vegetable sales, providing more remunerative channels for farmers in Uttar Pradesh.
4. **Rampur FPO**: Collaborated with the district administration for the "**Aahaar Se Upchar Tak**" campaign, supplying nutrition-rich products to Anganwadi Kendra and improving nutritive outcomes in Uttar Pradesh.

#### Way forward:

To further scale up and strengthen FPOs, **there is a need for suitable amendments in the APMC Act**, the creation of farm-level infrastructure at the FPO level, procurement of agricultural commodities directly through FPOs under the MSP scheme, promotion of private investors to strengthen the financials of FPOs, extending Equity Grant & Credit Guarantee Fund schemes of SFAC to all forms of FPOs, appropriate flexible policy by states and GOI to scale up FPO promotion and strengthen them, and mass awareness building among rural farmers.

#### Conclusion:

FPOs have the potential to change the face of Indian agriculture by empowering farmers, increasing productivity, reducing costs, and improving access to markets, infrastructure, and technology. The government and other stakeholders must work together to further.

#### Insta Links:

1. [Farmer Producer Organizations](#)

#### Mains Links:

**Q. "In the villages itself, no form of credit organization will be suitable except the cooperative society." – All**

**Indian rural credit survey. Discuss this statement in the background of agriculture finance in India. What constraints and challenges do financial institutions supply agricultural finances? How can technology be used to better reach and serve rural clients? (UPSC 2014)**

**Prelims links:**

**Q. Which one of the following best describes the concept of 'Small Farmer Large Field'? (UPSC 2023)**

(a) Resettlement of a large number of people, uprooted from their them a large cultivable land which they cultivate collectively and share the produce.

(b) Many marginal farmers in an are organize themselves into groups and synchronize and harmonize selected agricultural operations.

(c) Many marginal farmers in an area together make a contract with a corporate body and surrender their land to the corporate body for a fixed term for which the corporate body makes a payment of agreed amount to the farmers.

(d) A company extends loans, technical knowledge and material inputs to a number of small farmers in an area so that they produce the agricultural commodity required by the company for its manufacturing process and commercial Production.

**Ans: (b)**

Topics: Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

## 5. LEGALISING MINIMUM SUPPORT PRICE IN INDIA

**Context:**

The recent increases in **Minimum Support Prices (MSP) for 14 kharif crops** have disappointed farmers, as they do not adequately reflect the rising input costs.

**What is MSP?**

The **Minimum Support Price (MSP)** is a minimum price for any crop **at which the government purchases it from farmers**, and is based on a calculation of **at least one-and-a-half times the cost of production** incurred by the farmers.

### CROPS COVERED UNDER MSP

KHARIF CROPS (14)		RABI CROPS (7)		CALENDAR YEAR CROPS (4)	
1. Paddy		1. Wheat		1. Copra	
2. Jawar		2. Barley		2. De-husked Coconut	
3. Bajara		3. Gram		3. Jute	
4. Ragi		4. Masur		4. Sugar Cane (FRP)	
5. Maize		5. Rapeseed& Mustard			
6. Arhar		6. Safflower			
7. Moong		7. Torai			
8. Urad					
9. Cotton					
10. Ground Nuts					
11. Sunflower					
12. Soyabean					
13. Sesamum					
14. Nigerseed					

### How are MSPs determined?

The Centre fixes MSPs for every kharif and rabi cropping season based on recommendations of the Commission for Agricultural Costs and Prices (CACP).

When a farmer grows a crop, he incurs costs, some of it explicit and some implicit or unpaid.

The CACP considers the following costs:

1. A2 - Covers all cash and in-kind expenses incurred by farmers on seeds, fertilisers, chemicals, hired labour, fuel, irrigation, etc
2. A2 + FL - Actual costs plus an imputed value of unpaid family labour.
3. C2- Includes A2 + FL along with revenues forgone on owned land(rent) and fixed capital asset (interest).

**MSP does not have any legal basis but has been implemented since the 1960s with the following objectives:**

1. Ensuring **food security** in the country.
2. **Protection** from price drop for farmers
3. **Incentivise** desirable crop production.

**Importance of MSP:**

- **Safeguard against Price volatility:** The system of MSP acts as a tool for the government to control sharp falls and rises in the prices of any crops
- **Surety of minimum prices:** The MSP is announced before the sowing season so that farmers can make an informed decision. Hence, supporting farmers from distress sales.
- **Control crops short in supply:** by offering more price support for these crops so that more and more farmers are tempted to grow these crops.
- **Crop Diversification:** MSP for crops promotes their diversification and **curbs import-dependence and food inflation** (e.g., there was a notable increase in the MSP of pulses and oilseeds in 2021 in order to incentivise its domestic production)

- **Food security:** The government can use these crops to be sold at government fair price shops at a price lower than the market rate to the below poverty line people at a lower price.
  - **Developmental schemes like PM-POSH-AN, ICDS, Anganwadi Services Scheme, and TPDS** rely on grains procured by FCI at MSP.

**Limitations of MSP:**

- **Lack of legal guarantee:** Farmers cannot demand MSP as a matter of right. The only crop where MSP payment has some statutory element is **sugarcane**.
- **Issues with the cost of production:** Farm activists say that the **1.5-times MSP formula** — originally recommended by the National Commission for Farmers headed by agricultural scientist **M S Swaminathan should have been applied to the C2 costs**.
- **Lack of effective data:** The CACP does not do any field-based cost estimates itself.
- **Ineffective coverage:** Though government announces MSP for 23 crops only.
- **Highly unequal across states:** In 2019-20 roughly **90%** of the rice produced in Punjab, and Haryana was procured by the government whereas roughly **1%** was procured in Karnataka and Gujarat.
- **Ineffectively Implemented:** The **Shanta Kumar Committee**, in its report in 2015, stated that only **6%** of farmers receive MSP, which directly means that **94% of the farmers in the country are deprived of the benefit of the MSP**.
- **Lack of awareness:** NITI Aayog on the MSP revealed that **only 10 per cent of the farmers** were aware of MSP prices right price before the sowing season.

Therefore, the **legalization of MSP is needed:**

1. **Legalizing MSP enables farmers to claim MSP rights**, enforceable through courts.
2. **Improved price realization** from the private sector could boost the rural economy.
3. **Diversification of any of the MSP crops** helps farmers avoid the high input costs of select crops.
4. **Increased production of pulses and millets** promotes climate-smart agriculture.

**However, there are major impediments to legalizing it:**

- It would lead to a **heavy subsidy burden on the government**.
- **Ineffective grain management:** Legalising MSP will further aggravate the issues related to grain management in India.
- **Market distortion** as the natural cycle of demand-

supply would be disturbed.

- **It is more of a “One size fits all’ approach:** as the ultimate solution for agricultural stagnation in the country is not MSP.

**Recommendation by various committees:**

Recommendation	Details
<b>Swaminathan Commission</b>	Ensure MSP is 50% higher than the weighted average cost of production (C2+50% formula).
<b>Ashok Dalwai Committee</b>	Adhere to the Model Agricultural Land Leasing Act, 2016, ensuring fair tenancy reforms.
<b>Other major Recommendations</b>	Develop a <b>national agriculture policy focusing on the FIVE ‘Cs’:</b> Conservation, Climate change, Cultivation, Consumption, and Commercial viability.
	<b>Amend APMC Act:</b> States should amend their APMC Acts and promote the formation of farmer organizations.
	Recognize the <b>need for MSP in certain segments while supporting market-driven growth in others.</b>
	<b>Categorization &amp; Implementation of MSP Crops:</b> Categorize MSP crops into all-India and regional importance, with respective responsibilities for the central and state governments.
	<b>Commodity-based Farmers’ Organizations:</b> Establish organizations to provide global demand-supply projections and guide planting decisions.
	Include all production costs in MSP, ensuring fair compensation and reasonable profit margins.
	Implement <b>electronic platforms for mandis</b> to enhance price transparency and market access.

**Conclusion:**

**Legalizing MSP alone doesn’t ensure financial sustainability in farming.** Income-support schemes like **PM-KISAN** and price deficiency systems like **PM-AASHA** offer

more progressive solutions.

As suggested by the **Swaminathan Commission** the methods of calculation need to be restructured to make it more profitable for farmers and encourage crop diversification. But at the same time, other aspects such as irrigation, soil, irrigation, knowledge input, etc. also need to be considered to impart holistic development in the agricultural sector of the country.

### **Mains Links:**

**Q. What do you mean by Minimum Support Price (MSP)? How will MSP rescue the farmers from the low-income trap? (UPSC 2019)**

### **Prelims Links:**

**Consider the following statements: (UPSC 2020)**

1. In the case of all cereals, pulses and oil seeds, the procurement at Minimum Support Price (MSP) is unlimited in any State/UT of India.
2. In the case of cereals and pulses, the MSP is fixed in any State/UT at a level to which the market price will never rise.

**Which of the statements given above is/are correct?**

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

**Ans: D**

**Q. Consider the following statements: (UPSC 2023)**

1. The Government of India provides Minimum Support Price for niger (*Guizotia abyssinica*) seeds.
2. Niger is cultivated as a Kharif crop.
3. Some tribal people in India use niger seed oil for cooking.

**How many of the above statements are correct?**

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

**Ans: (c)**

Topics: Disaster and management.

## **6. HATHRAS STAMPEDE: CAUSES AND PREVENTION**

### **Context:**

The **Hathras stampede**, which tragically claimed over 100 lives, highlights the multifaceted causes and necessary prevention measures for such disasters.

### **What is a Stampede?**

**A stampede is a sudden, impulsive mass movement** resulting in injuries and deaths due to overcrowding, panic, or perceived danger. According to the **National Crime Records Bureau figures, from 2000 to 2013**, almost **2,000 people** died in stampedes in India.

### **Key Factors Behind Stampedes:**

1. **High Crowd Density**
2. **Panic and Fear**
3. **Poor Crowd Control and Management**
4. **Venue Design and Layout**
5. **Environmental Conditions**
6. **Event Characteristics**
7. **Human Behaviour**
8. **Lack of Communication**

### **Outcomes of Stampede:**

1. **Causes of Death:** Primarily traumatic asphyxia, heart attacks, crushing injuries, and head or neck injuries.
2. **Psychological Triggers:** Panic and the breakdown of cooperative behaviour; crowd members pushing to avoid danger or achieve gratification.
3. **Physical Factors:** Poor design, blocked exits, lack of lighting, and high crowd density increase the risk.

### **Causes:**

Stampedes in India are **primarily caused by structural failures**, such as collapsing makeshift bridges and narrow streets with few exits, as well as fire and electrical issues, like unauthorized fireworks and faulty equipment. **Crowd behaviour** also contributes significantly, with panic triggered by rumours or competition, as seen in the Hathras Stampede. **Security issues**, including under-deployment of staff and lack of surveillance, exacerbate the problem. Additionally, **poor coordination among agencies** and inadequate infrastructure and resources hinder effective crowd management.

### **Notable Stampedes:**

1. **Moscow (1896):** Over 1,000 deaths due to a rumour-driven surge.
2. **Allahabad (1954):** Around 800 deaths at Kumbh Mela from poor planning and crowd control.
3. **Lima (1963):** 326 deaths during a football match due to panic from tear gas.
4. **Wai (2005):** Over 340 deaths at a temple due to slippery steps.
5. **Mina (2015):** Estimates range from 769 to over 2,000 deaths during Hajj pilgrimage from intersecting crowds.
6. **Mata Vaishnav Devi Shrine (2022):** The Stampede at the Mata Vaishno Devi Shrine resulted in the death of 22 people and injured 32.

**NDMA Guidelines for Crowd Management:**

**1. Understanding venue, visitors, and stakeholders:**

- a. Event type (religious, educational, sports, music, political)
- b. Expected crowd demographics (age, gender, economic status)
- c. Crowd motives (social, academic, religious, entertainment)
- d. Venue details (location, terrain, open/closed space)
- e. Other stakeholders (NGOs, local community, administrators)

**2. Crowd Handling:**

- a. Traffic regulation around venues
- b. Clear route and emergency exit maps
- c. Barricades for crowd control
- d. Queue management with snake line approach
- e. VIP visitor management and discouraging general admissions

**3. Safety and Security:**

- a. Authorized use of electricity and fire safety measures
- b. CCTV surveillance and use of mini UAVs for large crowds

**4. Communication:** Public address system for crowd communication

**5. Medical and Emergency Care:** First-aid rooms and emergency operations centres

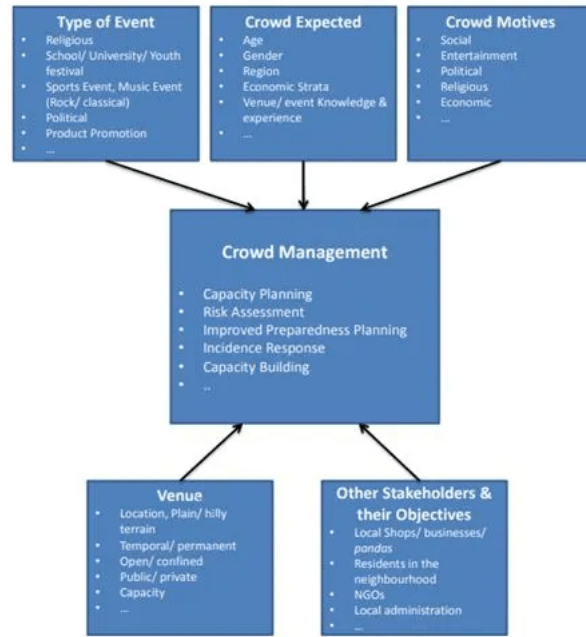
**6. Role of Event Managers:** Developing, implementing, and reviewing disaster management plans

**7. Role of Civil Society:** Involvement of NGOs in traffic control, medical aid, and disaster response

**8. Role of Police:** Venue assessment, crowd guidance, and traffic management

**9. Role of Media:** Educational role in disaster awareness; Critical role in evaluating disaster plans

**10. Capacity Building:** Training and assessment of security personnel and police



**Use of ICT in crowd management:**

ICT for Disaster mitigation and Prevention	ICT in Disaster response and relief
<p>Technology</p> <ul style="list-style-type: none"> <li>• GIS, Remote Sensing</li> <li>• Radio, Television, telephone</li> <li>• SMS, UMS, Cell Broadcasting, Internet/Social Media</li> <li>• RFID</li> <li>• Space based sensors and balloons</li> </ul>	<p>Technology</p> <ul style="list-style-type: none"> <li>• PA system, SMS, UMS, Cell Broadcasting, Inter-operability of mobile service providers</li> <li>• Emergency lighting, alarms</li> <li>• RFID Tags</li> <li>• Registration database software</li> <li>• Space based sensors and balloons</li> </ul>
<p>Typical Usage</p> <ul style="list-style-type: none"> <li>• Early warning system, Potential Risks, Vulnerabilities</li> <li>• Registration of visitors, Virtual Queues, RFID</li> <li>• Information dissemination</li> <li>• To regulate flow of visitors</li> <li>• Prepositioning of resources</li> </ul>	<p>Typical Usage</p> <ul style="list-style-type: none"> <li>• To ensure rumours do not spread</li> <li>• Registering missing persons</li> <li>• Search and rescue</li> <li>• Keeping track of relief organizations, Camps of displaced persons</li> <li>• Insurance processing</li> <li>• Resource inventory management</li> </ul>

**Conclusion:**

**Moving forward, India must enact comprehensive legislation addressing** tortuous liability, following the Supreme Court’s observations after the Uphaar Cinema Tragedy. Emphasis should be placed on specialized training, effective communication, and stringent safety measures to maintain professionalism in managing large events.

**Insta Links:**

- [Crowd management in temples](#)

**Mains Links:**

Q. Discuss the recent measures initiated in disaster management by the Government of India departing from the earlier reactive approach. (UPSC 2020)

## GENERAL STUDIES – 4

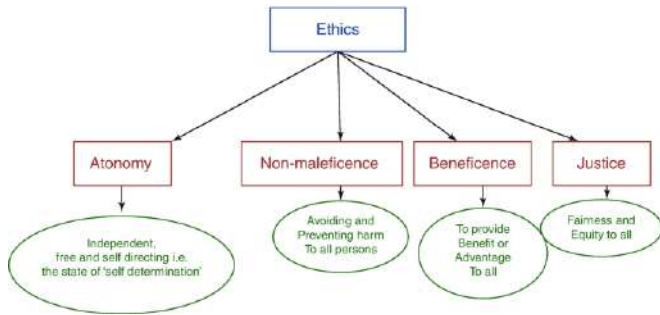
### 1. ISSUES WITH THE MEDICAL ETHICS IN INDIA

**Context:**

The [article](#) highlights systemic issues in medical ethics oversight in India.

**What is Medical Ethics?**

Medical ethics **addresses ethical choices in healthcare, defining what is right or wrong within a specific cultural context.** It governs the responsibilities of healthcare providers, including **doctors, hospitals, and other professionals,** towards patients and society at large.



**Issues with the Medical Ethics in India:**

1. **Informed Consent:** Often not obtained adequately or at all from patients, especially in clinical trials involving vulnerable populations.
2. **Patient Privacy:** Lack of stringent measures to protect patient data and confidentiality.
3. **Conflicts of Interest:** Instances where doctors have financial interests in treatments or procedures they recommend E.g., involvement of **senior doctors of Apollo hospitals in the organ trade racket.**
4. **Doctor-Patient Trust:** Erosion due to the commercialization of healthcare and lack of transparency.
5. **Regulatory Oversight:** Weak enforcement and compliance with ethical guidelines, leading to abuses in clinical trials and patient care.
6. **Inequitable Access:** Disparities in healthcare delivery and access to treatments based on socio-economic factors.

**Provisions of the Code of Medical Ethics:**

Provisions	Description
<b>Character of Physician</b>	A physician must uphold the dignity and honour of the profession. They should be upright, instructed in healing, pure in character, diligent in caring, modest, sober, and patient.
<b>Maintaining Good Medical Practice</b>	Physicians should continuously improve their medical knowledge and skills, sharing benefits with patients and colleagues. They must practice methods based on scientific principles.
<b>Maintenance of Medical Records</b>	Every physician must maintain indoor patient records for at least 3 years from the start of treatment.
<b>Use of Generic Names of Drugs</b>	Physicians should prescribe drugs using generic names whenever possible to ensure rational prescription and usage.
<b>Exposure to Unethical Conduct</b>	Physicians have a duty to expose incompetent, corrupt, dishonest, or unethical conduct within the profession, without bias.
<b>Obligations to the Sick</b>	While not obliged to treat every patient, physicians should not arbitrarily refuse treatment, especially in emergencies. They may advise seeking another physician's service when appropriate.

**Other Measures Needed:**

1. **Boosting Medical Humanitarianism:** Provide regular training and support to enhance doctors' empathy and compassion towards patients.
2. **Respectful Interaction:** Encourage effective communication between doctors and patients, promoting familiarity with patient histories and routines to revive the concept of 'family doctors'.
3. **Focus on Emergency Medicine (EM):** Introduce dedicated EM residents trained to handle tough situations, manage charged environments, and deliver difficult news effectively in emergency rooms and trauma centres.
4. **Enforcement of Ethical Guidelines:** Ensure strict adherence to ethical guidelines and cultural sensitivity among physicians and hospital ethical committees.
5. **Ensuring Doctor Confidence:** Implement measures for doctor safety such as security guards, CCTV cameras, and displaying patient interaction

guidelines in regional languages within hospitals.

### Insta Links:

- [Medical Ethics: 'Cash-for-Kidney' scam](#)

### Mains Links:

#### Q. Case Study:

Dr. X is a leading medical practitioner in a city. He has set up a charitable trust through which he plans to establish a super-specialty hospital in the city to cater to the medical needs of all sections of society. Incidentally, that part of the State had been neglected over the years. The proposed hospital would be a boon for the region. You are heading the tax investigation agency of that region. During an inspection of the doctor's clinic, your officers have found out some major irregularities. A few of them are substantial which had resulted in considerable withholding of tax that should be paid by him now. The doctor is cooperative. He undertakes to pay the tax immediately. However, there are certain other deficiencies in his tax compliance that are purely technical in nature. If these technical defaults are pursued by the agency, considerable time and energy of the doctor will be diverted to issues that are not so serious, urgent, or even helpful to the tax collection process. Further, in all probability, it will hamper the prospects of the hospital coming up. There are two options before you: Taking a broader view, ensuring substantial tax compliance, and ignoring defaults that are merely technical in nature. Pursue the matter strictly and proceed on all fronts, whether substantial or merely technical. As the head of the tax agency, which course of action will you opt for and why? (250 words)

## 2. HUMILITY IN PUBLIC DISCOURSE

### Context:

Freedom of speech is not just about **speaking freely but also involves exercising positive character traits**. Personal attacks and hate speech overshadow meaningful information and reveal a lack of understanding of both one's own and the opponent's limitations. This has turned **public discourse into a spectacle, prioritizing verbal aggression** over constructive debate.

### What is Humility?

Humility is the quality of being modest and respectful, acknowledging one's limitations and valuing others' perspectives.

**Example:** A scientist, despite their expertise, listens carefully to a colleague's new theory, considering it with an open mind instead of dismissing it outright, recognizing that they don't have all the answers.

### Current State of Political Discourse

Political discourse is **dominated by personal attacks rather than relevant issue discussions**. **TRP-driven media fuels** verbal harassment, turning debates into gladiatorial contests focused on aggression over constructive dialogue. This trend, prevalent in liberal democracies, teaches citizens to value harsh comments over meaningful discussions on public welfare.

### Need for Humility in Public Discourse

1. **Promotes Respectful Dialogue:** Encourages listening and valuing different viewpoints.
2. **Reduces Polarization:** Minimizes personal attacks and hate speech.
3. **Fosters Understanding:** Acknowledges one's own limitations and others' perspectives.
4. **Encourages Constructive Criticism:** Focuses on issues rather than personal attacks.
5. **Enhances Cooperation:** Builds bridges between different societal sections.

### Importance of Virtues in Politics

**Virtues like humility and care are vital for democratic discourse**, as highlighted by thinkers like **Montesquieu**, who advocated for **education to prioritize public over private interests**. The decline in character training in modern politics has shifted focus to individual achievement over collective well-being. **Charles Taylor and Dr. B.R. Ambedkar** also emphasized that good governance relies on the virtues of leaders.

### Traditional Indian Thought on Knowledge and Character

**Traditional Indian thought sees knowledge as a moral, collective endeavour, emphasizing character**. The Mahabharata highlights the importance of humility and care in acquiring knowledge. Prof. Vrinda Dalmiya illustrates this with Sage Kausika learning from a butcher and a housewife, showing that humility enhances understanding.

### Mains Links:

**Q. Humility is the mother of all virtues, purity, charity and obedience. Comment. Do you consider yourself humble? How can you prepare yourself to become humbler? Discuss. (250 words)**

## CONTENT FOR MAINS ENRICHMENT

<i>In News</i>	<i>Usage in answers</i>
<b>1. JAMES LAWSON</b>	<p><b>Context:</b> James Lawson, an American non-violence activist who passed away on June 9, 2023, at age 95, played a pivotal role in <b>integrating Gandhian non-violence principles into the American civil rights movement</b>. <b>Martin Luther King Jr.</b> regarded Lawson as a crucial figure in the movement and a global leader in nonviolence strategy.</p> <p><b>James Lawson demonstrated several key ethical values:</b></p> <ol style="list-style-type: none"> <li>1. <b>Nonviolence:</b> Advocated and practised nonviolent resistance inspired by Gandhian principles.</li> <li>2. <b>Inclusivity:</b> Promoted inclusivity by combining Gandhian methods with Christian teachings.</li> <li>3. <b>Courage:</b> Showed courage in training activists to peacefully challenge segregation.</li> <li>4. <b>Integrity:</b> Criticized unjust actions, including US military policies, maintaining a consistent ethical stance.</li> <li>5. <b>Love:</b> Emphasized love as a powerful tool in social movements, advocating for unity and justice.</li> <li>6. <b>Empowerment:</b> Empowered African Americans in their struggle for civil rights through strategic nonviolence.</li> </ol>
<b>2. 'JADUI PITARA'</b>	<p>'<a href="#">Jadui Pitara</a>' -a play-based learning-teaching material tailored for children between the age group of 3-8 years</p> <ol style="list-style-type: none"> <li>1. Developed under <b>the National Curriculum Framework for Foundational Stage</b> (part of the implementation of the <b>New Education Policy 2020</b>)</li> <li>2. Available in <b>13 Indian languages</b></li> <li>3. Includes <b>playbooks, toys, puzzles, posters, flashcards, storybooks</b>, and worksheets that reflect local culture and social contexts.</li> </ol> <p><b>Aim:</b></p> <ol style="list-style-type: none"> <li>1. Accommodate the diverse needs of learners and pique curiosity</li> <li>2. Making the learning-teaching environment more child-centric, lively, and joyful</li> </ol> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Why Playing is important for Children?</b></p> <p>Playing is crucial for children's overall development—<b>physical, emotional, social, cognitive, and cultural</b>—by encouraging curiosity, exploration, and experimentation. Interactive play activities, such as talking, storytelling, and creative arts, help build strong connections among children, teachers, parents, and the community. Research shows that play stimulates brain development, particularly <b>the prefrontal cortex enhances neuroplasticity</b>, and develops intuitive knowledge. <b>UNICEF emphasizes play's vital role in parenting</b>, establishing a strong foundation for children's growth and development from infancy.</p> </div> <p><b>Usage:</b> This example can be used in <b>Governance, Social justice, and Ethics (case study)</b> as a unique example of a child-centric foundational literacy initiative</p>

### 3. FRANZ KAFKA

**Context:** Franz Kafka remains relevant 100 years after his death, with his works illuminating the **absurdities of modern bureaucracy and disillusioned political systems**.

**Who was Franz Kafka?**

**He was a German-language novelist and writer from Prague.** He is widely regarded as one of the major figures of 20th-century literature.

Franz Kafka worked in an **insurance company by day and wrote at night**. His stories, reflecting his experiences in a bureaucratic world, introduced the term "**Kafkaesque**," describing nightmarish, absurd scenarios of oppressive bureaucracy. Despite burning much of his work, **Kafka's surviving writings like "The Trial" and "The Metamorphosis"** gained posthumous fame. His themes of alienation and existential dread continue to resonate, influencing many writers and maintaining relevance in modern discussions of bureaucracy and authority. **Kafka died in 1924**, but his legacy endures through his powerful and enduring literary contributions.

**Values exhibited by him:**

1. **Integrity:** Balancing a day job while pursuing his passion for writing.
2. **Humility:** Leading a modest life despite his literary talent.
3. **Perseverance:** Writing persistently, even in the face of personal struggles.
4. **Empathy:** Capturing the human condition and societal issues in his works.
5. **Commitment to Truth:** Exposing the harsh realities of bureaucracy and modern life.
6. **Intellectual Honesty:** Critiquing the failures of Modernism and Rationalism.

## FACTS FOR PRELIMS

### GS-1

#### Art & Culture

### 1. ABHAYA MUDRA

**Context:**

The '**abhaya mudra**' is a hand gesture symbolizing fearlessness and reassurance.

**Originating in the Buddhist tradition**, it is depicted with the right hand raised outward at shoulder height, fingers pointing up. It signifies protection and serenity, associated with the **Buddha granting fearlessness to his followers**, including taming a wild elephant. Over time, it became a **motif in Hindu art**, seen in depictions of deities like Shiva and Vishnu, illustrating their compassionate and protective qualities.

#### History

### 2. SANTHAL HUL

**Context:**

The 169th anniversary of the Santhal rebellion is celebrated

Hul Divas is observed **annually on June 30 in memory of tribal leaders — Sidho and Kanhu Murmu — who led the Santhal hul (rebellion) on June 30, 1855**, at Bhognadih in Sahebganj district (now Jharkhand)

About Santhal Rebellion:

Topic	Information
<b>What is the Santhal Rebellion?</b>	Santhal rebellion (also known as 'Hul') (1855-1856) was a revolt against both the British East India Company and the zamindari system by the Santhal. The rebellion was led by the <b>four sibling Brothers - Sidhu, Kanhu, Chand and Bhairav</b> .
<b>Santhals and their Migration</b>	The Santhal people migrated from the <b>Birbhum and Manbhum regions of Bengal to modern-day Santhal Pargana</b> . The British relocated them to the forested area of <b>Damin-i-Koh</b> as part of their revenue collection strategy.
<b>Reasons behind the Hul</b>	The Santhals rebelled against the British <b>due to extortions, oppressive extractions, dispossession of property, false measurements, and other illegalities</b> .
<b>Organization of the Hul</b>	Contrary to popular belief, the Hul was a <b>well-planned and organized political war</b> . Preparations included <b>guerrilla formations, military teams, detectives, secret bases</b> , logistics, and a network of message carriers for coordination. <b>Non-Adivasi Hindu castes</b> also participated in the rebellion.
<b>Contribution of Women</b>	<b>Phulo-Jhano</b> , two sisters, led an army of 1,000 women who played crucial roles in the rebellion. The East India Company's army was defeated twice during the uprising.
<b>End</b>	After the rebellion started, <b>martial law was proclaimed</b> by the East India Company which lasted until January 3, 1856, when martial law was suspended and the rebellion was <b>eventually suppressed by the Presidency armies</b> .
<b>Lasting Impact of the Hul</b>	The Santhal rebellion <b>inspired future uprisings, such as the Santhal involvement in the 1857 mutiny</b> . It <b>symbolized resistance against British colonialism</b> and laid the foundation for subsequent movements in Jharkhand.

Geography**3. PALM TREES**Context:

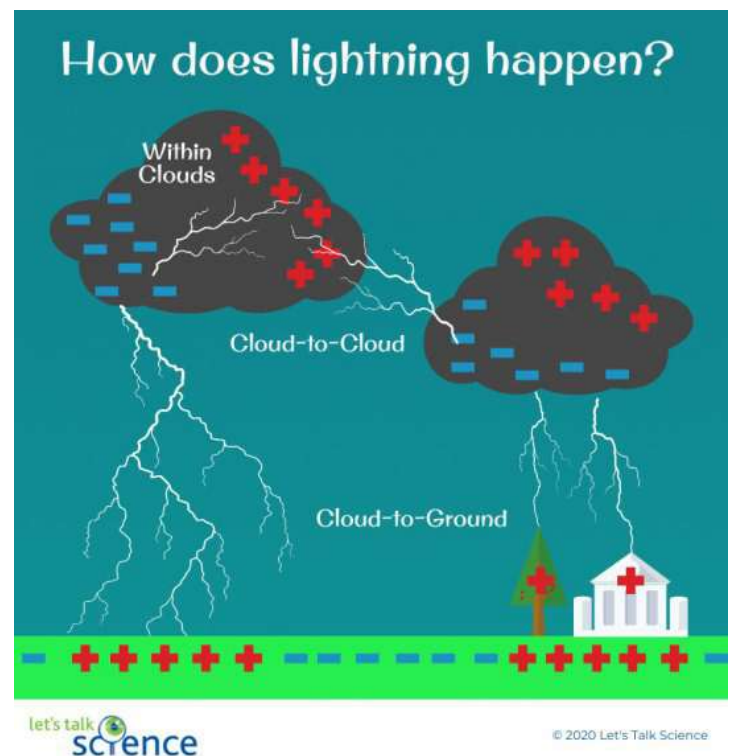
Odisha plans to plant **1.9 million palm trees** and restrict cutting to reduce **lightning deaths**, targeting areas heavily affected during pre-monsoon and monsoon seasons.

Palm trees are **part of tropical forest ecosystems and include varieties like Coconut, Oil Palm, Arecanut, and Palmyrah**. Palmyrah is the State Tree of Tamil Nadu. They act as natural conductors during lightning strikes, preventing loss of lives.

What is Lightning?

It is a **powerful electrical phenomenon** caused by the buildup of electrical charges within clouds and between clouds and the ground. It results in a **brilliant flash of light and thunder**.

India is among a **few countries with an early warning system** for lightning, providing forecasts up to five days in advance. Lightning accounted for **2,880 deaths in 2021**, making up 40% of all accidental deaths due to natural forces, as reported by the National Crime Records Bureau (NCRB). Lightning frequency is highest in **northeastern states and West Bengal, Sikkim, Jharkhand, Odisha, and Bihar**.



GS-2

Salient features of Indian Constitution

### 4. CONSTITUTIONAL RIGHT TO A SPEEDY TRIAL

**Context:**

The Supreme Court of India emphasized the **constitutional right to a speedy trial under Article 21**, rebuking the **National Investigation Agency (NIA)** for delays in a counterfeit currency case.

- The bench stressed that the **right to a speedy trial applies regardless of the crime's severity**, criticizing the NIA for repeated delays in submitting its counter affidavit.
- The Supreme Court's decision highlighted the importance of a speedy trial, referencing past rulings such as **Kartar Singh Vs State of Punjab (1994)**, **Hussainara Khatoon (I) Vs Home Secretary, State of Bihar**, and **Abdul Rehman Antulay Vs RS Nayak (1992)**, which all recognized the right to a speedy trial as a **fundamental right under Article 21**.

Governance

### 5. BHUVAN PANCHAYAT PORTAL AND NATIONAL DATABASE FOR EMERGENCY MANAGEMENT

**Context:** Recently **two new Geoportals** developed by ISRO: **'Bhuvan Panchayat (Ver. 4.0)'** for rural land records and **'National Database for Emergency Management (NDEM Ver. 5.0)'** were launched.

- These portals provide **high-resolution satellite imagery for visualisation and planning**.

Portal	Purpose	Features
<b>Bhuvan Panchayat Portal</b>	Support decentralized planning Empower grassroots citizens	Digitizes land records Reduces dependency on local administration Minimizes corruption
<b>NDEM Ver. 5.0 Portal</b>	Provide space-based inputs on natural disasters Aid in disaster risk reduction	Effective early warning systems Continuous monitoring Supports India and neighbouring countries

### 6. SAMPOORNATA ABHIYAN

**Context:**

The **NITI Aayog** has launched the **'Sampoornata Abhiyan'**, a **nationwide campaign aimed at achieving 100% saturation in 12 key social sector indicators**.

**More about Sampoornata Abhiyan**

1. **Overview:** A 3-month campaign by NITI Aayog.
2. **Objective:** To achieve **saturation of 6 key indicators in Aspirational Districts (ADP) and Aspirational Blocks Programme (ABP)**.
3. **Programs:**
  - o **ADP:** Targets 112 Aspirational Districts.
  - o **ABP:** Targets 500 Aspirational Blocks.
4. **Key Indicators for Districts:**
  - o Soil Health Cards distribution
  - o Schools with functional electricity
  - o Fully immunized children (9-11 months)
  - o Pregnant women registered for ANC in the first trimester
  - o Pregnant women taking ICDS Supplementary Nutrition
  - o Schools providing textbooks within 1 month of the session start
5. **Key Indicators for Blocks:**
  - o Screening for Diabetes and Hypertension
  - o Pregnant women registered for ANC in the first trimester
  - o Pregnant women taking ICDS Supplementary Nutrition
  - o Soil Health Cards generated
  - o SHGs receiving Revolving Fund

The campaign emphasizes collaboration among **local and state governments, central ministries, and NITI Aayog officials** to support and guide local governance.

**The Aspirational Districts Programme**, launched in 2018 by NITI Aayog, aims to transform 112 districts focusing on Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development, and Infrastructure, measured across 81 development indicators.

**The Aspirational Blocks Programme**, launched in 2023, targets 500 blocks in 329 districts to achieve saturation of essential government services in Health & Nutrition, Education, Agriculture and Allied Services, Basic Infrastructure, and Social Development, measured across 40 indicators.

International Relations

### 7. INTERNATIONAL NORTH-SOUTH TRANSPORT CORRIDOR

**Context:**

**India-Russia trade** has advanced with the **first-ever shipment** of **Kuzbass coal from Siberia to India via the International North-South Transport Corridor (INSTC)**.

- The **7,200 km-long INSTC**, a **multimodal network of sea, road, and rail**, offers the **shortest route from St Petersburg to Mumbai**.
- The INSTC is part of Russia's strategy to **redirect trade flows from Europe to Asia and the Middle East due to Western sanctions**.
- This corridor will benefit several countries, **including Iran, Russia, Azerbaijan, the Baltic, Nordic nations, and 11 Central Asian countries**.



## 8. COLOMBO PROCESS

**Context:**

India **chaired the first meeting of the Colombo Process** in Geneva, marking its **first time at the helm**.

**About the Colombo Process:**

It is a **regional consultative forum comprising 12 Asian member states** and aims to share best practices related to overseas employment for South and Southeast Asian countries that send migrant workers abroad. The member states include **Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam**. The forum, founded by 10 of these states, makes non-binding decisions by consensus.

The **International Organisation for Migration (IOM)** and the Colombo Process Technical Support Unit (CPTSU) provide technical and administrative support.

**About the IOM:**

**Established in 1951 as part of the UN System, headquartered in Geneva, Switzerland.** It comprises 175 member states and aims to address displacement issues and facilitate pathways for regular migration. It leads initiatives like the Global Compact for Migration.

## GS-3

**Indian Economy**

## 9. WAYS AND MEANS ADVANCES (WMA)

**Context:**

The **Reserve Bank of India (RBI)** has **increased the Ways and Means Advances (WMA) limits** for **State governments and Union territories by 28%**.

**About Ways and Means Advances (WMA):**

- Introduced in 1997 to **address mismatches in government receipts and payments**.
- Governments can **obtain immediate cash from the RBI, repayable within 90 days**, with interest at the existing repo rate.
- Legal Authority: **Authorized under Section 17(5) of the RBI Act, 1934**.
- If WMA **exceeds 90 days**, it becomes an overdraft, **with interest 2 percentage points higher than the repo rate**.

## 10. ESANKHYIKI PORTAL

**Context:**

The Ministry of Statistics and Programme Implementation (MoSPI) has launched the eSankhyiki portal (<https://esankhyiki.mospi.gov.in>) to enhance user experience and facilitate easier access to official statistics, on the eve of Statistics Day (29<sup>th</sup> June). **The portal features two modules:**

1. **Data Catalogue Module:** Provides centralized access to major datasets including National Accounts Statistics, Consumer Price Index, and more, with over 2291 datasets available. Users can search, download, and visualize data along with specific metadata.
2. **Macro Indicators Module:** Offers time series data on key macro indicators like National Accounts Statistics and Consumer Price Index, allowing data filtering, visualization, and API sharing for increased data reusability.

**About Statistics Day:**

**It is observed on June 29th, and commemorates the birth anniversary of P.C. Mahalanobis (1893-1972)**, a pioneering figure in Indian statistics. His legacy includes **founding the Indian Statistical Institute in 1931**, establishing the National Sample Survey and Central Statistical Organisation in 1950, and shaping **India's Second Five-Year Plan (1956-61)**, focusing on public sector

development and industrialization. Mahalanobis also devised the **Mahalanobis Distance**, a significant statistical measure used in fields like pattern recognition. His contributions earned him the Padma Vibhushan, India's second-highest civilian award, and led to the establishment of the **Mahalanobis International Award**, recognizing lifetime achievements in statistics in developing countries or regions, supported by the Ministry of Statistics and Programme Implementation (MoSPI).



## 11. PROJECT NEXUS

### Context:

The **Reserve Bank of India (RBI)** has joined **Project Nexus**, an international initiative aimed at **enabling instant cross-border retail payments** by linking domestic **Fast Payments Systems (FPSs) of multiple countries**.

- India's **Unified Payments Interface (UPI)** will be connected with the **FPSs of Malaysia, the Philippines, Singapore, and Thailand**, with potential

expansion to more countries.

- Project Nexus**, conceptualized by the **Bank for International Settlements (BIS) Innovation Hub**, aims to **standardize the connectivity between various instant payment systems (IPS) globally**.
- This will **streamline cross-border payments**, allowing **transactions to be completed within 60 seconds**.
- The platform simplifies the process by **allowing a single connection to Nexus to link to all other countries in the network**, accelerating the **growth of instant cross-border payments**.

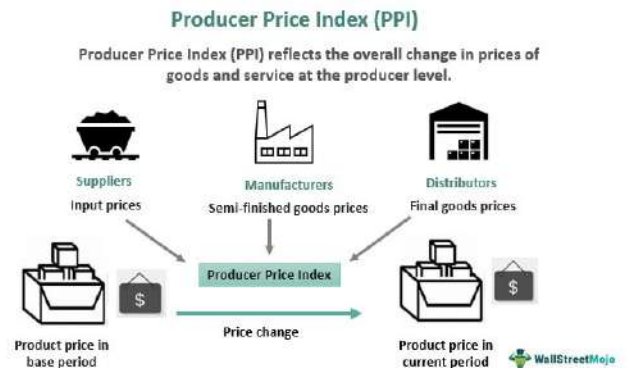
## 12. PRODUCER PRICE INDEX

### Context:

The DPIIT is **finalizing a new model of the Producer Price Index (PPI)** to better capture input prices in the economy.

### What is PPI?

**Producer Price Index** measures the average change in prices received by producers for goods and services sold in the **domestic market or exported**. It includes two types: Output PPI for goods and services leaving production sites, and Input PPI for goods and services entering production processes.



### What is the need for a new Model of PPI?

The new model of **PPI aims to replace WPI** due to biases in double counting of products, exclusion of exports/imports, and overlooking the **service sector (55% of GDP)**. It has been **shared with the IMF, and consultations are underway to transition from WPI to PPI**, aligning with most G20 economies.

The government is also **considering changing the base year of the Wholesale Price Index (WPI) from 2011-12**, with discussions ongoing with MoSPI and the National Statistical Commission.

## 13. STABLECOINS

### Context:

Recent volatility in the stablecoin market, **such as the collapse of TerraUSD**, has drawn attention to the challenges facing these digital assets.

### What are Stablecoins?

**Stablecoins are digital cryptocurrencies** designed to maintain a stable value by pegging their worth to assets like **fiat currencies (e.g., USD, EUR), commodities (e.g., gold)**, or other **cryptocurrencies**. They aim to minimize price volatility, making them suitable for transactions and as a store of value within the volatile cryptocurrency market. Eg: USD Coin, GEMINI Dollar, PAXOS, TrueUSD, tether etc.

### Stablecoins come in several types:

1. **Fiat-collateralized:** Backed 1:1 by fiat currencies like USD or EUR (e.g., Tether, Gemini Dollar).
2. **Asset-backed:** Supported by a basket of assets like commodities or precious metals, which can affect their value (e.g., Digix Gold).
3. **Crypto-collateralized:** Decentralized and backed by cryptocurrencies, often over-collateralized to mitigate price volatility (e.g., Dai).
4. **Non-collateralized:** Decentralized and algorithmically governed, without specific backing (e.g., Basis).

### Concerns:

Concerns include risks related to short-term debt, asset stability, contagion risks, financial stability, lack of transparency, and regulatory challenges. Cooperation between the stablecoin industry and regulators is crucial for effective regulation without stifling innovation.

### Science & Technology

## 14. AI WASHING

### Context:

**“AI washing,”** a term popularized by the **US Securities and Exchange Commission (SEC)**, refers to **companies exaggerating their use of AI to appeal to consumers.** It refers to a deceptive promotional practice that exaggerates or outright lies about a product or service’s use of artificial intelligence.

- This phenomenon has surged **following the release of OpenAI’s ChatGPT in 2022**, leading to a **significant rise in startups and companies claiming to use AI.**
- However, **only a small percentage actually integrate AI into their operations.**
- AI washing involves businesses overstating their AI capabilities or misleading consumers about

their features.

- Notable examples include **Google’s misrepresented AI demonstrations and Amazon’s cashier-less checkout systems that relied on manual oversight.**

The consequences of AI washing are substantial. It **can divert resources from genuine AI innovation, complicate decision-making for businesses seeking real AI solutions,** and pose data security risks to consumers.

## 15. SPACE DEBRIS

### Context:

A **defunct Russian satellite, RESURS-P1**, broke up into **over 100 pieces of debris**, forcing **astronauts on the International Space Station (ISS) to shelter in their spacecraft for about an hour.**

- This incident adds to the **growing concern over space debris as space becomes increasingly crowded with vital satellite networks.**

### About Space Debris:

- **Man-made objects in Earth’s orbit that are no longer functional.**

**Examples:** Defunct satellites, spent rocket stages, and debris fragments from collisions.

### Threats from Space Debris:

- **Threat to Marine Life:** Objects falling into oceans pose risks to marine life and contribute to pollution.
- **Threat to Satellites:** Debris poses hazards to operational satellites, potentially causing malfunctions.
- **Kessler Syndrome:** Overpopulation of space debris causing cascading collisions.
- **Reduction of Orbital Slots:** Accumulation limits the availability of orbital slots for future missions.
- **Space Situational Awareness:** Increasing debris complicates tracking and orbit prediction for satellite operators and space agencies.

## 16. ECO-FRIENDLY SUPERCAPACITORS

### Context:

Researchers at the Government College for Women, Thiruvananthapuram, have developed a method to create **eco-friendly supercapacitors** using activated carbon derived from coconut husks, a prevalent agricultural waste in Kerala.

### What are supercapacitors?

Supercapacitors, also known as ultracapacitors or electrochemical capacitors, are **energy storage devices that store electrical energy via electrostatic charge** separation at the interface between electrode and electrolyte. Unlike traditional capacitors, they can store much larger amounts of charge per unit volume and have the ability to charge and discharge rapidly. **They complement batteries by providing bursts of power and extending battery life.**

This new **biowaste-derived activated carbon** offers sustainable and efficient solutions for high-performance supercapacitors due to its availability, low cost, and environmentally friendly properties. The **innovative microwave-assisted production method, developed at the college's Centralised Common Instrumentation Facility (CCIF),** produces high-quality activated carbon quickly and efficiently, making it suitable for various applications including energy storage.

## 17. SNOWBLIND MALWARE

### Context:

**Snowblind is a new Android malware** that targets **banking credentials by exploiting a built-in Android security feature** called 'seccomp' (secure computing), part of the Linux kernel and Android OS.

- Discovered by **security firm Promon**, Snowblind **repacks apps to evade detection of accessibility features**, allowing it to **extract sensitive information and gain remote access.**
- This malware **injects code that activates before seccomp's anti-tampering measures**, bypassing security mechanisms and **disabling biometric and two-factor authentication.**

It mainly affects users **who download apps from untrusted sources and is most active in Southeast Asia.** **Google confirmed that no apps on the Play Store are infected**, suggesting users are safe if they stick to Play Store apps.

### About Malware:

- Malware, short **for malicious software**, refers to **any intrusive software developed by cyber-criminals (often called hackers) to steal data and damage or destroy computers** and computer systems.
- Examples of common malware include **viruses, worms, Trojan viruses, spyware, adware, and ransomware.**

## 18. ZINC'S ROLE IN MAKING LEGUMES RESILIENT TO CLIMATE CHANGE

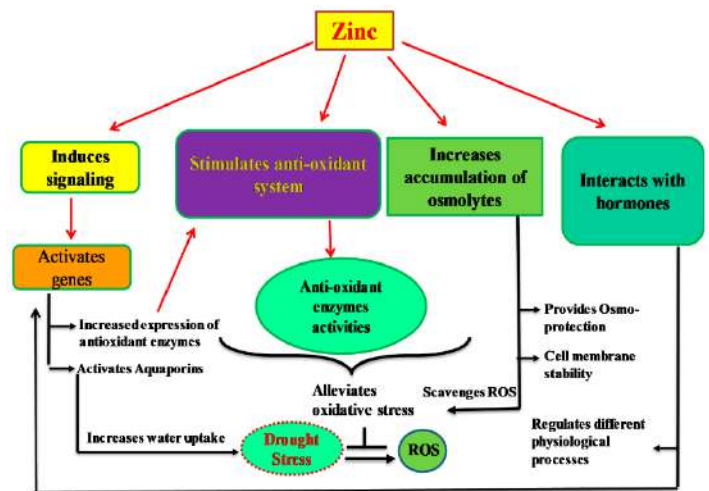
### Context:

Researchers have discovered that **zinc plays a crucial role in enhancing the health and climate resilience of legume crops.**

- The **study reveals zinc's importance in nitrogen fixation**, where **atmospheric nitrogen is converted into ammonia, essential for plant growth.**
- Legumes form a symbiotic relationship with rhizobia bacteria, **which fix atmospheric nitrogen in root nodules sensitive to environmental factors** like **temperature, drought, and soil salinity.**
- The study also identified a transcription factor called **Fixation Under Nitrate (FUN) that controls nodule breakdown when soil nitrogen levels are high.**

Zinc acts as a **secondary signal to regulate nitrogen fixation efficiency**, with the **zinc sensor FUN playing a key role.**

Understanding how zinc and FUN regulate nitrogen fixation can help optimize this process in legume crops, leading to **increased nitrogen availability, improved yields, and reduced reliance on synthetic fertilizers.**



## 19. DESERT MOSS: SYNTRICHIA CANINERVIS

### Context:

Scientists have discovered **Syntrichia caninervis**, a desert moss capable of surviving **Mars-like environmental conditions.**

Syntrichia caninervis is **found in harsh locations like**

**Antarctica and the Mojave Desert.** It is considered a potential pioneer species for Mars colonization.

**What are mosses?**

Mosses are **small, non-vascular plants belonging to the taxonomic division Bryophyta.** They **lack true roots, stems, and leaves, instead absorbing water** and nutrients through their stems. Mosses are commonly found in damp, shady environments worldwide, such as forests, bogs, and rocks.

## 20. LI-FI TECHNOLOGY

**Context:**

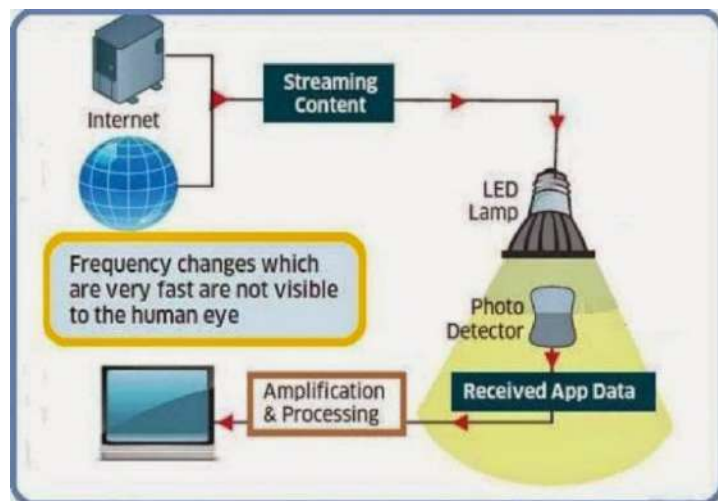
The Defence Ministry has adopted **Velmenni's Li-Fi technology** to tackle communication challenges in the Indian Navy.

**Li-Fi**, developed by Velmenni, **uses light for secure wireless communication**, supported by a grant under **India's iDEX initiative.**

**What is Li-Fi Technology?**

**LiFi (Light Fidelity) is a wireless communication technology** using visible light, specifically LED bulbs, to transmit data. Invented by Professor Harald Haas in 2011, LiFi **offers high-speed, bidirectional mobile communication** similar to WiFi but with faster speeds, lower latency, and greater bandwidth (thousands of terahertz).

It operates by **modulating LED light to encode binary data**, which is then received and decoded by photodiodes to transmit data wirelessly via visible light communication. This **makes LiFi ideal for electromagnetic-sensitive environments** such as aircraft cabins, hospitals, and nuclear power plants, as it does not cause electromagnetic interference and utilizes unused visible light frequencies for communication



## 21. ADITYA-L1 MISSION

**Context:**

The **Aditya-L1 spacecraft** has successfully completed its **first halo orbit around the Sun-Earth Lagrangian point L1.**

- This journey requires **precise modelling of dynamics and an understanding of perturbing forces.**
- The **successful execution of these manoeuvres has validated the state-of-the-art flight dynamics software developed by URSC-ISRO.**

The **Aditya-L1 mission** is an **Indian solar observatory at Lagrangian point L1**, launched on September 2, 2023, and was inserted in its targeted halo orbit on January 6, 2024.

Aditya-L1 spacecraft in the **Halo orbit takes 178 days to complete a revolution around the L1 point.**

**Aditya-L1**

**Context:** It was launched on September 2, is currently in Earth's orbit, but it is scheduled to leave this orbit and move towards the Earth-Sun system's Lagrange 1 (L1) point

Aspect	Explanation
Mission Objective	To study the Sun, its <b>upper atmospheric dynamics (chromosphere and corona)</b> , and understand the physics of the solar corona and its heating mechanism for the five years.
Launch Vehicle	Polar Satellite Launch Vehicle (PSLV)
Orbit	L1 orbit (First Lagrange point of the Sun-Earth system)
Primary Payload	Visible Emission Line Coronagraph (VELC)
Other Payloads	Solar Ultraviolet Imaging Telescope (SUIT), Solar Low Energy X-ray Spectrometer (SoLEXS), High Energy L1 Orbiting X-ray Spectrometer (HELIOS), Aditya Solar wind Particle EXperiment (ASPEX), Plasma Analyser Package for Aditya (PAPA)
Significance of VELC	VELC is a <b>solar coronagraph capable of simultaneous imaging, spectroscopy, and Spectro-polarimetry.</b> It can image the solar corona down to 1.05 times the solar radius.
Purpose of Studying the Sun	To gain a <b>deeper understanding of the Sun's radiation, heat, flow of particles, and magnetic fields;</b> provide clues about the high temperature of the solar corona; understand space weather dynamics; and offer early warnings for solar events.
Importance of L1 Point	L1 point provides an <b>unobstructed view of the Sun</b> , even during phenomena like an eclipse; allows payloads to directly observe the Sun; makes the mission fuel-efficient.
What is L1 Point?	Lagrange points are <b>equilibrium positions</b> in space where the gravitational forces of two large bodies, like the Earth and the Sun, produce enhanced regions of attraction and repulsion.

Fig: Structure of Sun

To know more Visit Insights IAS Daily Current Affairs

## 22. 3D HOLOGRAM TECHNOLOGY

**Context:**

Japan has introduced new yen banknotes equipped with **3D hologram technology** to combat counterfeiting.

1. The existing currency remains valid, with new bills gradually entering circulation through banks and ATMs to accommodate Japan's cash-centric transactions.

**What is 3D hologram technology?**

**3D hologram technology creates three-dimensional images** that appear to have depth and motion without the need for special glasses. It uses principles of **interference and diffraction.** It uses **lasers to record light patterns**

reflected from an object, producing a realistic holographic image that changes perspective as the viewer moves. These holograms are used for **security in currency, authentication of products, and immersive displays in entertainment and education.**

Environment & Ecology

### 23. SENNA SPECTABILIS

**Context:**

The **Kerala Forest Department** has partnered with **Kerala Paper Products Limited (KPPL)** to **remove invasive species like *Senna spectabilis*** from the Wayanad Wildlife Sanctuary.

- These plants **threaten the wildlife habitat in the Nilgiri biosphere.**

**Senna spectabilis:**

- A deciduous tree native **to tropical regions of the Americas.**
- **Ecological Impact:** Thick foliage inhibits the **growth of native trees and grasses**, leading to food shortages for wildlife, particularly herbivores. **Disrupts germination and growth of native plant species.**
- **Conservation Status:** Classified as **'Least Concern'** on the IUCN Red List.

### 24. GREAT INDIAN BUSTARD (GIB) AND LESSER FLORICAN CONSERVATION

**Context:**

The **Ministry of Environment, Forest and Climate Change (MoEFCC)** has approved **Rs 56 crore for the next phase of Great Indian Bustard (GIB) and Lesser Florican conservation.**

**Since 2016, the Wildlife Institute of India** has led a conservation program for the long-term recovery of the **Great Indian Bustard and Lesser Florican.** The next phase, planned from 2024 to 2033, focuses on habitat development, in-situ conservation, completing a conservation breeding centre, and releasing captive-bred birds. These efforts aim to protect these endangered species, which include the **Bengal Florican and Houbara Bustard among others.**

**About the Bustards:**

**Great Indian Bustard**



The Great Indian Bustard is classified as **critically endangered under Schedule I and IV of the Wildlife Protection Act, 1972, and listed under Appendix I of CITES.** It is part of a Species Recovery Program due to its declining population.

The **male bustards do not participate in incubating or caring for their young.** They are omnivorous and adapt opportunistically to their grassland habitat, predominantly found in Rajasthan and Gujarat, with smaller populations in Maharashtra, Karnataka, and Andhra Pradesh.

**Lesser Florican**



The Lesser Florican, also **critically endangered, is listed under Schedule I of the Wildlife Protection Act, 1972,** and shares the same grassland endemicity across the Indian sub-continent.

**Male floricans are noticeably smaller and lighter than females** and are known for their aerial courtship displays. They inhabit areas in Rajasthan, Gujarat, Madhya Pradesh, and parts of Andhra Pradesh, Maharashtra, and Karnataka.

### 25. MEGAFAUNA

**Context:**

A **41,000-year-old ostrich nest** was discovered by archaeologists in Andhra Pradesh, providing **significant insights into the extinction of megafauna in India.**

- **Megafauna, generally animals weighing over 50 kg,** includes the **mega omnivorous ostrich.**
- The discovery supports research on the reasons **behind megafauna extinction in India,** such as the **arrival of humans around 30,000 years ago** and **the co-evolution hypothesis,** which suggests that **geographic isolation and abiotic factors** accelerated their extinction.

## 26. GLOBAL CONCLAVE ON PLASTIC RECYCLING AND SUSTAINABILITY (GCPRS)

### Context:

The **Global Conclave on Plastic Recycling and Sustainability (GCPRS)** began yesterday at **Bharat Mandapam**, Pragati Maidan, addressing issues of [plastic waste management](#), recycling, and sustainability to promote circularity.

### About GCPRS:

**The Global Conclave on Plastics Recycling and Sustainability (GCPRS)**, organized by the AIPMA (All-India Plastics Manufacturers' Association (AIPMA)), gathers industry stakeholders to address critical issues in plastic use and recycling, showcasing innovative technologies and fostering collaboration for sustainable practices across sectors.

### Initiatives Taken to Tackle Plastic Pollution:

#### Global Initiatives:

1. [Global Partnership on Marine Litter \(GPML\)](#)
2. [GloLitter Partnerships Project](#)
3. [London Convention, 1972](#)

#### India-Specific Initiatives:

1. Elimination of single-use plastic
2. [Plastic Waste Management Rules, 2016](#)
3. Un-Plastic Collective
4. [Kerala: Beat Plastic Pollution Initiative](#)
5. **Other initiatives for plastic pollution mitigation:** Project REPLAN (REducing PLastic from Nature), Promotion of Circular Economy, EPR Portal for Plastic Packaging, Swachh Bharat Mission, Lifestyle for the Environment (LiFE) Movement

## Environment friendly Plastics

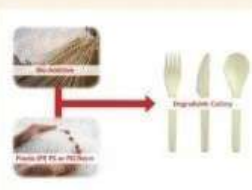


**Bio-plastics:** Materials bio-sourced or biodegradable or both and are made from renewable biomass resources (e.g., corn starch/ sugarcane/ cassava)



**Biodegradable plastic:** plastics (other than compostable plastics) which undergo complete degradation by biological processes under ambient environment.

**Compostable plastics:** Plastics that undergo degradation by biological processes during composting to yield CO<sub>2</sub>, water, inorganic compounds and biomass.



**Oxo-degradable:** These are conventional plastics such as PE, which include an additive to help them break down into smaller fragments, which could lead to microplastic leakage in the environment.

## 27. RUDRAM-1

### Context:

India successfully test-fires its first Indigenous anti-radiation missile, 'Rudram-1'

### What is Rudram-1?

**It was developed by DRDO for the Indian Air Force** and is an **air-to-surface anti-radiation** missile launched from Sukhoi-30MKI fighter jets. It features INS-GPS navigation and a Passive Homing Head for accurate targeting of radiation-emitting sources. With an effective range of 500 meters to 15 km in altitude and up to 250 km in distance, Rudram-1 significantly enhances the IAF's capability to suppress enemy air defences and neutralize critical installations.

### Types of Missiles Used by Indian Military

Missile Type	Name(s)	Description
Ballistic Missiles	<a href="#">Agni</a> Series, Prithvi	Long-range missiles capable of delivering nuclear and conventional warheads.
Cruise Missiles	BrahMos, Nirbhay	Subsonic and supersonic missiles for precision strikes, <a href="#">BrahMos</a> being the fastest supersonic cruise missile.
Anti-Tank Missiles	Nag, HELINA, MPATGM	Designed to destroy tanks and armoured vehicles.
Surface-to-Air Missiles	Akash, Barak-8	Used for air defence to intercept and destroy enemy aircraft and missiles.
Air-to-Air Missiles	Astra, Python-5	Fired from aircraft to target enemy aircraft.
Anti-Ship Missiles	BrahMos, Dhanush	Used to target and destroy enemy ships and naval vessels.
Anti-Radiation Missiles	RudraM, NGARM	Designed to detect and destroy enemy radar installations.
Surface-to-Surface Missiles	Prahaar, Shaurya	Short to medium-range missiles for targeting enemy installations and strategic points on the ground.
Submarine-launched ballistic Missiles (SLBMs)	K-15 Sagarika, K-4	Launched from submarines for nuclear deterrence.
Man-Portable Air-Defense Systems (MANPADS)	Igla-S, Starstreak	Portable systems for targeting low-flying aircraft and helicopters

## 28. NOMADIC ELEPHANT

### Context:

The **16th edition of the India-Mongolia Joint Military Exercise NOMADIC ELEPHANT** began in Meghalaya.

- The exercise aims to **enhance joint military capabilities for counterinsurgency operations under the United Nations Mandate Chapter VII**, focusing on semi-urban and mountainous terrain.
- Key **tactical drills include response to terrorist actions, the establishment of joint command posts and intelligence centres, securing helipads, special heliborne operations**, cordon and search operations, and the use of drones and counter-drone systems.

The exercise aims to **share best practices in joint operations, develop interoperability, and strengthen the camaraderie and defence cooperation** between the two nations.

## 29. INDIA- THAILAND JOINT MILITARY EXERCISE MAITREE

**Exercise MAITREE**, conducted annually since 2006, alternates between India and Thailand. This exercise is **crucial for both nations facing terrorism threats**, especially in southern Thailand regions like **Satun, Patthalung, and Bangkok**, which are prone to attacks.

The exercise includes **company-level joint training on insurgency and counter-terrorism** in jungle and urban scenarios, enhancing defence cooperation and bilateral relations between the Indian Army and the Royal Thailand Army.

Additionally, the **Royal Thailand Navy and Indian Navy have conducted Coordinated Patrols (CORPATs)** in the Indian Ocean since 2005.

[Internal Security](#)

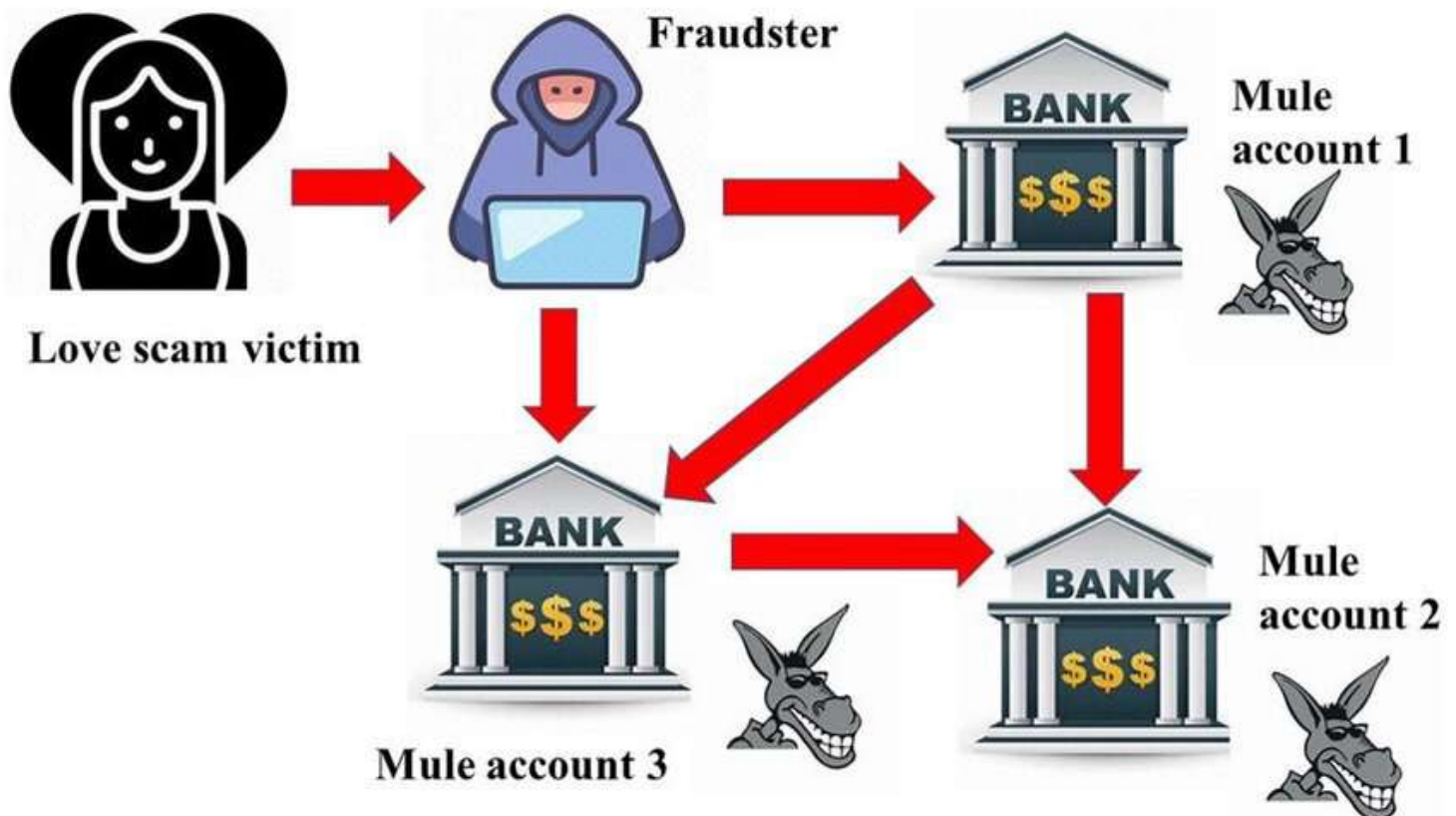
## 30. MONEY MULE

**Context:**

Banks are **intensifying scrutiny on new sole proprietorship** and individual current accounts to **combat 'money mule' activities**, aiming to deter money laundering and digital frauds.

**What is a Money Mule?**

A money mule is **a person who allows their bank account to be used by criminals** to transfer illegally obtained money. Banks have observed a rise in mule accounts, particularly among new accounts less than a year old, prompting cautious approvals and transaction limits.



**Modus Operandi:**

Criminals recruit money mules to launder money from online scams, frauds, and crimes like human trafficking and drug trafficking. They **use mules to create distance between victims and themselves**, making it harder for law enforcement to trace the funds. Methods include **bank transfers, checks, virtual currency, prepaid cards**, and more. Mules are often recruited **through fake job ads or social media promising easy money**. Some know they're aiding crime; others may not realize. **They're compensated or deceived into believing they're helping a friend**. When

caught, they face legal consequences for facilitating money laundering, even if unknowingly.

**What measures are being taken by banks?**

Measures include **verification visits, latitude data checks, and washout logic analysis**. The Reserve Bank of India is addressing these concerns **with banks amid ongoing discussions on enhancing safeguards against financial fraud**.

**31. REPORTS IN NEWS**


Reports	Description
RBI's Financial Stability Report (FSR)	The <b>latest 29<sup>th</sup> issue of the Financial Stability Report (FSR)</b> reveals encouraging trends in India's banking sector as of March-end 2024.
	Scheduled commercial banks reported a notable decline in their Gross Non-Performing Assets (GNPAs) and Net NPA ratios, reaching multi-year lows <b>of 2.8% and 0.6% respectively</b> .
	<b>About the report:</b> The <b>Financial Stability Report (FSR)</b> , <b>issued biannually (every six months)</b> by the RBI, provides a comprehensive assessment of financial stability and the resilience of India's financial system. Prepared by the <b>Sub-Committee of the Financial Stability and Development Council (FSDC)</b> , chaired by the Governor of RBI, the report evaluates risks impacting the financial sector.
Artificial Intelligence Preparedness Index (APII)	The <b>International Monetary Fund (IMF)</b> released the APII Dashboard, ranking <b>Singapore 1st and India 72nd</b> .
	The <b>APII Dashboard tracks AI readiness in 174 economies</b> based on digital infrastructure, human capital and labour market policies, innovation and economic integration, and regulation and ethics.
	Countries are categorized as <b>Advanced Economy (AE), Emerging Market Economy (EM), and Low-Income Country (LIC)</b> .
Annual World Drug Report (2024)	The <b>United Nations Office on Drugs and Crime (UNODC)</b> released a report on World Drug Day, observed annually on June 26th since 1987 to promote action against drug abuse and illicit trafficking.
	<b>Key highlights include</b> a rise in drug abuse, with 292 million users in 2022, and <b>cannabis</b> being the most abused drug, followed by opioids, amphetamines, cocaine, and ecstasy.
	<b>Regions most affected by drug-related criminal activity</b> include the Triple Frontier area (Argentina, Brazil, Paraguay) and the <b>Golden Triangle</b> (Laos, Myanmar, Thailand).
	<b>Cannabis</b> legalization has occurred in Canada, Uruguay, and 27 U.S. jurisdictions. The psychoactive effect of cannabis is primarily due to THC (delta9-tetrahydrocannabinol).
	Additionally, <b>illegal drug activities contribute to environmental issues like deforestation</b> , toxic waste dumping, and chemical contamination.
Migration and Development Brief 2024	The <b>World Bank</b> released a brief highlighting key trends in remittance and migration. Remittance flows to <b>low- and middle-income countries (LMICs)</b> reached <b>\$656 billion</b> , with India receiving the most at \$120 billion, followed by Mexico, China, the Philippines, and Pakistan.
	<b>Top migration destinations include the US, Germany, Saudi Arabia, Russia, and the UK</b> , with the largest number of emigrants from India ( <b>18.7 million</b> ), followed by Ukraine, China, Mexico, and Venezuela. The largest migration corridor is from Mexico to the US.

Reports	Description
<b>New World Soil Health Index</b>	<p>UNESCO announced the <b>New World Soil Health Index</b> at an international conference in Morocco <b>to standardize soil quality measurements</b> and identify degradation or improvement trends. Additionally, a pilot program for sustainable soil management will be launched in <b>ten Biosphere Reserves</b> to implement best practices globally.</p> <p><b>Soil degradation</b> is the decline in soil health, resulting in reduced capacity to provide essential ecosystem services.</p> <p>In India, <b>32% of land is degraded, and 25% faces desertification</b>, caused by deforestation, unsustainable agriculture, industrial pollution, and natural erosion.</p>
<b>Responsible AI for All (RAI) on Facial Recognition Technology (FRT)</b>	<p>By NITI Aayog</p> <p>This White paper examines <b>Facial Recognition Technology (FRT) under NITI Aayog's RAI principles</b> to establish a framework for its responsible and safe use in India.</p> <p>FRT <b>identifies or verifies individuals using AI algorithms</b> based on images or videos. It performs three main functions: <b>facial detection, facial extraction, and facial recognition</b>.</p> <p>Applications include security (surveillance, law enforcement) and non-security uses (contactless services, authentication).</p> <p><b>Recommendations</b> for responsible FRT use emphasize the need for robust data protection to ensure privacy and security. It is crucial to implement measures that ensure transparency and address AI biases to uphold accountability.</p>

## MAPPING

### INTERNATIONAL

Place	Why in News?
<b>1. MINAMI-TORISHIMA ISLAND (JAPAN)</b>	<p><b>Context:</b> Researchers discovered <b>230 million tons of minerals, including cobalt and nickel</b>, off a remote island 1,200 miles from Tokyo.</p> <p>This find could supply <b>Japan's EV battery needs for over a decade</b>. The seabed near <b>Minami-Torishima island contains 610,000 metric tons of cobalt and 740,000 metric tons of nickel</b>.</p> <p><b>Mining is set to begin in 2025</b>, with commercial extraction expected by 2026. The discovery is significant as global demand for these minerals is projected to rise sharply, though deep-sea mining poses technical and environmental challenges.</p> <p><b>About the Island:</b>  <b>Minami-Torishima Island, also known as Marcus Island</b>, is an isolated Japanese coral atoll in the northwestern Pacific Ocean, 1,950 km southeast of Tokyo. It is Japan's easternmost territory and the only one on the Pacific Plate. The island is shaped like an equilateral triangle and formed by a raised coral reef, with flat terrain and a maximum altitude of 9 meters.</p>



© 2018 The Sankei Shimbun / JAPAN FORWARD

## INDIAN

<i>Place</i>	<i>Why in News?</i>
<b>2. SHYOK RIVER (LADAKH)</b>	<p><b>Context:</b> Five soldiers, including a junior commissioned officer, died in Ladakh after their T-72 tank was swept away by the <b>Shyok River</b> during a training exercise near Saser Brangsa.</p> <p><b>About Shyok River:</b> <b>It is a tributary of the Indus River</b> and flows through northern Ladakh in Jammu and Kashmir, India, and into <b>Gilgit-Baltistan in Pakistan</b>. Originating from the Rimo Glacier, it flows southeast before turning northwest at the Pangong range and joining the Indus at Skardu. The river, fed by glacial meltwater, traverses high-altitude deserts and mountain ranges, spanning approximately 550 km. Its main tributary is the <b>Nubra River</b>.</p>