



# INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION

## SEA GROYNES

Coastal residents in Ernakulam district, Kerala, protested against sea incursion and incomplete erection of Sea Groynes, by blocking the Fort Kochi-Alappuzha State Highway near Kannamaly.

8 JULY - 13 JULY 2024

# WEEKLY CURRENT AFFAIRS

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

# INSIDE

## GENERAL STUDIES – 1

Topics: History of the world will include events from 18th century such as industrial revolution, world wars, redrawing of national boundaries, colonization, decolonization, political philosophies like communism, capitalism, socialism etc.- their forms and effect on the society.

1. American Declaration of Independence 4

Topics: Salient features of Indian Society, Diversity of India.

2. Impact of War on Children 5
3. Supreme Court Targets Media Stereotypes of Differently-abled 7

## 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. Centre Amends Rules to Broaden the Administrative Role of J&K L-G 10

Topics: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

2. Eklavya Schools: Overcoming Hiring Barriers 11
3. Release of SDG India Index 2023-24: NITI Aayog 12

Topics: Important aspects of governance, transparency and accountability, e-governance applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

4. Rajasthan Pioneers 10-Year Road Safety Plan 14

Topics: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

5. India-Russia Ties: Highlights from the 22nd Annual Summit 16

## GENERAL STUDIES – 3

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

1. How to Read India's Balance of Payments 19
2. Skill Up: Tackling India's Unemployment 21

Topics: Conservation related issues, environmental pollution and degradation, environmental impact assessment.

3. UNESCO Unveils 11 New Biosphere Reserves 23

Topics: Disaster and management.

4. Rising Flames: The Global Surge in Wildfires 25
5. Assam Floods: Why Ganga-Brahmaputra region is flood Prone? 27

Topics: Security challenges and their management in border areas; linkages of organized crime with terrorism.

6. India's Indigenous Defence Production 28

## GENERAL STUDIES – 4

1. Alice Munro: Ethical Issues 31
2. Examples of Ethical Behavior 32

## CONTENT FOR MAINS ENRICHMENT

1. Thazhakara Launches People's Biodiversity Register 33
2. Barcelona Residents protesting against Tourists 33

## FACTS FOR PRELIMS

### GS-1

#### Art & Culture

1. Project PARI 34
2. Cave painting 34
3. Classical language status 34
4. Order of Saint Andrew the Apostle 34
5. Ahom 'Moidam' 35

#### Geography

6. Aphelion Point 35
7. Sea Groynes 35
8. Denisovans 35

### GS-2

#### Functioning of Parliament and State Legislatures

1. Expunction Powers 36
2. Anand Marriage Act 36

#### Governance

3. SEHER program 36
4. Digital Bharat Nidhi 37
5. Integrated tribal development programme 37
6. e-Office 37

#### International Relations

7. Kartarpur Corridor 37
8. International Maritime Organization (IMO) 38
9. Mutual Recognition Agreement (MRA) for organic products 38

### GS-3

#### Indian Economy

1. Credit-Deposit (CD) ratios 38
2. Zombie Start-ups 38

3. Vizhinjam International Seaport 39

#### Science & Technology

4. Indo-French Liver and Metabolic Disease Network (InFLiMeN) 39
5. 'Responsible quantum technologies' movement 39
6. Regenerative braking 39
7. Mitochondrial donation 40
8. MeDevIS platform 40
9. Hydrogen peroxide nebulisation 40
10. Drone tested at Ladakh's Umling La pass 41
11. Mineral nanoparticles with water 41
12. Time crystal 42
13. NASA's CHAPEA project 42

#### Environment & Ecology

14. Biodiversity Beyond National Jurisdiction (BBNJ) Agreement 42
15. Pearl spot fish 43

#### Defence

16. Camcopter S-100 43
17. Reports In News 43

## MAPPING

#### INDIAN

1. Koyna, Maharashtra 44
2. Siang River 45

## GENERAL STUDIES – 1

Topics: History of the world will include events from 18th century such as industrial revolution, world wars, redrawing of national boundaries, colonization, decolonization, political philosophies like communism, capitalism, socialism etc.- their forms and effect on the society.

### 1. AMERICAN DECLARATION OF INDEPENDENCE

**Context:**

**July 4 marked the 248th Independence Day of the United States.** It was the day when the Declaration of Independence, the document which marked the **foundation of the US as a union of states liberated from Britain, was signed.**

**What was the American War of Independence?**

- Also **known as the American Revolutionary War (1775-1783), was a conflict between the thirteen American colonies** and Great Britain.
- The colonies sought to gain independence from British rule due to various grievances, including taxation without representation and a desire for self-governance.
- The war ended with the **Treaty of Paris in 1783**, where Britain recognized the sovereignty of the United States, leading to the establishment of an independent nation.

**Circumstances leading up to the American Independence:**

Circumstance	Description
<b>Seven Years War</b>	<b>The end of the Seven Years’ War in 1763 and the transfer of Canada from France to England</b> removed the fear of French attack from the minds of the Americans. They could now fully focus on countering the British adversities.
<b>Granville Measures</b>	British PM Granville passed a series of Acts affecting American colonies’ interests, such as <b>The Sugar Act of 1764, The Stamp Act of 1765, and The Quartering Act.</b> These measures were opposed by colonists who raised the slogan <b>“No Taxation without Representation.”</b>
<b>Townshend Laws</b>	In 1767, British minister Townshend imposed new taxes on glass, paper, tea, paints, etc. Americans protested these measures and boycotted British goods. The protest led to the <b>Boston Massacre, where five Americans were killed by British soldiers.</b>
<b>Boston Tea Party</b>	In 1773, the Tea Act imposed a tax on tea imports, sparking American protests. A group of Americans, <b>dressed as Red Indians, boarded ships and threw tea bundles into the sea at Boston Harbor,</b> an event known as the Boston Tea Party.
<b>Philadelphia Congress</b>	In 1774 and 1775, representatives of American colonies met in Philadelphia. They appealed to the <b>British King to remove trade restrictions and not impose taxes without consent.</b> Their appeal and the Olive Branch Petition were rejected.
<b>Declaration of Independence</b>	A pamphlet titled <b>“Common Sense”</b> advocated against hereditary monarchy and for democratic government, inspiring Americans to fight. On July 4, 1776, the <b>American Declaration of Independence was adopted, emphasizing “Life, Liberty, and Pursuit of Happiness.”</b>

**Role of Enlightenment thinkers in the American Revolution:**

1. **John Locke:** Advocated for natural rights (life, liberty, property), social contract theory, and government by consent of the governed, influencing the Declaration of Independence and the U.S. Constitution.
2. **Thomas Paine:** Wrote **“Common Sense,”** promoting republican government, equality, and the urgency of American independence.
3. **Benjamin Franklin:** Facilitated the exchange of Enlightenment ideas between America and Europe, contributed to the Declaration of Independence, and negotiated the Treaty of Paris.
4. **Montesquieu:** Advocated for separation of powers and influenced the structure of American government

through ideas in "[The Spirit of Laws.](#)"

### Consequences of the American Revolution:

#### Political Changes:

1. **Birth of the United States of America**, was acknowledged under the Treaty of Paris (1783).
2. **Replacement of the Articles of Confederation** with the U.S. Constitution (1787), establishing a federal republic with separation of powers.
3. **Introduction of a written constitution**, separation of church and state, and a system of checks and balances.

#### Geopolitical Changes:

1. **France regained colonies**; Spain recovered Minorca and Florida.
2. **England lost American colonies** and faced increased national debt.
3. Financial strain contributed to the **French monarchy's downfall**, inspiring future revolutions.

#### Significance:

1. **Inspired European revolutions** and promoted Enlightenment ideals.
2. Demonstrated the feasibility of **overthrowing oppressive regimes**.
3. Promoted ideas of **individual liberty, equality, and democracy globally**.
4. **Influenced future democratic movements** and constitutional developments worldwide.

### How the American Revolution impact India?

The American Revolution indirectly impacted India by **inspiring ideas of liberty, democracy, and self-determination**. It set a precedent for challenging colonial rule and sparked discussions on rights and independence among Indian intellectuals. The principles of freedom and resistance against oppression influenced **India's later struggle for independence from British rule in the 20th century**.

#### Insta Links:

- [American Revolution](#)

[Topics: Salient features of Indian Society, Diversity of India.](#)

## 2. IMPACT OF WAR ON CHILDREN

#### Context:

A Russian missile strike severely **damaged Ohmatdyt Children's Hospital in Kyiv**, killing two people.

#### Ethical Issues related with War:

Incidents like these **spark debates on the ethics of war**, questioning whether war is ever justified. Tolstoy viewed war as inherently criminal, while the **'Just War' theory**, supported by texts like the **Mahabharata and thinkers like Aristotle, Cicero, and Augustine**, suggests war can be legitimate under certain conditions. Just War Theory includes:

- **Jus ad bellum**: Just cause, legitimate authority, last resort.
- **Jus in bello**: Ethical conduct during war, protecting civilians, fair treatment of prisoners.
- **Jus post bellum**: Justice after the war.

#### Ethical Issues Associated with War:

1. Loss of human life, including civilians, women, and children.
2. Degradation of moral equality by dehumanizing the enemy and mistreating prisoners of war.
3. War crimes and atrocities, including genocide and summary executions.
4. Fear of arms races and the use of weapons of mass destruction.

#### Other recent examples of conflict affecting children:

- **Gazan Crisis**: Majority of children killed during conflict.
- **Syrian Civil War**: Humanitarian crisis affecting millions of children due to displacement, violence, and lack of education and healthcare.
- **Yemen Conflict**: Impacts children through malnutrition, lack of medical care, and violence exposure.

- **Rohingya Crisis:** Persecution and displacement of Rohingya population from Myanmar to Bangladesh.
- **COVID-19 Pandemic:** Lockdowns, school closures, and economic challenges disproportionately impact vulnerable children.
- **Natural Disasters:** Displacement, trauma, and disrupted access to basic necessities.
- **Armed Conflict in Afghanistan:** Displacement, education disruption, and exposure of children to violence.
- **Civil Wars in Africa:** Displacement, food insecurity, and disrupted access to education and healthcare.

**Impact of conflict on children:**

Aspect	Description
Cycle of Revenge	Children experiencing conflict may harbour resentments and seek retribution.
Resistance to Social Norms	Adolescents exposed to violence may exhibit rebellious behaviour against societal expectations.
Psychological Trauma	Survivors of conflict zones may develop anxiety, depression, and post-traumatic stress disorder (PTSD).
Impact on Education	Children in war zones may face disruptions in schooling, impacting academic performance and future prospects.
Long-term Consequences	Adults who experience violence in childhood may perpetuate violence or struggle with mental health challenges.
Recruitment and Use	Armed groups exploit children by coercing them into combat or support roles, compromising their well-being.
Sexual Violence and Exploitation	Conflict increases the risk of sexual violence, subjecting children to rape, trafficking, and other forms of exploitation.
	Boys continued to be more affected by recruitment and use, killing and maiming, and abduction, while girls were disproportionately affected by conflict-related sexual violence.

**India’s Success in Protecting Children’s Rights:**

- **For the first time since 2010, India has been removed from the 2023 United Nations Report on Children and Armed Conflict.**
- This decision reflects the measures taken by the Indian government to safeguard children, particularly addressing previous accusations of recruiting and using boys **in armed groups in Jammu and Kashmir (J&K)**.

**Initiatives to Protect Children’s Rights**

Initiatives	Details
Infrastructure Establishment	Establishment of Child Welfare Committees, Juvenile Justice Boards, and Child Care Homes under the Juvenile Justice Act, 2015 in J&K.
UN-Recommended Measures	Implementation of UN-recommended measures, including training programs for security forces on protecting children. Suspension of pellet guns use in J&K
Enforcement of Acts	Active enforcement of the Juvenile Justice Act, 2015, and the Protection of Children from Sexual Offenses (POCSO) Act, 2012.
Global Conventions Compliance	Compliance with global conventions such as the UN Convention on the Rights of the Child (CRC), additional protocols to the Geneva Conventions, and the Optional Protocol on the involvement of children in armed conflict.
Rome Statute of the International Criminal Court (ICC)	Recognition of recruiting child soldiers as a war crime under the Rome Statute of the International Criminal Court (ICC). Recognition of the recruitment and use of child soldiers as one of six “grave violations” by the United Nations.
Indian Legal Framework	India’s status as a party to the CRC and accession to the Optional Protocol. Inclusion of most CRC rights in the Indian Constitution. IPC criminalizes the recruitment or use of persons under 18 in hostilities.

### About UNCRC:

- The UNCRC, an international agreement established in 1989, outlines 54 articles outlining children's rights and governmental responsibilities.
- The UN-ratified agreement, except for the United States, guarantees children's fundamental rights such as **life, education, protection from abuse, the right to be heard, and parental relationships**.
- **The core principles** include **non-discrimination, the right to life, survival, and development**, the best interests of the child, and respect for the child's views

### Way Forward:

- Trauma-Informed Responses to Conflict
  - Emphasize understanding past experiences' impact on children.
  - Encourage comprehensive approach to trauma in conflicting children.
  - Utilize civil society organizations and Child groups.
- Kailash Satyarthi, a Nobel Peace Prize winner, condemns harm in conflict, highlighting Israel-Palestine conflict's profound impact on children.

### WHO's INSPIRE strategy against violence on children involves seven key strategies:

Strategy	Description
Implementation and enforcement of laws	Involves enacting and enforcing laws, such as banning violent discipline and restricting access to alcohol and firearms.
Norms and values change	Aims to change societal norms and values, particularly those that condone behaviours like the sexual abuse of girls or aggressive behaviour among boys.
Safe environments	Identifies and addresses specific local causes of violence, often employing strategies like problem-oriented policing.
Parental and caregiver support	Provides training to young, first-time parents to enhance their ability to care for and nurture children effectively.
Income and economic strengthening	Includes initiatives like microfinance and gender equity training to improve economic stability, addressing underlying factors contributing to violence.
Response services provision	Ensures that children exposed to violence have access to effective emergency care and receive appropriate psychosocial support.
Education and life skills	Focuses on promoting school attendance and providing life and social skills training for children, contributing to their overall well-being and resilience.

### Conclusion:

**Montessori, in "The Secret of Childhood" (1936)**, emphasized the importance of peaceful childhood circumstances, asserting that major individual and social issues originate from early years and therefore need concerted efforts to shield children from the effects of conflicts.

### Insta Links:

- [Children impacted by armed conflict](#)

## 3. SUPREME COURT TARGETS MEDIA STEREOTYPES OF DIFFERENTLY-ABLED

### Context:

The Supreme Court of India, led by Chief Justice D.Y. Chandrachud, has issued a landmark judgment **addressing the portrayal of differently-abled individuals in visual media and films**.

### What did the SC say?

The Supreme Court observed that stereotyping differently-abled persons perpetuates discrimination and inequality. The judgment was in response to activist **Nipun Malhotra's petition** challenging the **portrayal of differently-abled individuals in the film 'Aankh Micholi'**.

### Key features of Guidelines are:

1. **Guidelines for Creators:** Avoid insensitive language; Seek accurate representation of medical conditions;
2. **CBFC and Expert Opinion:** The [Central Board of Film Certification \(CBFC\)](#) must seek the **opinion of experts** on disability before certifying films for screening.
3. **Inclusivity Principle:** Follow the '**Nothing about us, without us**' principle to ensure inclusivity. Involve differently-abled individuals in statutory committees for decision-making under the Cinematograph Rules.
4. **Diverse Depictions:** Visual media should depict the diverse realities of persons with disabilities, showcasing their challenges, successes, talents, and contributions to society.
5. **Accurate Representation:** Films and visual media content must aim for an accurate representation of medical conditions as much as possible.

### What is Stereotyping?

Stereotyping is a specific belief or assumption (thoughts) about individuals based solely on their membership in a group, regardless of their individual characteristics.

**Example:** A TV show depicting a character with a physical disability as completely dependent on others, ignoring their potential for independence and self-sufficiency.

### Reasons Why Differently-Abled Individuals Are Stereotyped:

1. **Lack of Exposure:** Limited interaction and exposure to differently-abled individuals lead to misconceptions.
2. **Media Portrayals:** Negative or inaccurate representations in films and visual media.
3. **Cultural Myths:** Historical and cultural myths that associate disability with weakness or abnormality.
4. **Educational Gaps:** Insufficient education and awareness about disabilities and the capabilities of differently-abled people.
5. **Social Prejudices:** Deep-rooted societal prejudices and biases.
6. **Medical Model of Disability:** Focus on disability as a personal tragedy or defect, rather than recognizing social barriers.
7. **Language:** Use of derogatory and insensitive language.
8. **Lack of Advocacy:** Inadequate representation and advocacy for differently-abled individuals in decision-making processes.

### Who are Persons with Disabilities?

**Persons with disabilities include those with long-term physical, mental, intellectual, or sensory impairments** that, in interaction with barriers, hinder their full participation in society (UN CRPD). The [Rights of Persons with Disabilities Act, 2016](#), aligns with this definition and specifies a "**Person with Benchmark Disability**" as having at **least 40% of a specified disability**. The 2016 Act expanded recognized disabilities from 7 to 21, with provisions for the Union Government to add more.

## Types of Disabilities

### Physical Disability

- **Locomotor Disability**
  - (i) Leprosy cured person; (ii) Cerebral Palsy; (iii) Dwarfism; (iv) Muscular Dystrophy; (v) Acid Attack Victims.
- **Visual Impairment**
  - (i) Blindness; (ii) Low Vision.
- **Hearing Impairment**
  - (i) Deaf; (ii) Hard of Hearing.
- **Speech and Language Disability.**

### Intellectual Disability

- (i) Specific Learning Disabilities; (ii) Autism Spectrum Disorder.

### Mental Illness

#### Chronic Neurological Conditions

- (i) Multiple Sclerosis; (ii) Parkinson's Disease

#### Blood Disorders

- (i) Haemophilia; (ii) Thalassemia; (iii) Sickle Cell Disease.

#### Multiple Disabilities including Deaf-Blindness

### Status of Persons with Disabilities in India (2011 Census)

1. **2.21%** of the total population
2. 56% male, 44% female
3. 69% reside in rural areas

### Issues Related to Persons with Disability in India

- **Discrimination:** Stigma and lack of understanding hinder full participation, especially for women and girls with disabilities.
- **Health:** Many disabilities are preventable but lack awareness and accessible medical facilities.
- **Education and Employment:** Limited special schools, access, trained teachers, and materials.
- **Political Participation:** Exclusion from political processes, lack of data on disabled populations, inaccessibility of voting processes, and perceived low electorate size.
- **Lax Implementation:** Many buildings remain inaccessible, and quotas for the disabled in government jobs and education remain unfilled.

### Provisions for Persons with Disabilities:

Category	Provision
Constitutional Provisions	<b>Preamble:</b> Secures social justice and equality of opportunity.
	<b>Fundamental Rights:</b> Ensures dignity and fundamental rights to persons with disabilities.
	<b>Directive Principles:</b> Articles 41 and 46 support the right to work, education, public assistance, and the promotion of weaker sections' interests.
	<b>State Subject:</b> Relief of the Disabled (Entry 9, List II) under the Seventh Schedule.
	<b>Eleventh and Twelfth Schedule:</b> Welfare of the Disabled and mentally retarded (Items 26 and 09).
Legal Provisions	<b>Mental Health Act, 2017:</b> Provides mental healthcare and protects the rights of persons with mental illness.
	<b>RPwD Act, 2016:</b> Replaces the 1995 Act, increases reservations for disabled persons in jobs and education, and ensures accessibility in public buildings.
	<b>Rehabilitation Council of India Act, 1992:</b> Regulates services for persons with disabilities and maintains a register of qualified professionals.
	<b>National Trust Act, 1999:</b> Provides welfare for persons with Autism, Cerebral Palsy, Mental Retardation, and Multiple Disabilities.
Welfare Programmes	<b>Accessible India Campaign:</b> This aims to create an accessible environment for PwDs, focusing on the built environment, transportation, and ICT ecosystem.
	<b>Deendayal Disabled Rehabilitation Scheme (DDRS):</b> Provides financial assistance to NGOs for rehabilitation projects for persons with disabilities.
	<b>Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP):</b> Assists in procuring aids and appliances for disabled persons to enhance their rehabilitation and economic potential.
	<b>Indian Sign Language Research and Training Centre:</b> Promotes sign language and develops human resources in the field.
	<b>National Institute of Mental Health Rehabilitation:</b> Focuses on capacity building and community-based rehabilitation for mainstreaming persons with mental illness.
National Policies	<b>National Policy for Persons with Disabilities, 2006:</b> Framework for disability rights.
	<b>Draft Guidelines:</b> Accessibility standards for public exhibition of films for persons with hearing and visual impairments.
Global	Incheon Strategy to <b>"Make the Right Real"</b> for Persons with Disabilities in Asia and the Pacific.
	United Nations Convention on Rights of Persons with Disability
	<b>UN Principles for People with Disabilities</b>
	<b>International Day of Persons with Disabilities</b>

### Strategies for Accommodating and Including Persons with Disabilities:

1. **Accommodation and Inclusion:**
  - a. **Employment:** Ensure equal job opportunities.
  - b. **Social and Political Participation:** Encourage active involvement in social and political decisions.
2. **Sensitization:**
  - a. **Changing Attitudes:** Adopt the term “**Divyangjan**” to highlight the potential of persons with disabilities.
  - b. **Education Campaigns:** Increase public awareness about the challenges faced by PwDs; Inclusive schools with transition programs to mainstream education.
3. **Preventive Measures:**
  - a. **Newborn Screening:** Expand the CNS program under **Rashtriya Bal Swasthya Karyakram** for early detection of disabilities. Under this, a **comprehensive clinical examination** is to be performed on all babies, usually within the first **48 hours of life**.
  - b. **Healthcare Access:** Improve care for pregnant mothers and medical facilities in rural areas with union government support.
4. **Public Policy Interventions:**
  - a. **Budget Allocation:** Increase funding for disabled welfare, similar to gender budgeting.
  - b. **Monitoring:** Implement systems for monitoring and accountability of public funds.
5. **Community-Based Rehabilitation (CBR):** Ensure people with disabilities can maximize their abilities, access services, and integrate fully into communities.
6. **Public Awareness:**
  - a. **Campaigns:** Run social campaigns to change attitudes towards PwDs.
  - b. **Media Representation:** Promote positive portrayals in media (e.g., “Taare Zameen Par” and “Barfi”)

#### Insta Links:

- [Persons with Disabilities](#)

#### Prelims Link:

**Q. India is home to lakhs of persons with disabilities. What are the benefits available to them under the law? (USPC 2011)**

1. Free schooling till the age of 18 years in government run schools.
2. Preferential allotment of land for setting up business.
3. Ramps in public buildings.

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

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

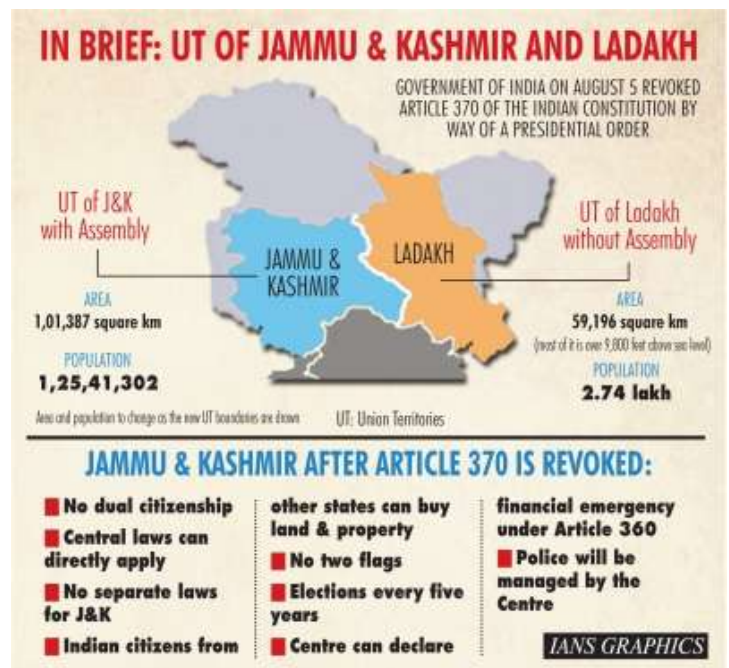
## GENERAL STUDIES – 2

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. CENTRE AMENDS RULES TO BROADEN THE ADMINISTRATIVE ROLE OF J&K L-G

#### Context:

The Ministry of Home Affairs (MHA) has amended rules to expand the administrative role of the **Lieutenant Governor (L-G)** of Jammu and Kashmir (J&K), aiming to streamline governance and enhance efficiency.



#### Key Amendments recently:

1. **Enhanced Administrative Powers:** The L-G now has greater authority in administrative matters, including appointments, transfers, and postings of senior officials.
2. **Increased Control Over Departments:** The L-G will have more direct oversight over key departments such as Public Works, Education, and Health.
3. **Financial Decisions:** The L-G has been granted expanded powers in financial matters, including sanctioning of funds and approval of development projects.

**Implications:**

- **Centralisation of Power:** The amendments centralise more administrative power with the L-G, **undermining federal principles and reducing the role of the elected government** that will be formed through upcoming elections.
- **Efficiency in Governance:** Proponents argue that these changes will lead to **more efficient and streamlined governance**, improving service delivery and development outcomes.

**Conclusion:**

The amendments reflect the Centre's intent to ensure more direct control over J&K's administration, which is seen as a measure to enhance governance and development. However, **the balance between centralised authority and democratic governance remains a critical area of concern.**

**Insta Link:**

[Rules for administration in the Union Territory of Jammu and Kashmir](#)

**Prelim link:**

Q. Which one of the following suggested that the Governor should be an eminent person from outside the State and should be a detached figure without intense political links or should not have taken part in politics in the recent past? (UPSC-CSE 2019)

- First Administrative Reforms Commission (1966)
- Rajamannar Committee (1969)
- Sarkaria Commission (1983)
- National Commission to Review the Working of the Constitution (2000)

**Answer: C**

**Mains Link:**

[With the new rules, the CM of J&K has been reduced to an ornamental figure. Discuss.](#)

[Topics: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.](#)

## 2. EKLAVYA SCHOOLS: OVERCOMING HIRING BARRIERS

**Context:**

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

**Background and features:**

1. **EMRS started in** the year 1997-98 to impart quality education to ST children in remote areas.
2. **Co-educational Residential Schools:** EMRS

cater to students from Class VI to XII. Eklavya schools aim to match the standards of Navodaya Vidyalayas.

3. **Capacity:** Each school can accommodate 480 students. An equal number of seats for boys and girls.
4. **Admission of Non-ST Students:** Non-ST students can be admitted, up to 10% of the total seats.
5. **CBSE Curriculum:** The schools follow the CBSE curriculum. Special facilities are provided to preserve local art and culture.
6. **The National Education Society for Tribal Students (NESTS)** has been established to set up and manage EMRS across the country.
  - NESTS is an autonomous organization under the **Ministry of Tribal Affairs.**

**What's the issue now?**

1. Compared to the 11,340 teaching strength that NESTS recommends, as of July 2022, all operational EMRS had a teaching strength of slightly under 4,000.
2. Hence in the **2023 Budget Session** of Parliament, the Finance Minister announced that the staffing responsibility shifted to the National Education Society for Tribal Students (NESTS).
  - It was supposed to staffing 38,000 positions in over 400 Eklavya schools across the country.
3. The recent **centralization of recruitment** also **introduced Hindi competency** as a mandatory requirement for the selection of teachers.
  - Earlier states used to have **varying criteria** and applied reservation quotas as per their State legislation.

**Tribal Community Challenges and Education Issues**

**Diverse Languages and Cultures:** Tribal communities have unique customs, traditions, and lifestyles.

- **Centre guideline makes Hindi compulsory in schools, posing psychological challenges.**
- **Financial Difficulties:** Tribal communities often live in poverty without monetary resources.
- **Reluctance to Learn:** Tribal people are disconnected from modern education systems.
- **Lack of Proper Guidance:** Tribal children often lack formal education guidance.
- **Issue with NTA:** Recruitment process for 2023 EMRS Staff Selection Examination is marred by corruption and paper leaks.

**Way ahead:**

1. **Decentralised recruitment:** Hiring local teachers and teachers who are familiar with tribal culture helps in effective education.
2. **Prioritisation of vernacular education:** Emphasis and education in the local language is much more effective compared to the imposition of Hindi.
3. **Incentivise teachers for relocation:** To counter

the hesitancy of north Indian teachers to relocate to south India, the government could provide incentives to nudge them.

4. **Interlinking teacher:** Since Navodaya Vidyalaya is on par with EMRS, the government can interlink two organization teachers to provide effective education.

**Conclusion:**

**Accommodation and empowerment of tribal communities** should be prioritized with local traditions and languages rather than adopting a one-size-fits-all approach. The government **should reconsider its centralized recruitment** policy for EMRS schools to better align with these needs.

**Insta Link:** [Insights on India](#)

**Prelims link:**

1. Consider the following statement regarding Eklavya Model Residential Schools:
  1. It was started in the year 1997-98 to impart quality education to SC and ST children.
  2. Non-ST students can be admitted, to up to 10% of the total seats.

Choose the correct statement:

  - A. 1 only
  - B. 2 only
  - C. Both 1 and 2
  - D. Neither 1 nor 2

Answer: B

2. Eklavya Model Residential Schools is the initiative of which of the following ministry?
  - A. Ministry of Education
  - B. Ministry of Tribal Affairs
  - C. Ministry of Rural Development
  - D. PMO Office

Answer: B

### 3. RELEASE OF SDG INDIA INDEX 2023-24: NITI AAYOG

**Context:**

The recently released SDG India Index 2023-24 demonstrates significant advancements in multiple areas, despite global challenges.

**What is the SDG India index?**

1. **First launched in December 2018**, the index has become the primary tool for monitoring progress on the SDGs in India.
2. It has also **fostered competition among the states and UTs** by ranking them on the global

goals.

3. The index is developed in **collaboration with the United Nations in India**.
4. It tracks the progress of all states and UTs on **113 indicators aligned with the National Indicator Framework (NIF)** of the Ministry of Statistics and Programme Implementation.

**How are states and UTs ranked?**

1. The SDG India Index scores **range between 0-100**, higher the score of a State/UT, the greater the distance to target achieved.
2. **States and UTs are classified into four categories** based on Index score:
  - a. Aspirant: 0-49.
  - b. Performer: 50-64.
  - c. Front-runner: 65-99.
  - d. Achiever: 100.

Currently, there are **no states in the aspirant and achiever category**.

**Latest finding of the report:**

1. India's **composite SDG score has improved from 57 in 2018 to 71 in 2023-24**, reflecting substantial strides towards achieving the SDGs.
2. All states and Union Territories (UTs) have shown improvement, with **scores ranging from 57 to 79**.
3. **32 States and UTs in the front-runner category** with 10 new entrants.
4. Between 2018 and 2023-24, the **fastest moving States are Uttar Pradesh** (increase in score by 25), **followed by J&K (21), and Uttarakhand (19)**.
5. **New front-runners include** states like **Arunachal Pradesh, Assam, Madhya Pradesh, and West Bengal**.



**Key SDG achievements:**

1. **Goal 1: No Poverty**
  - a. The score increased from **60 in 2020-21 to 72 in 2023-24**.
  - b. Significant **reduction in multidimensional poverty**, dropping **from 24.8% in 2015-16 to an estimated 11.28% in**

**2022-23.**

**2. Goal 3: Good Health and Well-being**

- The score improved from **52 in 2018 to 77 in 2023-24.**
- Key health indicators, such as **maternal mortality rate (97) and under-five mortality rate (32)**, have shown significant improvements.
- High immunization coverage (93.2%) and institutional deliveries (97.8%)** have been crucial contributors.

**3. Goal 6: Clean Water and Sanitation**

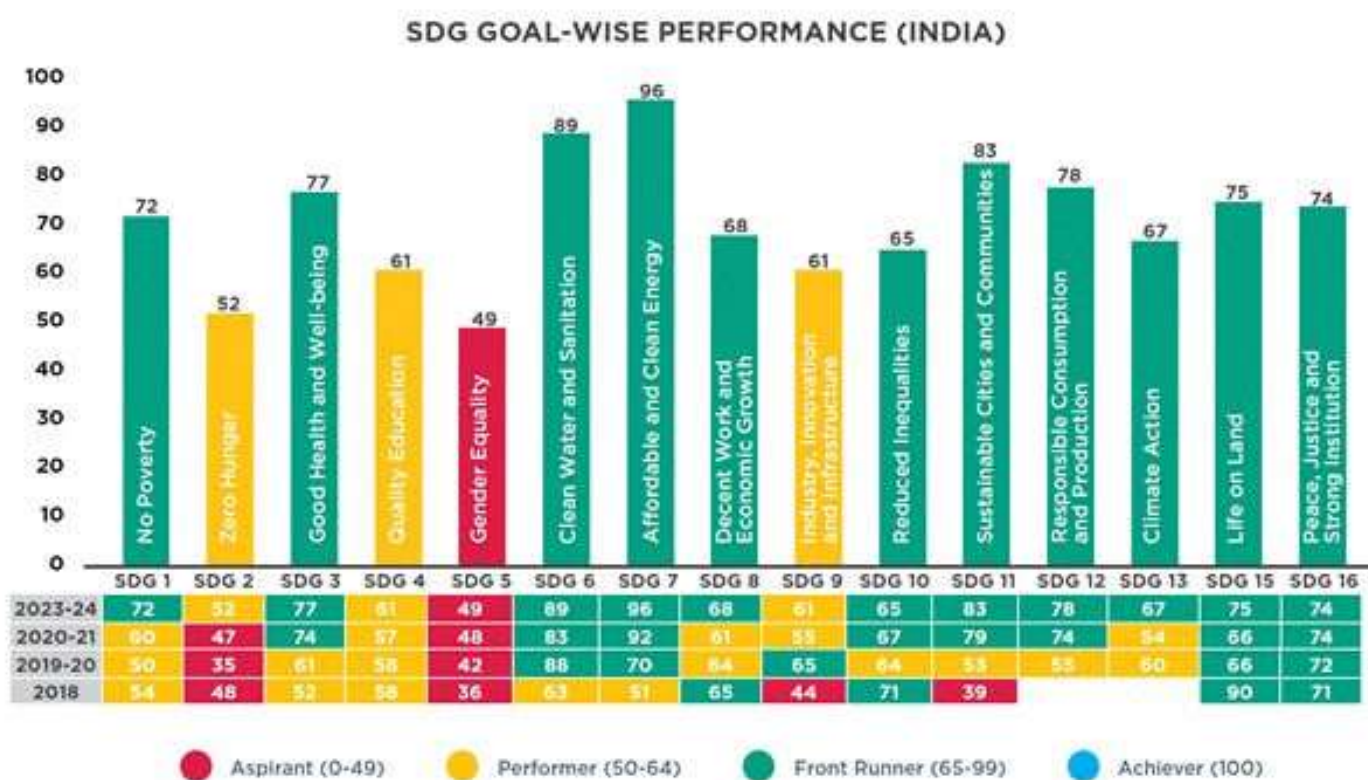
- Improvement in **score from 63 in 2018 to 89 in 2023-24.**
- Achievement of **Open Defecation Free (ODF) status in all districts** and high access to **improved drinking water sources.**

**4. Goal 7: Affordable and Clean Energy**

- The score **increased dramatically from 51 in 2018 to 96 in 2023-24.**
- Universal access to electricity** and significant **coverage of clean cooking fuels (96% households).**

**5. Goal 13: Climate Action**

- The highest increase in score, **from 54 in 2020-21 to 67 in 2023-24.**
- Increase in **renewable energy capacity** and compliance with environmental standards.



**Conclusion:**

India's success in adopting, implementing, and monitoring SDGs stands as a testament to the principle of cooperative federalism, envisioned by the government of India and promoted by NITI Aayog.

The index represents the articulation of the comprehensive nature of the Global Goals under the 2030 Agenda while being attuned to the national priorities.

**Insta Links:**

SDGs vs MDGs- similarities, differences and time period.

[SDGs National Indicator Framework \(NIF\) Progress Report 2023](#)

[UN Sustainable development goals](#)

[What is the SDG India Index?](#)

**Prelims link**

Q. Consider the following statements: **(UPSC CSE 2016)**

1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.

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: (b)

**Mains Links:**

[Critically analyse India's efforts towards achieving the Sustainable Development Goals \(SDGs\) by 2030. What course corrections are required to meet the targets?](#)

[Topics: Important aspects of governance, transparency and accountability, e-governance applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.](#)

## 4. RAJASTHAN PIONEERS 10-YEAR ROAD SAFETY PLAN

**Context:**

**Rajasthan will become the first state in India** to adopt a 10-year road safety action plan aimed at reducing road accidents by 50% by 2030.

**Measures included in the Rajasthan government's 10-Year Road Safety Action Plan:**

1. **Integrated Road Accident Database (iRAD): Technology Use:** Implementation of the iRAD application for online data entry of road accidents.
2. **Public Awareness and Behavioral Changes:** Campaigns to raise awareness and bring about behavioural changes regarding road safety rules and provisions.
3. **Specific Safety Measures:**
  - **Speed Limits:** Implementation and enforcement.
  - **Safe Distance:** Promoting safe driving distances.
  - **Traffic Signals:** Improving adherence to traffic signal regulations.
  - **Road Barriers:** Installing and maintaining barriers for enhanced safety.
  - **Pedestrian Safety:** Ensuring safety measures for pedestrians.
  - **Seatbelt and Helmet Use:** Enforcing the use of seatbelts and helmets.
  - **Vehicle Insurance:** Ensuring all vehicles have valid insurance.
4. **World Bank Assistance:** Utilizing the World Bank's assistance to incorporate international best practices in the preparation of the action plan and road safety policy.
5. **Coordination Among Stakeholders:** Enhanced collaboration among various departments like Transport, Public Works, Police, Medical & Health, and Forest departments for accurate data reporting and successful implementation.
6. **Workshops and Training:** Workshop organized by the State Road Safety Institute aimed at training police personnel on the Integrated Road Accident Database (iRAD) application for effective data entry and analysis of road accidents.

**Road Accidents in India:**

- WHO estimates 300,000 road-related deaths annually, affecting 5%-7% of GDP.
- Tamil Nadu has the highest reported cases.
- Speeding causes over half of deaths, while dangerous driving causes over 42,000.
- India leads in total deaths due to road accidents, followed by China and the US.

### Primary Reasons Behind Road Accidents in India:

Reasons	Description
Over speeding	According to the Road Accidents in India-2022 report, over-speeding accounted for over 72% of all accidents and two-thirds of deaths and injuries in India.
Drunk Driving	Drunk driving accounted for about 2% of road accidents in India in 2022.
Distracted Driving	Using mobile phones, eating, or engaging in activities while driving diverts attention.
Road Design	Potholes, poorly marked lanes, inadequate road signs, insufficient lighting, and lack of pedestrian facilities contribute to accidents.
Weather Conditions	Dense fog, excessive rainfall, and strong winds make driving challenging.
Mechanical Failures	Vehicle breakdowns or malfunctions compromise safety. Faulty brakes, tyres, and other components contribute to accidents.
Non-Compliance with Traffic Rules	Lack of adherence to traffic rules significantly contributes to road accidents.
Non-Use of Seat Belts and Helmets	Nearly 83% of car occupants killed in accidents in 2021 were not wearing seatbelts.
Overloading of Vehicles	In 2020, overloaded trucks caused 10,000 deaths and 25,000 injuries on National Highways in India.
Low Awareness	According to a SaveLIFE study, over 37% believed wearing seat belts is not mandatory for rear-seat passengers, and only 27.7% were aware of the law.

### Sundar Committee Recommendations on Road Safety:

- Establish National Road Safety & Traffic Management Board.
- Establish State Road Safety & Traffic Management Boards.
- Develop a National Road Safety Plan with specific targets and action plans.
- Improve post-accident care, trauma management, and national road accident database.
- Arrange 1% of diesel and petrol cess proceeds for Road Safety Fund.
- Address issues like decriminalization of road accidents, insurance, and dedicated highway police.
- Approve the National Road Safety Policy in 2010.

### Global Initiatives for Road Safety

- Brasilia Declaration on Road Safety (2015): Aims to halve global deaths and injuries from road traffic accidents by 2030.
- Decade of Action for Road Safety 2021-2030: UN initiative to prevent 50% of road traffic deaths and injuries by 2030.
- International Road Assessment Programme (iRAP): Charity dedicated to safer roads.

### International Best Practices for Sustainable Safety:

- Netherlands' Sustainable Safety vision: Focuses on preventing crashes and reducing severity through a safe road system.
- Japan's Sustainable Safety: Reduced road traffic deaths from 16,765 in 1990 to 3,215 in 2019.
- Measures: Strict enforcement of traffic laws, improved road infrastructure, seat belt and helmet use promotion, road safety education, and advanced safety technologies.

### India-Specific Initiatives:

- Motor Vehicles Amendment Act, 2019: Increases penalties for traffic violations, addresses defective vehicles, and juveniledriving.
- Cargo by Road Act, 2007: Regulates common carriers, limits their liability, and determines liability for goods loss or damage.
- Control of National Highways (Land and Traffic) Act, 2000: Provides control over land, right of way, and traffic movement.
- National Highways Authority of India Act, 1998: Establishes authority for National Highways development, maintenance, and management.

**Other Measures to address Road accidents:**

Measures	Details
Enforcement of Seatbelt and Helmet Use	A WHO report states that wearing a seatbelt reduces the risk of death by 45-50%, and for rear seat occupants by 25%.
Awareness Campaigns	E.g., the UN's #MakeASafetyStatement, to educate the public on road safety.
Speed Limit	Implement measures to reduce speeding, enhance traffic management systems, and enforce strict penalties for drunk driving.
Infrastructure Improvement	Enhance road infrastructure to ensure safe conditions, addressing issues contributing to accidents. Invest in ongoing government programs for rapid improvements.
Focus on Vulnerable Road Users	Prioritize the safety of vulnerable road users (pedestrians, cyclists, two-wheeler riders) through tailored infrastructure and awareness programs.
Emergency Care Services	Improve access to high-quality emergency care services and after-care for road crash victims.

**India's road network status:**

- **Road density:** 1,926 per 1,000 sq km in 2018-19, higher than many developed countries.
- **Surfaced/paved roads:** over 64% of the total road length, comparatively lower than in developed countries.
- **National Highways:** About 2% of total road length in 2019.
- **Other networks:** State Highways (about 3%), District Roads (about 10%), Rural Roads (about 7%)

**Insta Links**

[Editorial: Road Accidents](#)

**Mains Links**

**Road traffic accidents are a leading cause of death in India, and a major contributor to socio-economic losses, disability burden, and hospitalization. Discuss (15M)**

[Topics: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.](#)

## 5. INDIA-RUSSIA TIES: HIGHLIGHTS FROM THE 22ND ANNUAL SUMMIT

**Context:**

The Prime Minister of India co-chaired the 22<sup>nd</sup> Annual Summit with the President of Russia in Moscow.

**Key outcomes of the summit:**

- Trade and Economic Partnership:**
  - Set a bilateral trade target of **USD 100 billion by 2030**.
  - Promote bilateral settlements** using national currencies.
  - Expand energy cooperation** in nuclear, oil, and petrochemical sectors.
- Transport and Connectivity: Increase cargo turnover** via projects like the North-South International Transport Corridor and the Chennai-Vladivostok Eastern Maritime Corridor.
- UNSC Reform: Advocate for comprehensive reform** to make it more representative and effective.
- Counter-Terrorism:** Urge finalization and adoption of the Comprehensive Convention on International Terrorism.
- Implement UNGA and UNSC resolutions** on countering terrorism and violent extremism.
- Ukraine:** Support peaceful resolution through dialogue and diplomacy.
- Military Cooperation:** Encourage joint manufacturing in India for maintenance of Russian-origin arms and defence equipment under the Make-in-India program.

### Timeline of the Relationship:

1468	• Russian traveller Afanasy Nikitin began his journey to India
1947	• Diplomatic relations between India and Russia began even before India achieved independence
1965	• The Soviet Union served successfully as peace broker between India and Pakistan after an Indian-Pakistani border war
1971	• Watershed moment in relations between India and the Soviet Union with the signing of the <b>Treaty of Peace and Friendship</b>
1993	• After the dissolution of the Soviet Union, India and Russia entered into a new Treaty of Friendship and Cooperation
1994	• India and Russia entered into a bilateral Military-Technical Cooperation agreement
2000	• Since the signing of " <b>Declaration on the India-Russia Strategic Partnership</b> " in 2000, India-Russia ties have acquired a qualitatively new character with enhanced levels of cooperation
2010	• The Strategic Partnership was elevated to the level of a " <b>Special and Privileged Strategic Partnership</b> "

### Important Dimensions of [India-Russia Relations](#):

Dimensions	Details
Political Relations	The Annual Summit meeting between the PM of India and the Russian President is the highest institutionalized dialogue mechanism in the strategic partnership.
	The Strategic Partnership between the two countries was elevated to the level of "Special and Privileged Strategic Partnership" in 2010.
International/Multi-lateral Organisations and Connectivity Projects	BRICS, SCO, G20, <a href="#">International North-South Transport Corridor</a> (INSTC)
Defence and Security Cooperation	Evolution of India-Russia military-technical cooperation from a buyer-seller framework to joint research, development, and production of advanced defence technologies
	Russia is India's top military supplier accounting for 45% of total defense imports.
	Examples include the BrahMos Missile System, licensed production of SU-30 aircraft, and T-90 tanks. Deal for five S-400 batteries in 2018, and supply of MiG-29-K aircraft and Kamov-31
	Cooperation is guided by the Agreement on the Programme for Military-Technical Cooperation for 2021-2031
Trade and Economic Relations	Revised targets of increasing bilateral investment to US \$50 billion and bilateral trade to US \$30 billion by 2025.
	Bilateral investments surpassed the previous target of \$30 billion in 2018, leading to a revised target of \$50 billion by 2025.
Nuclear Energy	2014 Strategic Vision for strengthening cooperation in peaceful uses of atomic energy. Kudankulam Nuclear Power Plant (KKNPP) is being built in India with Russian cooperation.
Space Cooperation	Cooperation in the peaceful uses of outer space. MoU between ISRO and ROSCOSMOS on Joint Activities in the field of Human Spaceflight Programme ( <a href="#">Gaganyaan</a> ).

Science & Technology	Working Group on S&T under IRIGC-TEC.
	Institutional mechanisms: Integrated Long Term Programme (ILTP) and Basic Science Cooperation Programme.
	Initiatives: Traditional Knowledge Digital Library (TKDL), GIAN, and Russia-India Network (RIN) of Universities.
Cultural Cooperation	A strong tradition of Indian studies in Russia. Strong Russian interest in Indian dance, music, yoga, and Ayurveda.

### India-Russia Relationship Challenges

- **Defence issues:** Declining orders from Russia due to India’s diversification of defense imports.
- **Russia’s apprehensions over India’s foreign policy:** Criticism of Indo-Pacific and Quad, arguing it aims to contain China.
- **USA Factor:** Russia’s US relations diverge, influencing its reliance on China for support and power.
- **India’s signing of Foundational agreements with the US:** LEMOA, COMCASA, BECA.
- **Russia’s policy change:** Supplying China with weapon systems like the Sukhoi 35 and S-400 missile defense system.
- **China Factor:** Russia’s growing bond with China strains Indo-Russia relations.
- **Failure of Russia-India-China (RIC) forum:** No major diplomatic success due to India’s unresolved issues with China.
- **Growing China-Russian ties:** Russia’s joining of the Chinese One Belt One Road initiative.

### Way Forward for India-Russia Relations

- Rebuilding on strengths and common concerns.
- Identifying strengths and common concerns for joint projects in third countries. Ex - Rooppur nuclear plant project in Bangladesh.
- Deepening scientific and technological relations with Russia.
- Building a Russia-India-China (RIC) alliance using creative means.
- Balancing relationships between Russia, China, and the US, especially after the Freedom of Navigation operation (FONOP) in India’s Exclusive Economic Zone.

### Conclusion

On the whole, **Both India and Russia will have to learn to navigate** their relationship amidst challenges emerging not just from bilateral factors but also regional and global ones, as both countries seek to strengthen their position at a time of flux in the international order.

### Insta Links:

- [30 years of Indo-Russian Friendship Treaty 1993](#)
- [India-Russia relations](#)

### Mains Links:

**Q. What is the significance of Indo-US defence deals over Indo-Russian defence deals? Discuss with reference to stability in the Indo-Pacific region. (UPSC 2020)**

### Prelims Links:

Q. Recently, India signed a deal known as ‘Action Plan for Prioritization and Implementation of Cooperation Areas in the Nuclear Field’ with which of the following countries? (UPSC 2019)

- (a) Japan
- (b) Russia
- (c) The United Kingdom
- (d) The United States of America

**Ans: B**

## GENERAL STUDIES – 3

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

### 1. HOW TO READ INDIA'S BALANCE OF PAYMENTS

#### Context:

**India's current account registered a surplus in Q4 of 2023-24.** However, a surplus is not always good, nor is a deficit always bad.

#### About Balance of Payments (BoP):

Aspect	Description
<b>Definition</b>	Balance of Payments (BoP) is a <b>systematic statement of all economic transactions of a country with the rest of the world</b> during a specific period, usually one year. It shows if the country has a trade surplus (exports > imports) or a trade deficit (imports > exports).
<b>Purposes of Calculation of BoP</b>	<ul style="list-style-type: none"> <li>Reveals the financial and economic status of a country.</li> <li>Indicates whether the country's currency value is appreciating or depreciating.</li> <li>Helps the Government decide on fiscal and trade policies.</li> </ul>
<b>Components of BoP</b>	<p><b>Current Account:</b> Shows export and import of visible (merchandise/goods) and invisible (non-merchandise/services, transfers, income). A surplus occurred in Q4 of 2023 due to higher service exports and remittances, despite a trade deficit.</p> <p><b>Capital Account:</b> Shows capital expenditure and income, including ECB, FDI, and FPI. Q4 of 2023 showed a net surplus of \$25 billion</p> <p><b>Errors and Omissions:</b> Reflects the country's inability to record all international transactions accurately.</p> <p><b>Changes in Foreign Exchange Reserves:</b> Shows movements in foreign currency assets held by the RBI and in Special Drawing Rights (SDR) balances.</p>
<b>Overall BoP Status</b>	The BoP account <b>can be a surplus or a deficit</b> . A deficit can be bridged by drawing from the Foreign Exchange (Forex) Account. If forex reserves fall short, it leads to a BoP crisis.

#### Difference between BoP and BoT:

Topic	Balance of Payment (BoP)	Balance of Trade (BoT)
<b>Components</b>	The current account, capital account, financial account, errors and omissions	Trade in goods (merchandise trade)
<b>Coverage</b>	Trade in goods, services, income flows, and transfers (current and capital)	Trade in physical goods (raw materials, manufactured goods, commodities)
<b>Definition</b>	A comprehensive record of all economic transactions between residents of a country and the rest of the world over a specific period	Difference between the value of a country's exports and imports of goods (merchandise trade) over a specific period
<b>Focus</b>	A comprehensive view of a country's economic transactions with the rest of the world	Focuses solely on the trade of goods
<b>Inclusion of Services, Income Flows, and Transfers</b>	Yes	No

### Why Current account surplus is not always good, nor is a deficit always bad?

- A surplus is not always good because it can indicate **reduced domestic investment or economic activity**, as seen during economic downturns.
- Conversely, a deficit is not always bad because **it can signal strong domestic demand and investment in growth**, such as importing capital goods to boost future production capacity.
- In essence, the context and underlying reasons behind the surplus or deficit are crucial for determining their impact on the economy.

### Importance of Balance of Payments (BoP):

Importance	Description
<b>Economic Indicator</b>	It is a crucial indicator of a country’s economic relationships with the global market, revealing trade flows, financial transactions, and overall economic health.
<b>Policy Formulation</b>	Helps by offering insights into competitiveness, trade performance, capital flows, and monetary stability.
<b>Exchange Rate Management</b>	Central banks use the BoP to assess foreign currency supply and demand, manage exchange rate stability, and determine the need for currency interventions.
<b>External Debt Management</b>	Assists in monitoring the capacity to service foreign debt and assessing borrowing sustainability, promoting prudent debt management.
<b>Investment Decisions</b>	Investors analyse the BoP to gauge a country’s investment attractiveness, where a favourable BoP indicates stability and positive economic prospects.
<b>Policy Coordination</b>	Facilitates international policy coordination, helping to identify areas of cooperation, address global imbalances, and promote financial stability.

### Insta Links:

- [India’s balance of payments](#)

### Prelims Links:

**Q1. Which of the following has/have occurred in India after its liberalization of economic policies in 1991? (UPSC 2017)**

1. Share of agriculture in GDP increased enormously.
2. Share of India’s exports in world trade increased.
3. FDI inflows increased.
4. India’s foreign exchange reserves increased enormously.

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

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

**Ans: (b)**

**Q2. With reference to Balance of Payments, which of the following constitutes/constitute the Current Account? (UPSC 2014)**

1. Balance of trade
2. Foreign assets
3. Balance of invisibles
4. Special Drawing Rights

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

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

**Ans: (c)**

## 2. SKILL UP: TACKLING INDIA'S UNEMPLOYMENT

### Context:

Economic growth alone hasn't solved India's job problem over the past 50 years. Job availability has lagged behind economic growth, particularly affecting the young population.

### High Unemployment Rate in India

- Consistent increase in unemployment rate over two decades, from 2% in 2010 to 9.2 percent in June 2024. (According to the Center for Monitoring Indian Economy)
- Over 42% of India's under-25 graduates unemployed in 2021-22.
- Despite 2000s GDP growth, employment growth rate remains unresponsive, indicating jobless growth.

### Types of Employment in India:

Types	Description
Wage Employment	Regular Wage Jobs: Formal, structured positions with fixed salaries, found in government organizations, private companies, and multinational corporations.
	Casual or Daily Wage Labor: Involves daily wage labour, prevalent in sectors like construction, agriculture, and unorganized labour markets.
Self-Employment	Entrepreneurship: Individuals engaged in entrepreneurial activities, running small businesses or enterprises such as shops, local services, or manufacturing units.
	Farmers: Agriculture serves as a significant source of self-employment, with individuals owning and operating farms independently or as part of a family-run enterprise.
	Freelancing and Informal Work: Reflects the gig economy trend, with individuals working as freelancers, consultants, or in part-time roles.

### Why Is India's Economic Growth Not Corresponding with Sufficient Job Creation?

Issue	Explanation	Example
<b>High-Skill, Low-Employment Sectors</b>	Economic growth driven by services and capital-intensive sectors generates fewer jobs.	IT sector contributes significantly to GDP but employs only <b>about 4.5 million directly</b> .
<b>Premature Deindustrialization</b>	Decline in manufacturing's share of GDP and employment at low per capita income.	Limits absorption of surplus agricultural labor, a key job creation pathway.
<b>Skill Mismatch</b>	Gap between skills demanded by job market and workforce capabilities.	<b>Only 4.7% of workforce</b> had formal skill training as per 2015 report.
<b>Informal Sector Dominance</b>	Over 90% of workforce in low-productivity, insecure jobs.	Gig economy offers flexible work but lacks security and benefits.
<b>Global Economic Trends</b>	Job market affected by global protectionism and economic disruptions.	<b>4.25 lakh tech employees</b> lost jobs in 2023 due to global recession.
<b>Impact of Automation and AI</b>	Emerging technologies displacing low-skill jobs.	9% of workforce could be displaced by automation by 2030.
<b>Academia-Industry Mismatch</b>	Education system fails to meet modern job market needs.	Only 47% of Indian graduates were employable in 2019.
<b>'Missing Middle' in MS-MEs</b>	Predominance of very small and very large firms hampers job creation.	Lack of mid-sized firms limits employment potential.
<b>Regional Disparities</b>	Economic growth concentrated in few urban centers.	Migration pressures from less developed regions to urban areas.
<b>Demographic Dividend Challenge</b>	Need to create <b>10-12 million jobs</b> annually for new entrants.	Economy consistently falls short of job creation target.

### Jobless Growth in India:

- **Two types of jobless growth in India:**

- **Weak Responsiveness:** Automation and tech introduction lead to jobless growth, but increasing GDP can still boost employment.
- **High Responsiveness:** In India, **labour productivity growth is strongly** linked to output growth. So even though GDP increases, output will increase only if labour productivity increases.

### Social Impact of Unemployment in India:

Social Impact	Details
Marginalisation of People	Prolonged unemployment leads to the erosion of skills, reducing employability even when jobs become available. Perpetuates a cycle of joblessness as skills diminish over time.
Social Unrest	High unemployment can result in dissatisfaction, social unrest, and various forms of manifestation such as protests, crime rates, and civil unrest.
Migration	High unemployment often drives rural-to-urban migration in search of better opportunities. This migration can strain urban infrastructure, leading to the development of slums and inadequate living conditions.
Impact on Education	Financial struggles due to high unemployment may deter families from investing in education. Immediate earning potential may take precedence over education, perpetuating a cycle of limited opportunities for future generations.
Disproportionate Impact on Social Groups	Disadvantaged groups like youth, women, rural labourers, minorities, and scheduled castes are disproportionately affected by unemployment. – Exacerbates existing inequalities in society.
Increased Crime	Lack of lawful income sources due to unemployment can drive individuals toward illegal activities. Unemployment is linked to higher crime rates in affected areas.

### Addressing Unemployment in India:

- Importance of good infrastructure, both physical and human, for job creation.
- Convergence of urbanisation and industrialisation paths for job creation.
- Focus on Tier II cities for potential 70% job generation and GDP growth.
- Implementation of National Employment Policy (NEP) to enhance workforce quality and create public jobs.
- Introduction of Urban MGNREGA for income security and public asset creation.
- Rapid industrialization and agricultural investment for job creation and productivity boost.
- Diversification of agriculture and promotion of agro-processing for export.
- Expanding education and healthcare to enhance human capital.
- Reforming education system and providing vocational training.

### Conclusion

**More than 50% of India's population is below the age of 25** and more than 65% is below the age of 35. India's young demographic is an asset in an ageing world. This clearly presents the case for India to **address the jobless growth scenario**.

### Mains Links:

**Most of the unemployment in India is structural in nature. Examine the methodology adopted to compute unemployment in the country and suggest improvements. (UPSC 2023)**

### Prelims Links:

**Disguised unemployment generally means (UPSC 2013)**

- (a) a large number of people remain unemployed
- (b) alternative employment is not available
- (c) the marginal productivity of labour is zero
- (d) productivity of workers is low

**Ans: C**

Topics: Conservation related issues, environmental pollution and degradation, environmental impact assessment.

### 3. UNESCO UNVEILS 11 NEW BIOSPHERE RESERVES

**Context:**

UNESCO recently added 11 new biosphere reserves worldwide, spanning countries like Colombia, Italy, Mongolia, and the Republic of Korea.

- These reserves, **including two transboundary sites**, aim to conserve biodiversity and cultural heritage amid global biodiversity and climate challenges.

**What are Biosphere reserves?**

Biosphere reserves are areas designated by UNESCO to promote the conservation of biodiversity, sustainable development, and scientific research. It is managed by **Managed under UNESCO’s Man and Biodiversity Programme**. They aim to balance economic and social development, cultural preservation, and nature preservation. There are now **759 reserves in 136 countries**, including **24 transboundary sites**.

They consist of three zones:

- **a core zone** for the strict protection of ecosystems and biodiversity.
- **a buffer zone** where people live and work in harmony with nature. Ex- Tourism, Research, Education, Monitoring
- **a transition zone** for sustainable activities. Ex - settlements, crop lands, managed forests, and areas for economic activities.

**Status of Biosphere Reserves in India:**

- India has 18 internationally recognized Biosphere reserves, first Nilgiri reserve.
- Panna in Madhya Pradesh is the latest addition.
- Twelve of 18 reserves are part of the World Network of Biosphere Reserves.
- November 3 is World Biosphere Reserve Day.



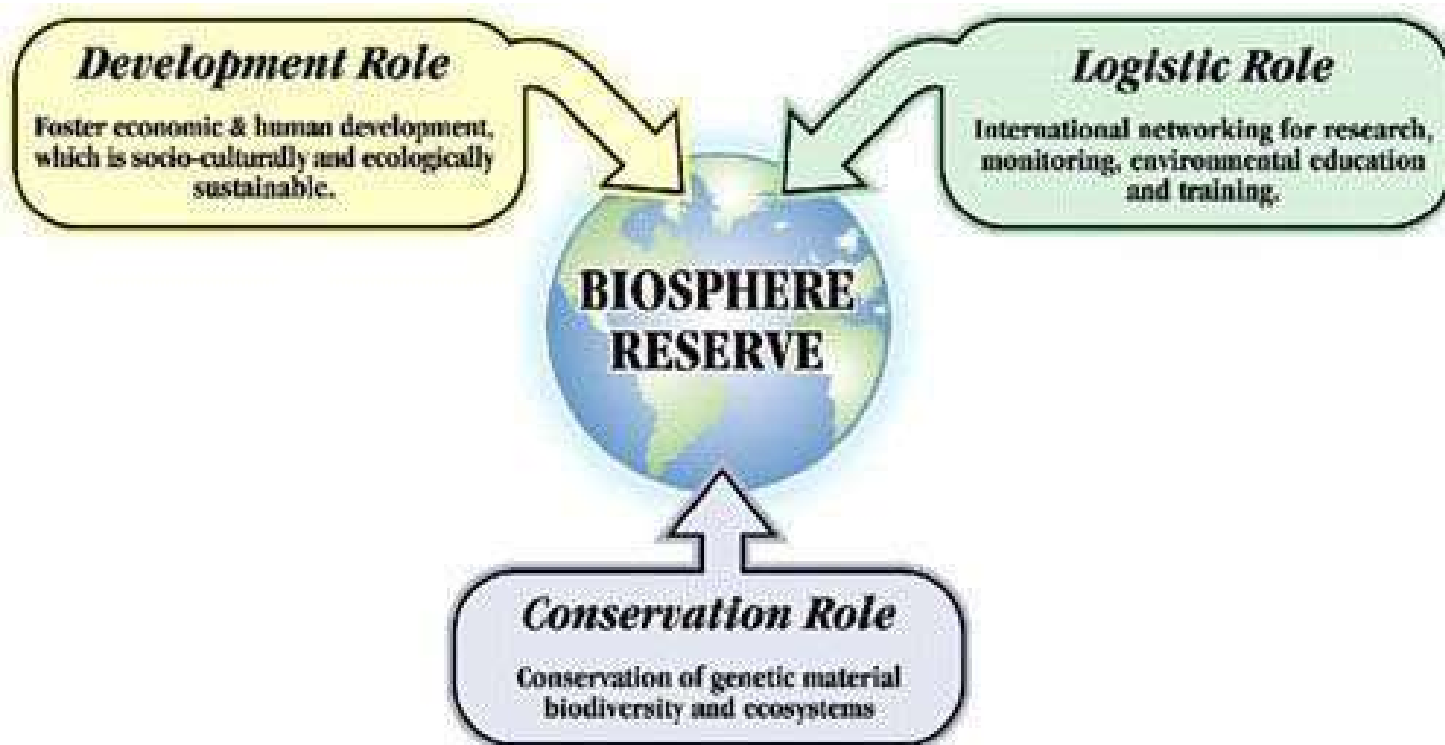
**Difference between National Park, Wildlife Sanctuary and Biosphere Reserve**

Table 4.52 : Comparison of National Park, Wildlife Sanctuary and Biosphere Reserve

National Park	Wildlife Sanctuary	Biosphere Reserve
1. Attention is not given to biotic community as a whole. Rather conservation is connected to habitats for particular wild animal species such as lion, tiger, rhinoceros etc.	Attention is not given to biotic community as a whole. Conservation rather is species oriented such as citrus, pitcher plant, Great Indian bustard etc.	Attention is focussed on biotic community as a whole. Thus, conservation is ecosystem oriented.
2. The approach is not based on scientific principles.	The approach is not based on scientific principles.	The approach is based on sound scientific principles.
3. The size ranges from 0.04 to 3,162 sq. kms.	The size ranges from 0.61 to 7,818 sq. kms.	Size well over 5,670 sq. kms.
4. Boundaries circumscribed by state legislation.	Limits are not sacrosanct.	Boundaries incumscribed by state legislation.
5. No biotic interference permissible except in buffer zone.	Limited biotic interference occur.	No biotic interference permissible except in buffer zone.
6. Tourism is not only permissible, but is often encouraged.	Tourism is permissible.	Normally tourism is not permissible.
7. Research and scientific management are lacking.	Research and scientific management are lacking.	Research and scientific management are carried out.
8. Due attention is not given to gene pool conservation of economic species, particularly of plants.	Proper attention is not given to gene pool conservation of economic species, particularly of plants.	Due attention is given to conservation of plants as well as animal species.

**Functions of Biosphere Reserves:**

Function	Description
Conservation	Managing genetic resources, endemic species, ecosystems, and landscapes.
	Preventing conflicts like man-animal incidents.
	Protecting the wildlife, culture, and customs of tribal communities.
	Support a wide variety of ecosystems, from tropical rainforests to alpine deserts.
Development	Promoting sustainable economic and human growth on sociocultural and ecological levels.
	Strengthening the pillars of sustainable development: social, economic, and environmental protection.
	Play a crucial role in combating climate change by acting as carbon sinks.
Logistic Support	Promoting research, environmental education, training, and monitoring in the context of conservation and sustainable development.



**The threats to Biosphere Reserves (BRs) include:** Deforestation, Invasive species, Land use changes like mining, Urbanization and population growth causing exploitation.

**Initiatives aimed at conserving Biosphere Reserves (at the Indian level):**

Initiative	Description
South and Central Asian Biosphere Reserve Network Meeting (SACAM) in Chennai	UNESCO and the Indian Ministry of Environment, Forests, and Climate Change have partnered to establish SACAM, a platform for sharing expertise and fostering partnerships in sustainable environmental practices.
UNESCO’s Man and the Biosphere Programme (MAB)	UNESCO’s MAB, launched in 1971, aims to enhance human-environment relationships through interdisciplinary studies, economics, and education, promoting sustainable, socially and culturally appropriate development and protection of biosphere reserves
	It grants protection not only to the flora and fauna but also to the human communities and their ways of life within biosphere reserves.

Local community engagement in conservation	Local communities in India's biosphere reserves are actively managing and conserving their ecosystems through collaborative efforts to protect mangrove forests, form self-help groups, and promote eco-tourism.
	The Gulf of Mannar Biosphere Reserve Trust is implementing plastic checkpoints to collect, recycle, and reuse plastic waste from vehicles and tourists, promoting sustainable waste management.

### Global Initiatives for Biosphere Reserves:

- World Network of Biosphere Reserves: UNESCO connects and supports global sites for biodiversity conservation and sustainable development.
- International Cooperation: Biosphere reserves often involve neighbouring countries, enhancing conservation efforts. Ex - Khangchendzonga Biosphere Reserve.
- Sustainable Development Goals (SDGs): Goals 15 (life on land) and 14 (life below water) emphasize biodiversity conservation and sustainable ecosystem management, aligning with biosphere reserve objectives.

### About [Man and Biosphere \(MAB\) Programme](#)

**The MAB Programme, launched in 1971**, aims to establish a scientific basis for improving human-environment relationships. It integrates natural and social sciences to enhance livelihoods and protect ecosystems, promoting sustainable economic development. In India, **12 out of 18 biosphere** reserves are recognized under this programme, with **Nilgiri Biosphere Reserve being the first to receive recognition.**

### Insta Links:

- [Panna Tiger Reserve gets UNESCO's 'Biosphere Reserve' Status.](#)

### Prelims Links:

**The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of (UPSC 2014)**

- (a) biosphere reserves
- (b) botanical gardens
- (c) national parks
- (d) wildlife sanctuaries

**Ans: A**

[Topics: Disaster and management.](#)

## 4. RISING FLAMES: THE GLOBAL SURGE IN WILDFIRES

### Context:

**Arctic wildfires** have become more frequent and intense due to global warming, causing significant environmental concerns. In 2024, over 160 wildfires in Sakha, Russia, burned nearly 460,000 hectares.

### Why Arctic is prone to wildfires?

- Rapid warming, four times faster than global average, leads to more frequent lightning strikes.
- Lightning strikes in Alaska and Northwest Territories doubled since 1975, escalating wildfires.
- Polar jet stream slows due to reduced temperature differences, causing prolonged warm weather and intense heatwaves.

### Climate Change's Impact on Arctic Heatwaves and Wildfires

- Geographical Change: Climate change splits jet streams, creating areas of weak winds and high pressure.
- Global Warming: Human activities have increased global temperatures by 1.2°C since pre-industrial times, causing extreme heat events.
- Creating Ground: Climate change creates hot, dry conditions, accelerating fire spread and burning longer.
- Other Factors: Forest management and human activities contribute to wildfires. Controlled burns and forest gaps can limit severe fires.



### Impact of Increased Heatwaves and Wildfires

- **Threat to life and property:** Heatwaves and wildfires can cause severe droughts, water crises and also poses a direct threat to people’s lives and property as it forces people to leave their homes. Ex-France.
- **Pollution:** Wildfires release pollutants like Nitrous oxide, Co2, PM 2.5, and particulate matter, potentially leading to cardiovascular and respiratory diseases.
- **Health-related issues:** Heatwaves can cause dehydration, heat cramps, heat exhaustion, and heat stroke.
- **Vicious cycle:** Wildfires release smoke, methane, and carbon dioxide, increasing temperatures.
- **Threat to biodiversity:** These events destroy habitats and ecosystems, leading to loss of biodiversity. Ex - **Florida’s sea turtles** are experiencing a gender imbalance due to climate change, which is exacerbated by hotter sand beaches, resulting in every turtle being born female.

### Various steps taken by countries to mitigate its impact:

Country	Steps Taken
USA	The US Senate passed a \$430 billion bill to fight climate change and raise corporate taxes.
Japan	Initiated research for a green GDP measurement reflecting progress in reducing greenhouse gas emissions.
Germany	The European Commission approved a €3 billion scheme to support renewable energy and waste heat-based district heating programmes.
India	<b>Approved new targets for slashing emissions</b> and aims to meet half of its energy demands from renewable sources by 2030.

### Measures for Fire Risk Reduction

- Enhancing community information and preparedness.
- Improving development planning, building standards, and forest-urban boundary management.
- Utilizing forest dryness information for early fire warning and preparedness.
- Implementing national and local measures for global greenhouse gas mitigation.
- Curtailing greenhouse gas emissions to reduce climate change’s contribution to fire risk.

### Conclusion

Climate change is happening. This should be accepted and not politicised. International cooperation to address climate change is vital to mitigate the adverse impact. Additionally, mitigation must be complemented with climate change-related adaption since mitigation alone cannot address the adverse effects we are facing right now.

## Insta Links

- [Forest Fires](#)

## Practice Questions

Q. Enumerate the causes for the rising instances of forest fires in India. What measures are needed to mitigate the adverse impacts of forest fires? (250 Words)

## 5. ASSAM FLOODS: WHY GANGA-BRAHMAPUTRA REGION IS FLOOD PRONE?

### Context:

Six more people died in Assam floods, raising the toll to 58. Over 24 lakh are affected across 30 districts, with rivers flowing above danger levels.

### The floods in Assam have led to severe consequences:

1. **Loss of Wildlife:** Over 130 wild animals, including 6 rare one-horned rhinos in Kaziranga National Park, have died. Other casualties include 117 hog deer, 2 sambar deer, a rhesus macaque, and an otter. Kaziranga hosts the world's largest population of one-horned rhinos.
2. **Infrastructure Damage:** Extensive damage to roads and infrastructure has hindered rescue and relief efforts.
3. **Displacement of People:** More than 2 million people have been displaced, forcing many to seek shelter in relief camps, straining resources and management.

### What is Ganges-Brahmaputra Delta?

The **Ganges-Brahmaputra Delta**, encompassing the states of Assam, Bihar, and West Bengal and covers more than 105,000 km<sup>2</sup>. It stands as a geographical marvel with its intricate river networks. However, this deltaic region is not just a testament to natural beauty but also bears the brunt of annual floods



## Key factors contributing to the vulnerability of the Ganges-Brahmaputra Delta to annual floods:

### Natural Factors:

1. **Heavy Rainfall and Monsoon Intensity:** The region experiences intense monsoon rains, often exceeding 2,500 mm annually, leading to rapid riverine rises and flash floods.
  - **Eg:** These rivers drain 75% of the total basin runoff in only 3 months of the monsoon.
2. **Riverine Morphology:** The Brahmaputra River has a highly dynamic and shifting course, prone to erosion and channel avulsion (sudden change in course), increasing flood risks.
  - **Eg:** The course of the Brahmaputra River has changed dramatically over the past 250 years, of 80 km from east of the Madhupur tract (Bangladesh) to the west of it.
3. **Tectonic Activity:** The region lies in a seismically active zone, and earthquakes can trigger landslides and disrupt river courses, exacerbating flood events.
  - **Eg:** Earthquakes of 1897 and 1950 in Assam increased flood frequency in the delta due to subsidence.
4. **Tidal influence:** The Ganges Delta experiences high tides, creating backwater effects that impede drainage and worsen flood inundation.
5. **Cyclonic impact:** The delta region is prone to cyclones, with an average of 4-5 cyclones making landfall every year.
  - **Eg:** 2021 Cyclone Yaas caused massive floods.

### Anthropogenic Factors for Floods:

- **Deforestation and Land Use Changes:** Increases soil erosion and sediment load in rivers, causing overflows. Eg: Sundarbans flooding
- **Encroachment on Floodplains:** Blocks natural drainage and reduces buffer zones, amplifying flood impacts. Ex - Bihar floods from are particularly severe due to encroachment of floodplains.
- **Inadequate Drainage and Infrastructure:** Choked rivers and dilapidated embankments lead to widespread inundation. Ex - Inadequate and weak embankments are annually breached in Bihar-West Bengal floods.
- **Poor Urban Planning:** Increases runoff and exposes more people to risks.

### Strategies can be implemented to mitigate the risks associated with these floods:

1. **Early Warning Systems:** Implement advanced early warning systems to provide timely alerts to communities, enabling them to evacuate and take preventive measures.
  - **Eg:** Flood Early Warning System (**FLEWS**) in Assam by its state disaster management authority.
2. **Eco-Restoration:** Undertake comprehensive

eco-restoration initiatives, including reforestation and wetland conservation, to enhance natural drainage systems and reduce vulnerability.

- **Eg:** Red River Delta Rehabilitation Project restored over 100,000 hectares of mangroves and wetlands which can be replicated here.
3. **Infrastructure Development:** Invest in resilient infrastructure, such as embankments, flood shelters, and drainage systems, to protect communities and vital assets.
    - **Eg:** Coastal Embankment Improvement Project (**CEIP**) in Bangladesh part of the delta.
  4. **Community Engagement:** Foster community-based initiatives for flood preparedness, including training in disaster response, and involve local communities in planning and decision-making processes.
    - **Eg:** Community Preparedness and Adaptation of “Living with Floods” under Flood Risk Mitigation and Management.
  5. **Climate-Resilient Agriculture:** Promote climate-resilient agricultural practices and crop varieties to minimize the impact of floods on the agrarian economy.
    - **Eg:** Integrated Rice-Fish Farming System (**IRFFS**) promoted by the World Food Programme.

#### NDMA Guidelines for Floods:

NDMA Guidelines	Details
<b>Preparing for Floods:</b>	Avoid building in flood-prone areas unless you elevate and reinforce your home. Elevate furnace, water heater, and electrical panel if susceptible to flooding. Install check valves in sewer traps to prevent flood water backup. Contact officials about flood barriers being constructed in your area. Seal basement walls with waterproofing compounds.
<b>When Flood is Likely:</b>	Listen to radio/TV for information. Be aware of flash flooding - move to higher ground immediately if at risk. Be aware of areas known to flood suddenly.
<b>If Evacuating:</b>	Secure your home - bring in outdoor furniture, move items upstairs. Turn off utilities if instructed. Do not walk or drive through moving floodwater.

#### Conclusion:

As seen above, many factors are natural and inevitable to certain extent, thus, mitigating the risks associated with annual floods in the Ganges-Brahmaputra Delta requires a holistic and integrated approach that combines physical infrastructure, sustainable land-use practices, communi-

ty engagement, and international cooperation.

#### Insta Links:

##### 1. [Assam Floods](#)

#### Prelims Link:

**Q. Which of the following is/are tributary/tributaries of Brahmaputra?**

1. Dibang
2. Kameng
3. Lohit

**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: (d)**

**Q. With reference to river Teesta, consider the following statements:**

1. The source of river Teesta is the same as that of Brahmaputra but it flows through Sikkim.
2. River Rangeet originates in Sikkim and it is a tributary of river Teesta.
3. River Teesta flows into Bay of Bengal on the border of India and Bangladesh.

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

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

**Ans: (b)**

[Topics: Security challenges and their management in border areas; linkages of organized crime with terrorism.](#)

## 6. INDIA'S INDIGENOUS DEFENCE PRODUCTION

#### Context:

[India's indigenous defence production reached a record ₹1.27 lakh crore](#) in FY 2023-24, growing **16.7%** from the previous year, per the Defence Ministry.

#### What is Indigenous Defence Production?

**Indigenous defence production** refers to the **development and manufacturing of defence equipment and technology within a country's own borders**, using its own resources, skills, and industries. This approach aims to achieve self-reliance and reduce dependence on foreign imports for defence needs.

According to the [Stockholm International Peace Research Institute \(SIPRI\)](#), India was the **world's largest importer of major arms between 2019 and 2023**, accounting for **9.8%** of global arms sales

### Need for defence indigenisation:

- For self-reliance
- To reduce dependency on the foreign player and ensure the security of the nation
- To reduce the Balance of Payment deficit
- To promote employment and also exports
- To reduce the cost of production to India and thereby reduce fiscal deficit.

### Key Highlights of India's Defence Production:

- **Over 79% of defence production** was contributed by DPSUs/PSUs, and nearly 21% by the private sector.
- Since 2019-20, the **value of defence production has increased by over 60%**.
- By 2028-29, annual defence production is expected to **reach ₹3 lakh crore**, with defence exports **hitting ₹50,000 crore**.

### Background of Defence Indigenisation in India:

- India's Shift from Soviet-Based to Indigenous Defence Industrialization
- Shifted from license-based production to R&D-focused defence industrialization in mid-1980s.
  - 1983, IGMDP developed five missile systems: Prithvi, Akash, Trishul, Nag, and Agni.
  - 1990 Self Reliance Review Committee's goal to boost self-reliance index from 30% to 70% by 2005 unmet.
  - Insufficient indigenous efforts led to co-development and production with foreign partners, including 1998 India-Russia BrahMos missile agreement and collaborations with Israel and France.

### Potential of Defence Indigenisation in India:

1. **Rising Demand:** The Indian defence manufacturing industry is growing due to national security concerns and ongoing territorial disputes with Pakistan and China.
2. **Growth Opportunities:** India's proactive foreign trade policies and joint defence manufacturing agreements with countries like the UAE, Kazakhstan, and the US offer significant growth potential.
3. **Experienced Industry:** India has the necessary manpower and industries, such as the Ordnance Factory and HAL, actively contributing to defence indigenisation. Three Indian companies (HAL, Ordnance Factory Board, BEL) are among the top 100 defence companies globally.
4. **Future Contracts:** The defence ministry estimates potential contracts worth ~₹4 lakh crore (US\$ 57.2 billion) for the domestic industry in the next 5-7 years (2025-2027).

### Success Achieved:

Key Achievements	Details
<a href="#">INS Vikrant Development</a>	Millennium Aero Dynamics and Cochin Shipyard jointly developed and <b>produced INS Vikrant</b> , India's first indigenously built aircraft carrier.
<a href="#">Indigenous Nuclear Submarine</a>	BARC and DRDO jointly developed India's first indigenous nuclear submarine, <b>Arihant</b> .
<a href="#">Missile Development</a>	Under the Integrated Guided Missile Development Programme (IGMDP), India developed 5 missiles: <b>Akash, Prithvi, Agni, Trishul, and Nag</b> .
<a href="#">Helicopter and Aircraft Development</a>	HAL and Taneja Aerospace and Aviation Limited (TAAL) are developing <b>Dhruv multirole helicopters, Light Combat Helicopter (LCH), Rudra armed helicopter</b> , and manufacturing Tejas Light Combat Aircraft.
<a href="#">IRST System Development</a>	HAL and Bharat Electronics Limited (BEL) signed a contract for the co-development and co-production of the <b>Long Range Dual Band Infra-Red Search and Track System (IRST)</b> for the Su-30 MKI under the MAKE-II procedure of Defence Acquisition Procedure (DAP) 2020.
<a href="#">Unmanned Aerial Vehicle Development</a>	DRDO is currently developing an indigenous unmanned aerial vehicle named <b>Nishant</b> .
<a href="#">Growth in Exports</a>	Defence exports surged from ₹1,940 crore (US\$ 255 million) in 2014-15 to over ₹15,000 crore in 2022-23 (at 21000 cr currently)
<a href="#">Export Deals with Countries</a>	Indian defence companies are <b>exporting to over 85 Friendly Foreign Countries (FFCs)</b> in Africa, South Asia, Southeast Asia, and West Asia.

<b>Reasons for Increase in Exports</b>	The surge in exports attributed to <b>policy initiatives and private sector involvement</b> , contributed 70% to total defence exports in FY 2021-22.
	<b>Policy Initiatives:</b> Liberalising FDI policies, issuing Positive Indigenisation Lists, and simplifying export procedures have contributed to growth in defence exports.
	<b>Future of Indian Exports:</b> The <b>Draft Defence Production &amp; Export Promotion Policy (DPEPP) 2020 aims to export ₹35,000 crore</b> worth of aerospace and defence equipment annually by 2025, aligning with the goal of achieving a <b>₹1.75 lakh crore (US\$ 25 billion) turnover</b> in defence manufacturing.

### Government's Initiative towards Defence Indigenisation:

Government's Initiative	Details
<b>Defence Acquisition Procedure (DAP) 2020</b>	Streamlines defence procurement under Atmanirbhar Bharat Abhiyaan, emphasizing Make in India and MSME benefits. Key features include: <ul style="list-style-type: none"> <li><b>Reservation for Indian Vendors:</b> Encourages domestic industry with up to 100% FDI allowed (74% Automatic, beyond 74% Government route).</li> <li><b>Enhancement of Indigenous Content:</b> Focus on procuring indigenously manufactured products and technologies.</li> <li><b>Make and Innovation:</b> Supports indigenization through Make I/II/III initiatives and iDEX for startups.</li> <li><b>Buy (Global-Manufacturing in India):</b> Mandates manufacturing processes be conducted by Indian subsidiaries of foreign investors.</li> <li><b>Ease of Doing Business:</b> Simplifies operations through the Project Management Unit, favouring complete product manufacturers.</li> </ul>
<b>Innovations for Defence Excellence (iDEX)</b>	Engages MSMEs, start-ups, individual innovators, R&D institutes, and academia with grants, funding, and support.
<b>SPRINT Challenges</b>	A NIIO-DIO initiative to <b>integrate at least 75 new indigenous technologies/products into the Indian Navy.</b>
<b>Indigenous Manufacturing</b>	Simplifies industrial licensing extends validity periods, and liberalizes FDI policy (up to 74% Automatic). Defence procurement from foreign <b>sources reduced from 46% to 36%.</b>
<b>Defence Industrial Corridors</b>	Established in <b>Uttar Pradesh and Tamil Nadu</b> to create regional aerospace and defence hubs.
<b>Positive Indigenisation Lists</b>	Prioritizes procurement from domestic sources under the <b>Buy Indian (IDDM) category with embargoes on imports.</b>
<b>E-Biz Portal</b>	Digitizes application process for <b>Industrial License (IL) and Industrial Entrepreneur Memorandum (IEM).</b>

### Challenges in Defence Indigenisation

1. Lack of a defence manufacturing base in India.
2. Low private participation due to the absence of a permanent arbitration committee for dispute resolution.
3. Conflict between manufacturers and defence forces on equipment design and capacity.
4. High costs and lack of an assured market, lead to delays and credibility issues.
5. Poor technological transfer by foreign companies.
6. Bureaucratic delays and licensing issues hinder the ease of doing business.

### Way Forward for Defence Indigenisation

- **Ensure a level playing field** for private industry, DRDO, DPSUs, and OFB.
- **Utilize software industry** and technologies like AI and cyber security.
- Provide financial and administrative **autonomy to DRDO.**
- **Improve in-house design capabilities**, as seen with the Navy's success.
- **Develop a robust supply chain**, with Indian SMEs playing a key role in the global OEM supply chain.

### Conclusion

**Going ahead, the requirement for higher indigenous content** is expected to help defence product manufacturers in India as well as encourage foreign companies to set up operations in India. France and Russia have already agreed to manufacture in India.

### Insta Links:

- [India's Defence Exports Reaches an All-time High](#)

### Mains Links:

**Q. Foreign Direct Investment (FDI) in the defence sector is now set to be liberalized: What influence this is expected to have on Indian defence and economy in the short and long run? (UPSC 2014)**

### Prelims Links:

**Q. What is "Terminal High Altitude Area Defence (THAAD)", sometimes seen in the news? (UPSC 2018)**

1. An Israeli radar system
2. India's Indigenous anti-missile programme
3. An American anti-missile system
4. A defence collaboration between Japan and South Korea

**Answer: (c)**

**Q. Which one of the following is the best description of 'INS Astradharini', that was in the news recently? (UPSC 2016)**

1. Amphibious warfare ship
2. Nuclear-powered submarine
3. Torpedo launch and recovery vessel
4. Nuclear-powered aircraft carrier

**Answer: (c)**

## GENERAL STUDIES - 4

### 1. ALICE MUNRO: ETHICAL ISSUES

#### Context:

Alice Munro, a **Canadian Nobel laureate** renowned for her short stories, is now the **subject of a disturbing revelation by her daughter, Andrea Robin Skinner**. Weeks after Munro's death, Skinner disclosed that **Munro's second husband, Gerald Fremlin, had sexually abused her repeatedly**.

Despite being **aware of the abuse**, Munro chose to stand by Fremlin, prioritizing **her own needs over her daughter's suffering**. This revelation has tarnished Munro's legacy, highlighting the **moral fallibility of literary idols**. Skinner's estrangement from her family lasted until Munro's death, and she ultimately shared her story to shed light on the hidden darkness behind Munro's celebrated literary career.

#### Ethical Issues involved in the case:

1. **Failure to Protect:** Alice Munro did not protect her daughter from abuse despite knowing about it.
2. **Silent Acquiescence:** Munro's choice to remain silent and support her abuser over her daughter.
3. **Victim Blaming:** Fremlin blamed Skinner for the abuse, and Munro did not challenge this narrative.
4. **Complicity:** Munro's family and others close to the situation did not take action to stop the abuse or support Skinner initially.
5. **Prioritizing Personal Needs:** Munro prioritized her own relationship with Fremlin over her daughter's well-being.
6. **Abuse of Power:** Fremlin used his position of trust as a stepfather to abuse Skinner.
7. **Public Deception:** The true nature of Munro's family life was hidden, potentially misleading the public about her character.
8. **Long-term Trauma:** The prolonged impact of abuse on Skinner and the lack of support from her mother and family.

### Course of Action:

1. **Therapy and Counseling:** Ensure continued psychological support for Skinner to help her heal.
2. **Public Apology:** The Munro family should issue a public apology acknowledging past mistakes and supporting Skinner's account.
3. **Advocate for Victims:** Use Munro's literary legacy to raise awareness about sexual abuse and advocate for victims' rights.
4. **Family Reconciliation:** Encourage ongoing dialogue within the family to rebuild trust and support Skinner.
5. **Legal Review:** Review any remaining legal actions to ensure justice and closure for Skinner.
6. **Educational Outreach:** Support programs and initiatives that educate the public about the importance of protecting and supporting abuse victims.
7. **Establish a Fund:** Create a fund or foundation in Munro's name to support abuse survivors and promote mental health services.

## 2. EXAMPLES OF ETHICAL BEHAVIOR

### Example 1: Anukathir Surya: IRS Officer's Historic Name and Gender Change

**Anukathir Surya, an IRS officer,** has become the first in **Indian Civil Service** history to officially change his name and gender to be **identified as a man**. Approved by the **Ministry of Finance** on July 9, the order recognizes him as **Mr. M. Anukathir Surya in all official records**.

#### **Ethical Values from Anukathir Surya's Experience**

1. **Integrity:** Staying true to one's identity despite societal pressures.
2. **Courage:** Taking bold steps to seek official recognition for his gender identity.
3. **Inclusivity:** Promoting acceptance and understanding within the workplace.
4. **Resilience:** Overcoming personal and professional challenges related to identity.
5. **Respect for Diversity:** Highlighting the importance of diversity in the civil service.
6. **Advocacy for Rights:** Paving the way for others in similar situations to seek recognition and respect.

### Example 2: Puja Khedkar: misuse of power

**Puja Khedkar, a probationary IAS officer in Maharashtra,** faced controversy and was transferred to Washim for alleged misuse of power. She used **a private Audi with a red-blue beacon and claimed facilities** were not allowed for probation officers. This included occupying a senior official's office without permission and making demands like a separate cabin and residential quarters. Her actions led to **scrutiny over the alleged submission of fake disability and OBC certificates** for her civil services exam.

#### **Ethical Issues concerned here are:**

1. **Misuse of Power:** Using a private vehicle with an unauthorized beacon and claiming facilities beyond entitlement.
2. **Ethical Breach in Documentation:** Allegedly submitting fake disability and OBC certificates.
3. **Entitlement and Privilege:** Demanding exclusive office space and facilities not permitted during probation.
4. **Influence Peddling:** Allegations of her father pressuring officials to meet her demands.
5. **Transparency and Accountability:** Lack of compliance with verification processes for disability certification.

### Example 3: Hannibal Directive

The Hannibal Directive was allegedly **used by Israeli forces following the October 7 by Hamas on Israel**. **The Hannibal Directive is an alleged Israeli military policy** aimed at preventing the capture of Israeli soldiers by militant groups, even at the risk of harming or killing the soldiers themselves.

#### **Ethical issues associated with it:**

1. **Disregard for Human Life:** Critics argue that the directive prioritizes preventing capture over minimizing harm to civilians and soldiers, potentially leading to excessive use of force.
2. **Lack of Transparency:** The secretive nature of the directive raises concerns about accountability and oversight in military operations.
3. **Legal and Moral Implications:** The policy has been criticized for potentially violating international humanitarian law by endangering civilians and using disproportionate force.
4. **Impact on Prisoner Rights:** It raises questions about the treatment and rights of captured combatants, chal-

lenging conventions on the humane treatment of prisoners of war.

5. **Public Perception and Accountability:** The directive's existence and implementation without public debate or transparency undermine democratic principles of accountability and oversight.

## CONTENT FOR MAINS ENRICHMENT

Topic in News	Usage in Answers
<p><b>1. THAZHAKARA LAUNCHES PEOPLE'S BIODIVERSITY REGISTER</b></p>	<p><b>Context:</b> Thazhakara, a <b>gram panchayat in Alappuzha</b> and one of the first in Kerala, has created and published a <b>People's Biodiversity Register (PBR)</b>, involving local communities.</p> <p><b>What is the People's Biodiversity Register (PBR)?</b> Biodiversity Recording in India</p> <ul style="list-style-type: none"> <li>• PBR is a comprehensive record of biodiversity, mandated by <b>Biological Diversity Act (2002)</b>.</li> <li>• Biodiversity Management Committees oversee PBR development to <b>conserve biodiversity, promote sustainable use, and protect traditional knowledge</b>.</li> <li>• Thazhakara's PBR aids conservation efforts and guides local projects in agriculture and waste management.</li> <li>• Emphasizes <b>community involvement, transparency, conservation ethics, and equitable benefit-sharing in biodiversity management</b>.</li> </ul> <p>#Usage in answers: demonstrates ethical values such as community involvement, transparency, conservation ethics, and equitable benefit-sharing in biodiversity management.</p>
<p><b>2. BARCELONA RESIDENTS PROTESTING AGAINST TOURISTS</b></p>	<p><b>Context:</b> Barcelona residents are <b>protesting against mass tourism by firing water pistols at tourists and asking them to "go home."</b> The city's tourism surged from <b>9.7 million</b> in 2022 to 26 million in 2023, causing issues like rising living costs and a housing crisis.</p> <p>Measures like <b>banning short-term rentals and increasing tourist taxes</b> have been introduced but are seen as insufficient by locals. This problem isn't unique to Barcelona; cities <b>like Venice and Amsterdam are also struggling with overtourism and its impact on local residents and the environment</b>.</p> <p><b>Issues in the case of Barcelona's response to overtourism include:</b></p> <ol style="list-style-type: none"> <li>1. <b>Displacement of Residents:</b> Rising rental prices and living costs push locals out of their homes and neighborhoods.</li> <li>2. <b>Resource Strain:</b> Increased tourism pressures local infrastructure and resources, potentially reducing quality of life for residents.</li> <li>3. <b>Cultural Erosion:</b> The city prioritizing tourists over locals can lead to the loss of local culture and community values.</li> <li>4. <b>Environmental Impact:</b> Mass tourism can lead to environmental degradation, including pollution and damage to natural sites.</li> <li>5. <b>Economic Inequality:</b> While tourism boosts the economy, benefits may not be equitably distributed among residents.</li> </ol>

## FACTS FOR PRELIMS

### GS-1

#### Art & Culture

## 1. PROJECT PARI

#### Context:

The Ministry of Culture has **initiated Project PARI (Public Art of India)** to coincide with the **46th World Heritage Committee Meeting** in New Delhi from 21-31 July 2024.

#### About Project PARI (Public Art of India):

It is an **initiative by the Ministry of Culture, Government of India, executed by Lalit Kala Akademi and the National Gallery of Modern Art**. It aims to stimulate dialogue, reflection, and inspiration, enriching India's cultural landscape.

**Featuring a diverse range of artwork inspired by traditional Indian art forms**, Project

#### PARI includes

1. Sculptures that explore themes such as tributes to nature
2. Ideas from Natyashastra
3. Gandhi ji
4. Traditional Indian toys
5. Hospitality
6. Ancient knowledge
7. Naad (Primeval Sound)
8. Harmony of Life
9. Kalpataru (the divine tree).

**Women artists** play a significant role, showcasing Bharat's NARI SHAKTI through their substantial participation in the project.

## 2. CAVE PAINTING

#### Context:

Scientists have discovered the **world's oldest-known cave painting** in the **Leang Karampuang cave on the Indonesian island of Sulawesi**.

- **This artwork, created at least 51,200 years ago**, depicts **three human-like figures interacting with a wild pig**.
- Researchers determined its age using a **new technique involving laser dating of calcium carbonate crystals that formed over the painting**.
- The **painting, made with dark red pigment**, portrays a pig standing upright, surrounded by three smaller human-like figures, suggesting a narrative scene.
- This **makes it the oldest-known evidence of**

**storytelling in art.**

## 3. CLASSICAL LANGUAGE STATUS

#### Context:

The **Central government** is set to **revise the criteria for granting classical language status**, affecting languages like **Marathi, which has been seeking this status for over a decade**.

- Currently, six languages have classical status: **Tamil, Sanskrit, Telugu, Kannada, Malayalam, and Odia**.
- The criteria for classical language status include **high antiquity, a valuable body of ancient literature, original literary tradition, and distinctness from modern forms**.

## 4. ORDER OF SAINT ANDREW THE APOSTLE

#### Context:

The **Order of Saint Andrew the Apostle, Russia's highest civilian honour**, was awarded to **Prime Minister Narendra Modi during his visit to Russia**.

- Announced in 2019, the award recognized the Prime Minister for his exceptional services in **enhancing the strategic partnership and fostering friendly relations between Russia and India**.

#### About the Award:

- **Recipients:** The award is given to **notable government and public figures, military leaders, and outstanding representatives** in various fields, including science, culture, and the economy.
  - It can also be awarded to **foreign heads of state for their services to Russia**.
- **Historical Background:** Named after **Saint Andrew, one of Jesus' apostles** who is **said to have spread Christianity in Russia and Europe**, and founded the **Church of Constantinople**.
- **Establishment:** Created by **Tsar Peter the Great in 1698**, the order was abolished in 1918 after the Russian Revolution but was **reinstated in 1998 by a presidential executive order**.
- **Design:** The chain of the Order features **17 alternating links, with a gilded image of the State Emblem of Russia, and includes a badge, star, and a light blue silk ribbon**.

#### Past Recipients:

- Prominent figures in Russia, **including military engineer Mikhail Kalashnikov**, author Sergey Mikhalkov, **former Soviet leader Mikhail Gorbachev**, and leaders of the Russian Orthodox Church, have received the honour.

- Notable foreign recipients include **Chinese President Xi Jinping and former Kazakh President Nursultan Nazarbayev.**

## 5. AHOM 'MOIDAM'

### Context:

The **Ahom era 'Moidams' in Assam's Charaideo district** have been recommended for **inclusion in the UNESCO World Heritage List** by the **International Council on Monuments and Sites (ICOMOS).**

- These Moidams are the **burial grounds of Ahom royalty**, created by **constructing earth mounds over hollow vaults topped by shrines.**

### History and Significance:

- The Moidams **enshrine the mortal remains of Ahom royalty** along with cherished objects, reflecting their **funerary traditions and cosmologies.**
- The Tai-Ahoms migrated to present-day Assam in the 13th century, **making Charaideo their first capital and royal necropolis.**
- The site demonstrates their **integration with the natural landscape, creating a sacred geography**



### Geography

## 6. APHELION POINT

### Context:

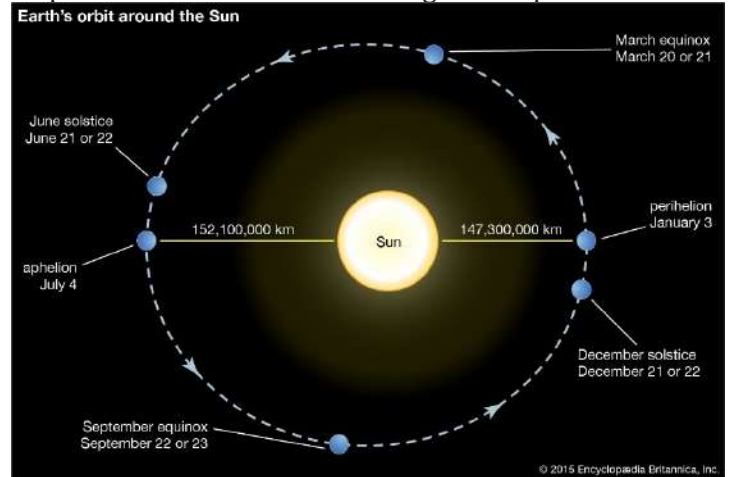
Recently, Earth has reached aphelion.

### What is Aphelion Point?

#### Aphelion and Perihelion in Earth's Orbit

- Aphelion occurs in early July, Earth's farthest from the Sun.
- Perihelion occurs in early January, Earth is 147 million kilometres closer.
- Despite 5 million kilometre difference, Earth's axis tilt determines seasons.

- Aphelion receives 7% less sunlight than perihelion.



## 7. SEA GROYNES

### Context:

Coastal residents in Ernakulam district, Kerala, protested against sea incursion and incompletion erection of **Sea Groynes**, by blocking the Fort Kochi-Alappuzha State Highway near Kannamaly.

### What is Sea Groynes?

**Sea groynes are structures built perpendicular to the shoreline**, extending into the sea. They are designed to reduce coastal erosion by trapping sand and sediment carried by currents, thereby stabilizing the beach and protecting the coast from the sea's impact.



## 8. DENISOVANS

### Context:

A study reveals that **Denisovans**, an **extinct human species, occupied the Tibetan Plateau 160,000 years ago.**

- Bone remains found in **Baishiya Karst Cave** indicate Denisovans survived there for millennia, enduring **both cold and warm periods between the Middle and Late Pleistocene eras.**
- The **research team analysed over 2,500 bones from the cave**, identifying **one rib bone as be-**

**longing to a new Denisovan individual from 48,000 to 32,000 years ago.**

- The study also showed that Denisovans hunted, butchered, consumed various animals, and used bones to make tools, highlighting their adaptability to fluctuating climatic conditions.

**Who were Denisovans?**

Denisovans were an **extinct group of hominins**, or human relatives, known primarily from remains found **in Siberia and Tibet**. They lived hundreds of thousands of years ago and coexisted with Neanderthals and early modern humans.

i.1 Map of Qinghai-Tibet Plateau (QTP) showing its immediate neighbors in India and in adjacent countries



**2. ANAND MARRIAGE ACT**

**Context:**

The **National Commission for Minorities** took initiative to discuss the implementation and registration of **Sikh marriages under the Anand Marriage Act with 18 States/UTs**.

**Jharkhand, Maharashtra, and Meghalaya** reported that they have already implemented the Act, while the remaining States/UTs assured that they would implement it within two months.

**About Anand Marriage Act:**

The Anand Marriage Act is a law **that allows Sikhs to register their marriages under a separate act, rather than the Hindu Marriage Act**.

It recognises the Sikh marriage ceremony called Anand Karaj.

**Steeped in history, religion**

- Maharaja of Nabha Ripudaman Singh got Anand Marriage Act drafted from Bhai Kahn Singh Nabha in 1908. It was approved by the British Council in 1909
- Anand Act became unoperational after Independence; since then, Sikh marriages are being registered under Hindu Marriage Act
- In a Sikh marriage, the couple takes four rounds of Guru Granth Sahib during the recital of Jaavan (hymns) from the holy book; a Hindu marriage features seven phere (rounds) of the sacred fire amid chanting of mantras
- Marriages of Buddhists, Jains are also currently registered under the Hindu Act, while Muslims, Parsis, Christians and Jews have their own Acts for the purpose



**Governance**

**3. SEHER PROGRAM**

**Context:**

The **Women Entrepreneurship Platform (WEP) and TransUnion CIBIL** launched the **SEHER program**.

- WEP is a public-private partnership platform** incubated at NITI Aayog aiming at empowering women entrepreneurs

**What is the SEHER program?**

SEHER Program in India: Empowering Women Entrepreneurs

- Aims to improve financial literacy and business skills for women entrepreneurs.
- Focuses on improving credit access and management awareness.
- Aims to boost economic development by accelerating women's entrepreneurship, which would create over 30 million new women-owned enterprises and 150 to 170 million more jobs. India has 63 million micro, small, and medium enterprises, with 20% owned by women, employing 27 million people.
- Part of WEP's Financing Women Collaborative (FWC), a unique initiative aiming to accelerate finance access for women entrepreneurs.

**GS-2**

**Functioning of Parliament and State Legislatures**

**1. EXPUNCTION POWERS**

**Context:**

The **first special session of the 18th Lok Sabha** saw heated debates and clashes between the government and opposition over remarks that led to expunction from records.

**Expunction Powers in Parliament:**

- Authority given to Rajya Sabha Chairman and Lok Sabha Speaker to delete defamatory, indecent, unparliamentary, or undignified remarks.
- Aim: Maintains decorum and upholds parliamentary standards during debates.
- Rules 261 (Rajya Sabha) and 380 (Lok Sabha) allow deletion of objectionable remarks.
- Expunged portions are marked and excluded from official records to prevent circulation

## 4. DIGITAL BHARAT NIDHI

### Context:

The **Department of Telecommunication (DoT)** has introduced the draft Telecommunications (Digital Bharat Nidhi) Rules, 2024 under Sections 26 and 56 of the **Telecommunication Act, 2023**.

### About Digital Bharat Nidhi (DBN):

- Replaces Universal Service Obligation Fund (USOF) funded by 5% levy on telecom operators' Adjusted Gross Revenue.
- Aims to expand telecom networks in underserved areas.
- Funds support universal service, R&D, pilot projects, and connectivity improvements.
- Managed by an administrator for non-discriminatory network sharing.

About **Telecommunication Act, 2023**: [Click Here](#)

## 5. INTEGRATED TRIBAL DEVELOPMENT PROGRAMME

### Context:

**NABARD** is set to launch an **integrated tribal development programme** in Kerala marking **its first initiative in the region**.

- Implemented by the environment organization Thanal, **the five-year project aims to enhance the livelihoods of 413 tribal families in eight hamlets through sustainable agriculture and various income-generating activities.**

### Previous Initiatives:

NABARD and Thanal previously collaborated on animal **husbandry and skill development programs in Ranni taluk, Pathanamthitta**, benefiting 429 families with sustainable development support.

## 6. E-OFFICE

### Context:

The **Indian government** is set to implement the **e-office system** in 133 attached and subordinate offices, as well as **autonomous bodies**.

- The **Department of Administrative Reforms and Public Grievances (DARPG)** will lead this initiative with the **National Informatics Centre (NIC) serving as the knowledge partner.**

### About e-Office:

- A mission mode project under the **National e-Governance Program**, developed by the **National Informatics Centre (NIC)**, provides a digital workplace solution.

- Built on open architecture, it is a **reusable product for replication across governments.**

### Its key components include:

- **eFile**: File Management System
- **KMS**: Knowledge Management System
- **WAW**: Work from Anywhere portal
- **SPARROW**: Smart Performance Appraisal Report Recording Online Window



### [International Relations](#)

## 7. KARTARPUR CORRIDOR

### Context:

**Pakistan has completed the 420-meter-long bridge** at the **zero line of the Kartarpur Corridor** after a **delay of two and a half years**.

- The bridge was necessary due to the area's **susceptibility to flooding, ensuring a safe passage for visitors to the Gurdwara Darbar Sahib.**

### About Kartarpur Corridor:

- Connects **Darbar Sahib Gurdwara in Pakistan with Dera Baba Nanak shrine in India's Punjab.**
- **Visa-Free Movement: Indian pilgrims need only a permit to cross into Pakistan.**
- **Commemoration: Built to celebrate the 550th birth anniversary of Guru Nanak Dev on November 12, 2019.**
- **Open Year-Round: The corridor will remain operational throughout the year.**



## 8. INTERNATIONAL MARITIME ORGANIZATION (IMO)

### Context:

At the **132nd session of the International Maritime Organization (IMO) Council** in London, **India led global maritime discussions.**

- The delegation proposed the establishment of **the South Asian Centre of Excellence for Sustainable Maritime Transport (SACE-SMarT)**, aiming to **advance environmentally sustainable and technologically proficient maritime practices in the region.**

### About **International Maritime Organization (IMO)**:

- The International Maritime Organisation (IMO) is a **specialized UN agency focused on regulating shipping and preventing marine pollution from ships.**
- Established in 1948 and operational since 1958**, the IMO has 175 member states and three associate members, **with headquarters in London.**
- India joined in 1959.**
- The IMO creates a **fair, effective regulatory framework for the shipping industry** and addresses legal issues like liability and **international maritime traffic facilitation.**

## 9. MUTUAL RECOGNITION AGREEMENT (MRA) FOR ORGANIC PRODUCTS

### Context:

**India and Taiwan** have implemented a **Mutual Recognition Agreement (MRA) for organic products.**

- This MRA, **the first bilateral agreement for organic products between the two nations**, involves **the Agricultural and Processed Food Products Export Development Authority (APEDA) of India and the Agriculture and Food Agency (AFA) of Taiwan.**
- Under this agreement, organic products produced according to **India's National Programme for Organic Production (NPOP)** and certified by an **accredited body can be sold in Taiwan with the "India Organic" logo.**
- Conversely, **organic products from Taiwan meeting its Organic Agriculture Promotion Act standards** can be sold in India with the **"Taiwan Organic" logo.**

This agreement will facilitate the export of key Indian organic products **such as rice, processed food, green/black and herbal tea, and medicinal plant products to Taiwan.**

## GS-3

### Indian Economy

## 1. CREDIT-DEPOSIT (CD) RATIOS

### Context:

The RBI is concerned about **banks with high Credit-Deposit (CD) ratios**, notably exceeding the **industry average of 80%.**

### Credit-Deposit Ratio in India

- Measures percentage of bank's total deposits used as loans.
- Higher ratio indicates larger portion used for lending, impacting liquidity and credit risk.
- RBI directed banks to reduce credit-deposit gap.
- RBI's Financial Stability Report shows steady rise in CD ratio, reaching 78.8% by December 2023.
- Over 75% of banks with CD ratios above 75% are private sector banks.

### High CD Ratios:

- Robust credit growth in retail and MSME sectors.
- Slower deposit growth due to competitive pressures.
- Shifts in customer savings behavior towards investments.
- Pressure on Net Interest Margins, increased liquidity risk, and credit risk.

## 2. ZOMBIE START-UPS

### Context:

**Koo, the Indian social media platform** created to rival **Twitter**, is **shutting down due to unsuccessful deals** with larger companies and media houses.

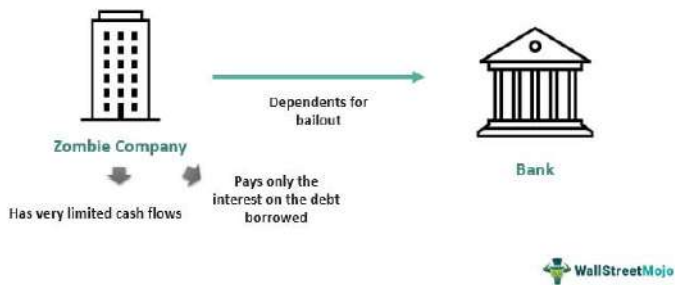
- Launched in **2020**, **Koo gained popularity during a conflict between the Indian government and Twitter.**
- Koo **offered features similar to Twitter**, supported **multiple Indian languages, and attracted prominent users, including politicians and celebrities.**
- However, the **company faced increasing losses, declining active users, and weak global sentiment**, leading to the **layoff of around 30% of its workforce in 2023.**

### About Zombie Start-ups:

**"Zombie start-ups"** refer to companies that, while **technically still in operation, are struggling to grow, innovate, or generate significant revenue.**

These businesses are often **stuck in a state of stagnation**, unable to **attract further investment or reach profitability**, yet they continue to exist due to **prior funding or minimal operational costs.**

## Zombie Company



## 3. VIZHINJAM INTERNATIONAL SEA-PORT

### Context:

Kerala Chief Minister officially welcomed the **first cargo ship, the Chinese vessel 'San Fernando,'** at the **Vizhinjam International Sea Port.**

- Developed by **Adani Ports and Special Economic Zone Ltd (APSEZ)**, this marks the beginning of **operations for India's largest deep-water trans-shipment port.**
- The port is **constructed under a public-private partnership.**



### Science & Technology

## 4. INDO-FRENCH LIVER AND METABOLIC DISEASE NETWORK (INFLIMEN)

### Context:

Union Minister Dr Jitendra Singh launched the **Indo-French Liver and Metabolic Disease Network (InFLiMeN)** to prevent and cure **metabolic liver diseases.**

### What is the Indo-French Liver and Metabolic Disease Network (InFLiMeN)?

The initiative, a joint effort between Indian and French experts, aims to prevent and treat metabolic liver diseases and address non-alcoholic fatty liver disease (NAFLD),

by developing low-cost diagnostic tests and India-specific solutions.

**One in three Indians** has **fatty liver**, a condition that **precedes Type 2 Diabetes** and other metabolic disorders.

### About Liver:

The liver is a vital organ located in the upper right abdomen, responsible for various functions including detoxification, protein synthesis, and production of biochemicals necessary for digestion.

**Metabolic liver diseases are caused by disruptions in the liver's metabolic processes, often due to factors such as:**

- Obesity:** Excess body fat can lead to fat accumulation in the liver.
- Diabetes:** Type 2 diabetes can increase the risk of liver fat accumulation.
- High cholesterol and triglycerides:** Elevated levels can contribute to liver fat buildup.
- Genetic predispositions:** Certain inherited conditions can affect liver metabolism.
- Poor diet:** High intake of sugar and fats can lead to liver fat accumulation.
- Alcohol consumption:** Excessive alcohol intake can damage liver cells and affect metabolism.

## 5. 'RESPONSIBLE QUANTUM TECHNOLOGIES' MOVEMENT

### Context:

The **"responsible quantum technologies" movement** emphasizes the need **for ethical development and public trust in quantum science and technology (S&T).**

- The United Nations has **declared 2025 as the International Year of Quantum Science and Technology to raise awareness of quantum S&T's benefits.**
- Responsible quantum S&T calls for **ethical practices to prevent misuse, especially given the dual-use nature of the technology.**
- Companies **like IBM are committed to positive social impact and preventing harmful applications of quantum technology.**

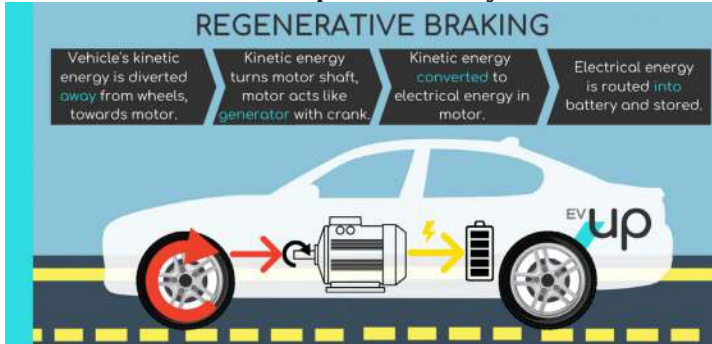
Challenges **include disparities in quantum S&T capacities between countries and ethical issues.** National policies often prioritize intellectual property protections over openness.

## 6. REGENERATIVE BRAKING

### Context:

**Regenerative braking** in **electric vehicles** is a system that **converts kinetic energy from the wheels into a storable form of energy, increasing efficiency.**

- Traditional braking methods, **such as disc and induction brakes, convert kinetic energy to heat.**
- In regenerative braking, **the electric motor that propels the vehicle acts as a generator during braking, converting mechanical energy back to electrical energy,** which is then stored in the vehicle's battery.
- While beneficial, regenerative braking has limitations, **such as not being sufficient alone to stop a vehicle completely and reduced energy recovery at lower speeds.**
- Other methods of energy recovery include fly-wheels and compressed air systems.



## 7. MITOCHONDRIAL DONATION

### Context:

**Mitochondrial disease (Mito)** encompasses **a group of disorders that impair mitochondria's ability to produce the energy necessary for organs to function,** potentially leading to organ failure.

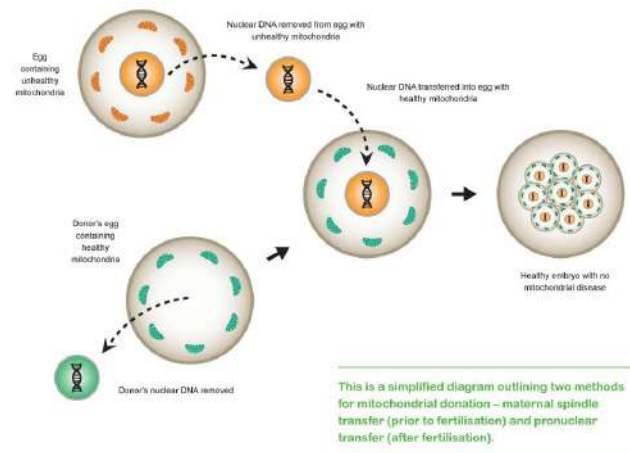
- A new procedure called **mitochondrial donation offers a cure for Mito.**

### Mitochondrial Disease:

- **Types:** Caused by **faulty genes in nuclear DNA (inherited from both parents) or mitochondrial DNA (inherited from the mother).**
- **Symptoms:** Affects 1 in 5,000 people, impacting **energy-intensive organs like the heart, brain, and muscles.**

### Mitochondrial Donation:

- **Procedure:** An **IVF-based technique allowing parents with faulty mitochondrial DNA to have genetically related children without passing on the disease.**
- **Process:** Involves **transferring nuclear DNA from an egg with faulty mitochondria to a donor egg with healthy mitochondria.** The resulting child inherits nuclear DNA from the parents and mitochondrial DNA from the donor.



## 8. MEDEVIS PLATFORM

### Context:

The **World Health Organization (WHO)** has launched **MeDevIS (Medical Devices Information System),** an online platform designed to **provide global open access to information on medical devices.**

- This platform **supports governments, regulators, and users in selecting, procuring, and using medical devices for diagnostics, testing, and treatment** of various health conditions.
- **MeDevIS covers 2301 types of medical devices** addressing health issues like **reproductive health, noncommunicable diseases, and infectious diseases such as COVID-19.**
- MeDevIS consolidates information from **multiple sources, simplifying the decision-making process for healthcare practitioners and patients.**

The platform references two international naming systems: **the European Medical Device Nomenclature (EMDN) and the Global Medical Device Nomenclature (GMDN),** which assist in regulatory approval, procurement, and inventory management.

The WHO aims for MeDevIS to improve **access to life-saving medical technologies, especially in resource-limited settings, and to contribute to universal health coverage.**

## 9. HYDROGEN PEROXIDE NEBULISATION

### Context:

Recently an actress sparked controversy by **advocating hydrogen peroxide nebulisation for viral infections, suggesting it as an alternative to medications.**

- This method involves **inhaling a mist of diluted hydrogen peroxide,** typically used in **disinfectants, which can lead to harmful by-products and lung damage.**

**About Hydrogen Peroxide:**

Hydrogen Peroxide ( $H_2O_2$ ) is a **colourless liquid with a slightly sharp odour**.

Hydrogen peroxide can cause **irritation to the eyes, nose, skin, and throat**. Workers may be harmed from exposure to hydrogen peroxide.



## 10. DRONE TESTED AT LADAKH'S UMLING LA PASS

**Context:**

A **Bengaluru-based firm, NewSpace Research and Technologies**, has successfully tested a **100-kg Max Take Off Weight (MTOW) drone** at an altitude of **19,024 feet at Umling La pass in Ladakh**, the **world's highest motorable pass**.

- It demonstrated the **drone's ability to carry a 25-kg payload**, surpassing the performance of

China's **DJI FlyCart 30 drone tested at Mount Everest base camp**.

- The drone, which flew to an **altitude of 6,200 meters, offers significant potential for civilian and military logistics, disaster relief, and medical transport** in high-altitude regions such as **J&K, Uttarakhand, and the North Eastern states**.

The NewSpace drone could also **reduce the cost of high-altitude logistics operations compared to traditional manned flights**, like those conducted by the Ministry of Defence.



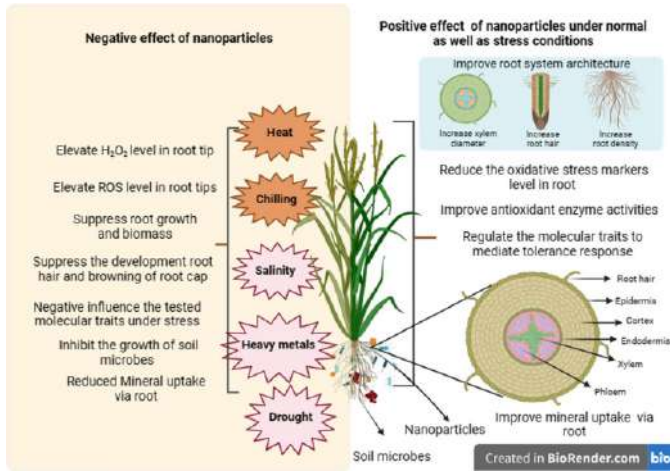
## 11. MINERAL NANOPARTICLES WITH WATER

**Context:**

Researchers at IIT Madras have discovered that **water microdroplets can break down minerals into nanoparticles**.

- This study, published in the journal Science, involved **creating nanoparticles from minerals such as silica and alumina by applying high voltage to mineral microparticles suspended in water**.
- The **electric fields and surface tension within the microdroplets facilitate this rapid transformation**, which is not possible with bulk water.

This innovative method holds **potential for significant applications in agriculture by infusing soil with silica nanoparticles** to enhance plant growth and transform unproductive lands into fertile areas.

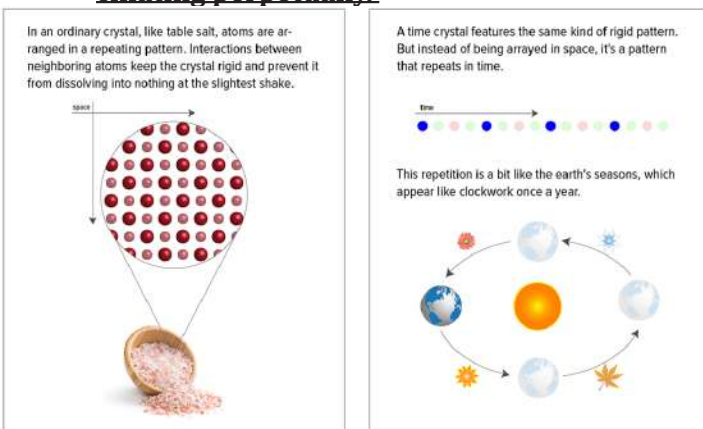


## 12. TIME CRYSTAL

### Context:

Physicists have created a **new type of “time crystal”** by **inflating rubidium atoms to hundreds of times their normal size using lasers.**

- This innovative method results in **atoms oscillating between two states without losing energy.**
- Unlike traditional matter, **time crystals break time symmetry, existing in the lowest energy state allowed by quantum mechanics and oscillating perpetually.**



## 13. NASA'S CHAPEA PROJECT

### Context:

**NASA's CHAPEA project** involved **four volunteers living in a simulated Mars habitat** for a year to **study the challenges of long-duration missions to Mars.**

- The mission, **part of NASA's Crew Health and Performance Exploration Analog (CHAPEA),** was the **first of three planned simulations.**
- The habitat, called **“Mars Dune Alpha,”** was a 1,700 sq ft 3D-printed structure at the Johnson Space Center in Houston, Texas, designed to **replicate Martian conditions, including a backdrop of red, rocky cliffs and simulated Martian soil.**
- The crew experienced conditions similar to those

on Mars, **including spacewalks in “Marswalks” suits, growing vegetables, and dealing with communication delays, limited resources, and prolonged isolation.**

### Environment & Ecology

## 14. BIODIVERSITY BEYOND NATIONAL JURISDICTION (BBNJ) AGREEMENT

### Context:

The Union Cabinet has approved **India's signing of the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement.**

- This decision **aims to conserve and sustainably use marine biodiversity** in areas **beyond national jurisdiction, known as the “High Seas.”**
- The **Ministry of Earth Sciences** will lead the implementation of the BBNJ Agreement.

### About Biodiversity Beyond National Jurisdiction (BBNJ) Agreement:

- The **BBNJ Agreement, also known as the “High Seas Treaty,”** falls under the **United Nations Convention on the Law of the Sea (UNCLOS).**
- It addresses the **protection of marine biodiversity in the high seas** through **international cooperation and sustainable practices.**
- The **agreement prohibits sovereign rights over high seas resources and promotes the fair sharing of benefits,** an inclusive ecosystem-centric approach, and the use of traditional and scientific knowledge.
- It also **aims to minimize environmental impacts and support the achievement of Sustainable Development Goal 14 (Life Below Water).**

The BBNJ Agreement will become the third implementation agreement under UNCLOS, alongside agreements on mineral resources and fish stocks.



## 15. PEARL SPOT FISH

### Context:

The **Kerala University of Fisheries and Ocean Studies (Kufos)** is set to launch a **genome editing mission** to enhance **the breeding and seed production of pearl spot fish**.

- This **initiative aims to improve the growth rate of pearl spots**, addressing the **long-standing challenges faced by farmers in Kerala who have struggled with slow growth rates in uncontrolled environments**.
- Pearl spots, **which fetch a high market price, take a year to reach 300-400 grams**, whereas genetically **improved tilapia achieve 600-700 grams in six months**.

### Defence

## 16. CAMCOPTER S-100

### Context:

India is set to **enhance its naval capabilities through a deal with Austrian company Schiebel for their Camcopter S-100 unmanned aerial system (UAS)**.

#### Features of Camcopter S-100:

- The **system can operate in various extreme climates** and **has a high endurance**, making it ideal for the Indian Ocean Region.
- The Indian Navy has begun using the **S-100 for Intelligence, Surveillance, and Reconnaissance (ISR) operations, which previously required manned helicopters**.
- The S-100, known for its **versatility and advanced technology**, operates with either aviation gasoline or kerosene and can function without GPS.
- It **requires minimal space for launch and recovery**, making it suitable for deployment from various naval vessels.


## 17. REPORTS IN NEWS

Reports	Description
Planet on the Move	By <b>IUCN</b>
	It calls for a <b>reimagined conservation approach that addresses the nexus among migration</b> , environmental change, and conflict.
	Environmental changes <b>drive migration, leading to resource conflicts and further environmental degradation</b> . Current migration policies often treat human and wildlife migration separately.
Financial Inclusion Index	The RBI released the Financial Inclusion Index for March 2024, with a value of <b>64.2, up from 60.1</b> in March 2023 (meaning higher Financial inclusion). This comprehensive index measures financial inclusion across banking, investments, insurance, postal, and pension sectors, reflecting the extent of inclusion in the country.
	<b>It ranges from 0 (complete exclusion) to 100 (full inclusion)</b> and includes three parameters: Access (35%), Usage (45%), and Quality (20%). The index is published annually in July.

<b>Digital Economy Report 2024</b>	By <b>UN Trade and Development (Established in 1964)</b> . It aims to help developing countries integrate into the global economy and has 195 member nations.
	It highlights the <b>urgent need for sustainable strategies in the digitalization lifecycle</b> . With internet users rising from 1 billion in 2005 to <b>5.4 billion</b> in 2023, the environmental footprint of digitalization is significant. The ICT sector <b>accounted for 1.5–3.2%</b> of global GHG emissions in 2020, and e-waste surged by 30% from 2010 to 2022, <b>reaching 10.5 million tonnes globally</b> .
	<b>Data centers consumed 460 terawatt hours</b> of electricity in 2022, with water use expected to double by 2026. The <b>demand for critical minerals like graphite, lithium, and cobalt could increase by 500% by 2050</b> , leading to potential environmental inefficiencies.
	The report recommends <b>adopting circular economy models, enforcing stricter environmental regulations</b> , investing in renewable energy and energy-efficient technologies, and promoting sustainable business models.

## MAPPING

### INDIAN

<i>Place</i>	<i>Why in News?</i>
<b>1. KOYNA, MAHARASHTRA</b>	<p><b>Context:</b> India is undertaking a <b>mission to drill a 6-km deep hole in the Koyna-Warna region</b> of Maharashtra to <b>study earthquakes and the earth's crust</b>.</p> <ul style="list-style-type: none"> <li>• This region has experienced <b>frequent earthquakes since the Koyna Dam was impounded in 1962</b>.</li> <li>• The <b>pilot borehole, drilled to a depth of 3 km</b>, has already provided significant insights, <b>including information on ancient lava flows and granitic basement rocks</b>.</li> <li>• The <b>deep drilling aims to better understand reservoir-triggered earthquakes</b> and involves complex techniques like <b>mud rotary drilling and air hammering</b>.</li> </ul> <div style="text-align: center; margin-top: 10px;">  <p style="font-size: small; margin: 0;">INDIA LOCATION MAP OF KOYNA DAM</p> <p style="font-size: x-small; margin: 0;">LEGEND</p> </div>

## 2. SIANG RIVER

**Context:** Locals are protesting against the proposed **Upper Siang hydropower project in Arunachal Pradesh** due to **environmental and social concerns**.

- The project, a **massive 11,000 MW dam on the Siang River**, is seen as a **strategic counter to China's hydropower projects**.

### **About Siang River:**

The Tsangpo, which originates in **China**, is called the **Siang** after it enters India through the **Upper Siang district in the northeastern state**.

The Siang joins two other rivers – **the Lohit and the Dibang** – downstream to form the Brahmaputra.

