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7 AUG - 12 AUG 2023

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Jan Vishwas Act 2022



Aspect	Details
	The recently passed Jan Vishwas Act, 2022 aims to enhance Ease of Living and Ease of Doing Business and to decriminalize minor offences that don't harm public interest or national security, replacing them with civil penalties .
Objective	Redefine the regulatory landscape by decriminalizing minor offences under 42 Central Acts and 19 Ministries/ Departments
Salient provisions	Decriminalizes 180 offences across 42 laws in areas like environment, agriculture, media, industry, etc. Replaces imprisonment clauses with monetary fines Allows compounding of some offences (meaning offenders can settle their cases by paying a certain amount without going through a court trial) Removes all offences and penalties under Indian Post Office Act, 1898 (considered obsolete in the present context) Introduces Adjudicating Officers for determining penalties. Periodic revision of fines with a 10% increase every 3 years .
Acts covered under it	The Air (Prevention and Control of Pollution) Act, 1981; The Environment (Protection) Act, 1986; The Indian Forest Act, 1927; The Agricultural Produce (Grading & Marking) Act, 1937; The Information Technology Act, 2000; The Copyright Act, 1957; The Motor Vehicles Act, 1988; The Cinematograph Act, 1952; The Food Safety and Standards Act, 2006, etc
Issues with the current system	Current business compliances: 1,536 laws, 70,000 compliances, and 26,134 with imprisonment clauses are burdening the administrative and judicial system The lengthy processing time for approvals currently, leads to increased costs There is excessive compliances burden business, particularly MSMEs. It hinders job creation, economic growth, and innovation.
How the act will solve the issues?	Will reduce the compliance burden , boosts business and well-being. Will reduce undue pressure on the justice system and attract investment Address technical and procedural defaults without imposing severe penalties Will establish a balanced approach between the severity of the offence and the prescribed punishment Promotes "trust-based governance" . Visit Insights IAS Daily Current Affairs for more News

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Contact:
08069405205

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GS1

PARLIAMENTARY PANEL FINDINGS ON DRUG ABUSE IN INDIA

Context:

Parliament Standing Committee on Social Justice and Empowerment in India has recommended conducting a survey to assess the **impact of drug abuse on society**. In 2018, the ministry commissioned a national survey conducted by the **National Drug Dependence Treatment Centre (NDDTC) AIIMS**, which formed the basis of the **National Action Plan for Drug Demand Reduction (NAPDDR)** to address drug abuse in the country.

What is Drug Abuse?

Drug abuse refers to the **excessive, inappropriate, or harmful use of legal or illegal substances**, leading to negative physical, mental, social, and behavioural consequences.

Findings of the Panel:

- **No comprehensive study or survey** has been conducted by the Ministry of Social Justice and Empowerment to assess the **impact of drug abuse on society**.
- **Around 37 crore people** in the age groups of **10-17 years (children)** and **18-75 years (adults)** are using drugs and alcohol in states like Punjab, Haryana, Delhi, Uttar Pradesh, Odisha, and Maharashtra.
- **Penetration of District De-Addiction Centers (DDAC)** is inadequate.
- **Decrease in financial allocations** for preventive education and awareness programs.
- **Delay in providing training to Master Trainers** under the Navchetna Programme, which focuses on life skills and drug education for school children.

Recommendations
1. Regular meetings and reviews of the Apex Committee of Narcotics Coordination Centre (set up by the Ministry of Home Affairs in 2016).
2. Establish an impact assessment mechanism for National Action Plan for Drug Demand Reduction (NAPDDR) .
3. Incorporate awareness chapters on drug addiction, consequences, and de-addiction measures in the education curriculum.
4. Foster inter-ministerial coordination to address both supply and demand side issues.
5. Conduct periodic surveys by National Drug Dependence Treatment Centres (NDDTC) to stay updated on drug abuse situations.
6. National Institute of Social Defence should undertake the survey to provide a clearer understanding of the issue and aid in better intervention strategies

India's vulnerability:

India is geographically situated between **major drug-producing regions**, including the **Golden Crescent** (Pakistan, Afghanistan, Iran) and **Golden Triangle** (Thailand, Myanmar, Vietnam, Laos).

Negative impacts of drug addiction on individuals, families, and society:

Aspect	Negative Impacts	Examples
Individuals	Physical health deterioration	Lung damage due to smoking
	Mental health disorders	Anxiety, depression, psychosis
	Impaired cognitive function	Memory loss, decreased concentration
	Reduced productivity and job loss	Frequent absenteeism from work
	Financial strain and poverty	Spending money on drugs, neglecting bills
	Criminal involvement and legal issues	Arrests for drug possession
Families	Breakdown of family relationships	Strained communication, conflicts
	Emotional distress and trauma	Children witnessing parent's addiction
	Financial instability due to addiction-related costs	Draining savings to support addiction
	Neglect of responsibilities towards family	Parents failing to provide for children
	Increased domestic violence	Arguments and fights fueled by addiction
Society	Increased crime rates and public safety concerns	Drug-related thefts, violence
	The burden on healthcare systems	Increased hospital admissions
	Reduced workforce productivity	Absenteeism and decreased output
	The strain on social services	Overburdened rehabilitation centres
	Impact on education and future prospects	Dropouts due to addiction-related issues
	Disruption of community well-being	Communities plagued by drug-related issues

Government measures to address drug abuse:

- **'Nasha Mukh Bharat Abhiyaan'** (Drugs-Free India Campaign) was launched in August 2020 in 272 vul-

nerable districts.

- The **Ministry of Social Justice & Empowerment** is implementing the **National Action Plan for Drug Demand Reduction (NAPDDR)** for 2018-2025.
- The **Narco-Coordination Centre (NCORD)** was established in November 2016.
- The “**National Fund for Control of Drug Abuse**” was created to support efforts against illicit drug traffic, addiction rehabilitation, and public education.
- **National Drugs & Psychotropic Substance** (NDPS) Act, 1985 (Narcotics Control Bureau has been set up under it)
- **National Policy on Narcotic Drugs and Psychotropic Substances 2012**

InstaLinks:

- [The ‘war on drugs’](#)
- [HM reply on the Drug Abuse problem](#)

Mains Link:

India is vulnerable to narcotic drug trafficking. Critically examine its causes. Also, comment on the role of the Government in combating the drug problem. (15M)

81ST ANNIVERSARY OF ‘QUIT INDIA MOVEMENT’

Context:

On the 81st Anniversary of the historic ‘**Quit India Movement**’, the Vice-President, PM and Chairman of Rajya Sabha, paid homage to freedom fighters and highlighted the movement’s enduring relevance.

About Quit India Movement (also known as the August Movement)

It was a movement launched at the Bombay session of the All-India Congress Committee by Mohandas Gandhi on 8th August 1942, during World War II, demanding an end to British rule in India.

Reasons that led to the Quit India movement:

- The Failure of the **Cripps Mission**
- **Wartime miseries:** There was popular discontent because of rising prices and shortage of rice, salt, etc.,
- **Weakening Empire:** News of reverses suffered by the British in Southeast Asia and an imminent British collapse. It also shattered the **notion of White prestige**

QIM united people against British Rule:

- **People’s movement:** By August 9, Gandhi and all other senior Congress leaders had been jailed. With no one to give directions, people took the movement into their own hands.

- **Public rampage:** Many felt Gandhi’s mantra of **Do or Die** represented the militant mood of Gandhi. The general public attacked symbols of authority and hoisted national flags forcibly on public buildings. Satyagrahis offered themselves up to arrest, **bridges were blown up, railway tracks were removed, and telegraph lines were cut.**
- **Parallel governments:** Parallel governments were established in many places:
 - **Ballia** (for a week)—under Chittu Pandey.
 - **Tamluk —Jatiya Sarkar** undertook cyclone relief work, sanctioned grants to schools, supplied paddy from the rich to the poor, **organised Vidyut Vahinis**, etc.
 - **Satara (mid-1943 to 1945)**—named “Prati Sarkar”, was organised under leaders like Y.B. Chavan, Nana Patil, etc. **Village libraries and Nyayadan Mandals were organised**, prohibition campaigns were carried on, and ‘**Gandhi marriages**’ were organised.
- **Active help by all sections:** was provided. Extended Mass Participation:
 - By **businessmen** through donations, shelter, and material help, **students** (acting as couriers),
 - **Youth, especially the students** of schools and colleges, remained at the forefront.
 - **Women**, especially school and college girls, actively participated and included Aruna Asaf Ali, Sucheta Kripalani, and Usha Mehta.
 - **Workers** went on strikes and faced repression.
 - **Peasants** of all strata were at the heart of the movement. Even some **zamindars participated**. These peasants concentrated their offensive on symbols of authority, and there was a complete **absence of anti-zamindar violence**.
 - **Simple villagers-** by refusing information from the authority.
 - Muslims helped by giving shelter to underground activists. **There were no communal clashes during the movement.**
- **Loyalty to the government suffered considerable erosion:** This also showed how deep nationalism had reached.
 - **Government officials including police participated**, passed on secret information to the activists, especially those belonging to lower levels of police and administration, resulting in an **erosion of government loyalty**.
 - **Pilots and train drivers** by delivering bombs and other materials.

Although QIM was **violently suppressed by the British**, it had mobilised the masses with Unparalleled heroism and militancy, which was not seen during the Non-cooperation Movement (1920) and **Civil Disobedience Movement** (1930). QIM changed the **character of the Indian freedom struggle**

and placed the demand for independence on the immediate agenda of the national movement.

Quit India Movement's Enduring Relevance Today:

Aspect	Enduring Relevance Today
Unity and Togetherness	Demonstrates the power of collective efforts for a cause
Determination and Dedication	Inspires perseverance and commitment to challenges
Upholding Sovereignty and Integrity	Reinforces the importance of safeguarding national identity
Striving for Independence	Encourages pursuit of self-reliance and autonomy
Overcoming Challenges and Adversity	Provides lessons in resilience and overcoming obstacles
Social and Political Activism	Inspires citizen participation for societal betterment
Leadership and Courage	Highlights the impact of bold leadership and courage
Promoting National Pride	Instils a sense of patriotism and pride in the nation

Conclusion

As **Ram Manohar Lohia** wrote on the 25th anniversary of the Quit India Movement **"9th August was and will remain a people's event. 15th August was a state event... 9th August 1942 expressed the will of the people — we want to be free, and we shall be free. For the first time after a long period in our history, crores of people expressed their desire to be free..."**

Insta links: [Quit India Movement](#)

Mains Links:

The Quit India Movement has rightly been described as the most massive anti-imperialist struggle on the eve of Partition and Independence. Explain. (10M)

HEALTH FACILITIES FOR TRIBAL WOMEN REPORT

Context:

A Parliamentary Committee (on the empowerment of women) tabled a report criticizing the Union government for **lacking disaggregated data on tribal populations' health conditions** and emphasized the need for comprehensive data collection.

Major Highlights of the Report:

Key Highlights	Description
Lack of Disaggregated Health Data	The report highlights the absence of detailed data on the health conditions of tribal populations in the country.
Early Marriage	Early marriage in tribal women causes early pregnancy and other general health risks.
Prevalence of Health Issues among Tribal Women	The report highlights how tribal women suffer from malnutrition , a high infant mortality rate (over 41%), and communicable diseases like malaria, tuberculosis etc (NHFS-5) More than half of tribal women of reproductive age suffer from anaemia
Online Portal for Registration	An online portal is being established for tribal people to register for diseases, allowing targeted interventions. However, the committee critiques the online portal and suggests setting up self-help kiosks for easier registration.

Key Recommendations:

- **Extensive Data Collection:** The committee recommended the inclusion of tribal sub-samples in the National Family Health Survey-5
- **Empowerment of ministry:** The committee suggests empowering the Tribal Affairs Ministry to plan resources for tribal welfare in various sectors.
 - Ministry of Tribal Affairs should work **with MoHFW to generate central health data for tribals** with separate classifications like **girl children, women of various age groups etc**
- **Inclusive data collection:** The committee recommends including tribal populations in data collection and examining the information periodically.
- **Focus on Prenatal, Post-natal Care, and Access to Health Services,** including mental health and emergency services.
- **Ministry's Efforts to Monitor Tribal Health Data:** The Tribal Affairs Ministry is working on a central database to monitor the health of tribal people.
- **Linking of the Swasthya portal to various government databases** such as the POSHAN tracker
- **Education:** Devise a special action plan to retain tribal girl children in school and develop an alternate learning program for 'out of school' girl child

For Health Schemes in Tribal areas: [Click Here](#)

Best practices:

Mera Baccha Abhiyan:

- It aims to fight malnutrition through public participation in Datia district, Madhya Pradesh.
- As a result, the district witnessed a drop in malnutrition

rates (by over 17%), a rise in immunisation, breastfeeding and a drop in diarrhoea.

Piramal Swasthya – One of the largest implementing agencies of primary healthcare programmes in India:

- It has over a decade's experience of working with the tribal communities of Andhra Pradesh, implementing its unique community-based model.
- More recently, it has partnered with **NITI Aayog to transform the health and nutrition systems in 25 Aspirational Districts spread across 7 States of India.**

Insta Links:

- [Launch a national tribal health mission](#)
- [India@100: Resolving the tribal health challenge](#)

GS2

LOWERING THE MINIMUM AGE FOR CONTESTING ELECTION

Context:

A Parliamentary panel has suggested lowering the minimum age for contesting in Assembly elections **from 25 years to 18 years.**

Benefits of Lowering Minimum Age	Description
1. Youth Representation: This allows young individuals to participate actively in the political process and bring fresh perspectives to policy discussions.	In countries like Canada , where the minimum age for candidacy in federal elections is 18 , young leaders like Pierre-Luc Dusseault were elected to the House of Commons at a young age.
2. Enhanced Political Engagement: Encourages political awareness and involvement among youth, contributing to a more engaged and informed citizenry.	The success of youth-led movements such as " March for Our Lives " in the United States demonstrates the political activism and engagement of young people.
3. Diverse Leadership: Promotes diversity in leadership by allowing representation from different age groups, backgrounds, and experiences.	Young youth leaders will bring new energy and momentum to the parliamentary system.

4. Adaptation to Modern Challenges: Acknowledges that young candidates may have insights into contemporary issues like technology, climate change, and social justice.

The committee pointed out that surveys show significant political awareness and knowledge among youth globally.

Drawbacks of Lowering Minimum Age:

Drawbacks	Examples
1. Lack of Experience	Young candidates might lack the experience and maturity required for effective decision-making and governance.
2. Limited Understanding	Young candidates may have a limited understanding of the complexities of governance and public policy.
3. Vulnerability to Influence	Young candidates might be more susceptible to external influence, as they may have less exposure to political dynamics.
4. Inadequate Preparedness	Lowering the age might lead to unprepared candidates entering the political arena, resulting in ineffective representation.

Election Commission's view:

The Election Commission **disagreed with the proposal**, stating that **18-year-olds might lack the necessary experience and maturity** for such responsibilities.

Other proposals discussed by the committee:

- **Common Electoral Rolls:** The committee discussed the **concept of a common electoral roll for different types of elections** but urged caution, emphasizing the importance of maintaining the **principles of federalism**.
 - Currently, **some states utilize the Election Commission's electoral rolls**, while others do not
 - Implementing a common electoral roll, as proposed by the **central government and ECI**, is presently **outside the scope of Article 325**.
 - The committee expressed concern about the **potential impact of a common roll** on state powers listed under **Chapters IX and IX A of the constitution**.
- **Aadhaar and Voter ID linking:** The committee expressed **concerns about linking the Aadhaar and Voter IDs of non-citizens**, suggesting the establishment of **legal provisions to ensure non-citizens with Aadhaar are not included on electoral rolls**.

- **Remote voting:** The committee invited comments from political parties on Election Commission's proposal for remote voting for internal migrants

Recommendations by the committee:

- False declaration during nominations: The panel recommended **increasing the punishment for filing a false affidavit from six months to up to two years**, depending on the severity of the offence.
- **Section 125A of the Representation of People Act of 1951**, deals with the penalties for providing false information.

Insta Links:

[Salient Features of the Representation of People's Act](#)

Mains Links:

With an increasing number of young leaders taking centre stage in the electoral discourse, Do you think the time has come to revisit the minimum age for contesting Lok Sabha elections? Provide your opinion and examine the pros and cons associated. (250 words)

JUSTICE ROHINI PANEL'S FINDING

Context:

The Justice G. Rohini-led Commission, **established in 2017** to explore the **sub-categorization of Other Backward Classes (OBC) groups**, submitted its report to the President of India on July 31, 2023, after numerous extensions.

What is the sub-categorization of Other Backward Classes (OBC) groups?

Sub-categorization of Other Backward Classes (OBC) groups involves **classifying existing OBC caste groups into further categories based on their historical dominance** in availing government benefits meant for OBCs.

- **Aim:** It aims to **ensure a more equitable distribution of benefits among OBC communities** by giving higher shares to **historically marginalized groups** and lesser shares to those that have **traditionally dominated such benefits**.

Background:

- **National Commission for Backward Classes (NCBC)** proposed the sub-categorisation of Other Backward Classes (OBCs) back in 2015.
- In October 2017, former President Ram Nath Kovind, in the exercise of the powers conferred by **Article 340 of the Constitution**, appointed a commission to examine the **issue of sub-categorisation of OBCs**, chaired by retired Justice G. Rohini, to ensure social justice in an efficient manner by prioritising the Extremely Backward Classes (EBCs).

What is Article 340?

- It lays down **conditions for the appointment of a Commission** to investigate the conditions of the backward classes.
- The President **may by order appoint a Commission consisting** of such persons as he thinks fit to investigate the conditions of socially and educationally backward classes within the territory of India.

Constitutional basis:

- **Article 14 of the Constitution guarantees equality before the law.** Measures are required to be taken for the upliftment of unequal to bring them on par with the advanced classes.
- **Article 16 (4) provides that the State can make any provision** for the reservation of appointments or posts in favour of any backward class of citizens who, in the opinion of the state, are not adequately represented in the services under the State.

Need for sub-categorization:

There is a perception that **only a few dominant caste groups among them benefit from the existing 27% reservation** in central government jobs and educational institutions.

- In 2018, an analysis of data from 1.3 lakh central government jobs and OBC admissions to central higher education institutions revealed that **97% of benefits were availed by just 25% of OBC castes**.
- **Approximately 37% (983) of OBC communities had no representation** in these opportunities, underscoring the necessity for sub-categorization.

The mandate of the Commission:

Commission was tasked with **first examining how much of 27% reservation** (jobs and education) and other government benefits meant for OBCs was dominated by which caste groups.

Major Findings

- **The Dominance of Few Caste Groups:** A small number of caste groups among all OBC groups were found to **dominate the reservation quotas** and other government benefits meant for OBCs.
- **Equitable Redistribution:** The need to ensure a more equitable distribution of benefits among OBC communities was identified, aiming to address the imbalance caused by the dominance of certain groups.
- **Reservation Allocation Formula:** The Commission formulated a formula to **allocate reservation shares based on historical underrepresentation**, with the objective of providing a larger share to historically marginalized groups and reducing the share of dominant groups.
- **Rationalization of Central OBC List:** The Commission suggested corrections and replacements

in **spellings within the Central OBC list**, aiming to rectify errors and inaccuracies in the entries.

Why are the Commission's findings significant?

The findings are significant because they provide **exact numbers on OBC communities benefiting from reservations since 1992**.

- **Socio-Economic Data Significance:** The data on socio-economic changes among OBC communities since the **inception of reservation in 1992 is of great significance** as it reflects the impact of reservation policies on these communities' development.
- **Electoral Implications:** The distribution of benefits, could have direct implications on the **electoral strategies of political parties**, leading them to reconsider their approach towards **caste-based vote banks**.
- **Caste census:** The findings come amid calls for a **caste census and growing interest in caste-based surveys**.

Conclusion:

The government intends to hold detailed deliberations with various stakeholders before implementing the recommendations to address concerns and ensure smooth execution.

Insta links: [Commission to examine the issue of Sub-categorization](#)

Prelims Links:

Q. Consider the following organizations/bodies in India: (UPSC 2023)

1. The National Commission for Backward Classes
2. The National Human Rights Commission
3. The National Law Commission
4. The National Consumer Disputes Redressal Commission

How many of the above constitutional bodies?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Ans: A

JAN VISHWAS ACT, 2022 AND SEPARATION OF POWER

Context:

The recently enacted **Jan Vishwas Act, 2022**, aimed at easing business regulations, transfers the authority to impose penalties for offences from the judiciary to the bureaucracy. This move has raised concerns **about the separation of powers**, as bureaucrats become both prosecutors and judges.

What is Separation of Power?

Separation of Powers is a **fundamental principle in governance** where the powers of a government are **divided among different branches to prevent any one branch from having unchecked authority**. It ensures a system of **checks and balances**.

For example, in a democratic country, the **legislative, executive, and judicial branches** have distinct functions to prevent the concentration of power and ensure accountability.

About the act:



Jan Vishwas Act 2022



Aspect	Details
	The recently passed Jan Vishwas Act, 2022 aims to enhance Ease of Living and Ease of Doing Business and to decriminalize minor offences that don't harm public interest or national security, replacing them with civil penalties .
Objective	Redefine the regulatory landscape by decriminalizing minor offences under 42 Central Acts and 19 Ministries/ Departments
Salient provisions	Decriminalizes 180 offences across 42 laws in areas like environment, agriculture, media, industry, etc. Replaces imprisonment clauses with monetary fines Allows compounding of some offences (meaning offenders can settle their cases by paying a certain amount without going through a court trial) Removes all offences and penalties under Indian Post Office Act, 1898 (considered obsolete in the present context) Introduces Adjudicating Officers for determining penalties. Periodic revision of fines with a 10% increase every 3 years .
Acts covered under it	The Air (Prevention and Control of Pollution) Act, 1981; The Environment (Protection) Act, 1986; The Indian Forest Act, 1927; The Agricultural Produce (Grading & Marking) Act, 1937; The Information Technology Act, 2000; The Copyright Act, 1957; The Motor Vehicles Act, 1988; The Cinematograph Act, 1952; The Food Safety and Standards Act, 2006, etc
Issues with the current system	Current business compliances: 1,536 laws, 70,000 compliances, and 26,134 with imprisonment clauses are burdening the administrative and judicial system The lengthy processing time for approvals currently, leads to increased costs There is excessive compliances burden business, particularly MSMEs. It hinders job creation, economic growth, and innovation.
How the act will solve the issues?	Will reduce the compliance burden , boosts business and well-being. Will reduce undue pressure on the justice system and attract investment Address technical and procedural defaults without imposing severe penalties Will establish a balanced approach between the severity of the offence and the prescribed punishment Promotes "trust-based governance" .

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Issues Related to Jan Vishwas Act:

Issues	
Violates Separation of Power	The legislation replaces criminal imprisonment with monetary penalties but shifts the authority to impose penalties to the bureaucracy . It amends environmental and pollution control Acts to replace imprisonment with penalties, decided by designated bureaucrats
A form of 'quasi-decriminalization':	Critics argue the Act offers a form of 'quasi-decriminalization' , and more efforts are needed for true decriminalization .
Technical competence of adjudicating officers	Questions were raised about the technical competence of adjudicating officers under the Act , especially in environmental legal proceedings.

Status of division of powers between executive and judiciary in India:

The division of powers between the judiciary and the executive is **not explicitly outlined in the Constitution**.

- **Article 50** instructs the state to achieve this separation over time.
- **Initially, the criminal magistracy** was part of the executive at Independence.
- It was only **around 1970 that certain State legislatures**, like West Bengal, enacted laws to separate the judicial and executive functions within the criminal magistracy under the [Criminal Procedure Code, 1898](#)

The bureaucracy encroaches upon judicial power through various methods:

- **Establishing Judicial Tribunals:** Ministries create judicial tribunals to take over judicial functions, often appointing bureaucrats as **“technical members”**
- **Creating Statutory Regulators:** The Union government establishes regulators like **SEBI and CCI** with the authority to impose substantial fines on private sector entities.
- **Appointing Adjudicatory Officers:** The government introduces **adjudicatory officers in legislation like the Prevention of Money Laundering Act, IT Act, and Food Safety Act**. These officers, who are bureaucrats, possess **powers to impose penalties or confirm property attachment orders**.

Supreme Court Views:

- A “judicial function” should only be **performed by an independent** judicial authority free from executive control.
- While there is **limited precedent on whether imposing penalties qualifies** as a “judicial function,” processes involving **fact-finding, applying the law, and determining punishment or compensation** fundamentally constitute a judicial function.

Hence, it's the **government's duty to present its case before an impartial judge** to guarantee citizens a fair trial before any penalty is imposed. The government cannot serve as both **prosecutor and judge in its own matter**.

Insta Links:

- [The Jan Vishwas \(Amendment of Provisions\) Bill 2023](#)
- [Good Governance Practices](#)

NATIONAL NURSING AND MID-WIFERY COMMISSION (NNMC) BILL, 2023

Context:

The Parliament has approved the **National Nursing and Midwifery Commission (NNMC) Bill, 2023**, a significant legislative reform aimed at **revolutionizing the [nursing education and practice sector](#)**.

Objectives:

- This bill will replace the existing **Indian Nursing Council** with a modern regulatory structure.
- Repeal the existing **Indian Nursing Council Act, of 1947**, as the act is outdated and **does not reflect the current needs and demands**
- It will aim to enhance **standards, professionalism, transparency, and accountability** in the nursing field.

What is Nursing and Midwifery?

Nursing involves providing healthcare services, monitoring patients, administering treatments, and assisting doctors. Midwifery specifically focuses on providing care to pregnant women before, during, and after childbirth, as well as newborn care. Both roles are critical in healthcare systems.

Key highlights of the proposed National Nursing and Midwifery Commission (NNMC) Act, 2023

Highlight	Description
Establishment of Commissions	National and State Nursing and Midwifery Commissions to regulate education, service standards, and conduct.
Tenure and Accountability	Fixed tenures for Commission members to ensure transparency and prevent reappointment for vested interests.
Uniform Admission and Competence	Implementing standardized admission processes and maintaining competence for high-quality healthcare services.
Innovation and Collaboration	Encouraging technology and industry collaboration for advanced nursing education, excellence, and research.
Soft Skills and Specialized Courses	Focusing on soft skill development and recognizing specialized courses to enhance nursing professionals' expertise.

Global Mobility and Expertise	Facilitating Indian nurses' global mobility through international expert participation in Commission meetings.
Advisory Council and Coordination	Forming a National Advisory Council for balanced representation and promoting collaboration with other healthcare bodies.

Insta Links: ["State of the World's Nursing" report](#)

NATIONAL DENTAL COMMISSION BILL, 2023

Context:

The Parliament has passed the **National Dental Commission Bill, 2023**, aiming to elevate **dental education and health-care** standards in India.

Aim: To improve **dental care accessibility, professionalism, and global employability** for Indian dental professionals.

Key provisions of the Bill:

Provisions	Description
Constitution of NDC and State Dental Councils	Establishes the National Dental Commission (NDC) and mandates State Dental Councils or Joint Dental Councils for decentralized regulation.
Three Autonomous Boards	Empowers Under-Graduate and Post-Graduate Dental Education Board , Dental Assessment and Rating Board (DARB), and Ethics and Dental Registration Board (EDRB).
Fixed Tenure and Professional Development	Introduces fixed tenures for Chairperson, Members, and Secretary , emphasizing promotive and preventive dental care and soft skills development.
Industry Collaboration and Technological Innovation	Encourages partnerships with industry and institutions for dental research and integrates advanced technology into education.
Online National Register and Dental Advisory Council	Establishes an online National Register of licensed Dentists , along with a Dental Advisory Council for comprehensive insights and guidance.

Merit-Based Selection Process	Appoints NDC Chairman and Members through a merit-based selection process conducted by a Search-cum-Committee chaired by the Cabinet Secretary.
Collaborative Approaches	Facilitates joint sittings with relevant bodies like National Medical Commission, Pharmacy Council, Nursing Council, and more.
Fee Regulation and Constitutions	Empowers Commission to frame fee guidelines for private dental colleges , and requires establishment of State Dental Councils or Joint Dental Councils.

Insta Links: [Dentists to practice as general physicians](#)

STANDING COMMITTEE REPORT ON "JUDICIAL PROCESS AND THEIR REFORMS"

Context:

The Parliamentary standing committee on Personnel, Grievances, Law and Justice has recommended that judges of the **Supreme Court** and **high courts** should be required to **declare their assets annually**, citing the need for transparency and public trust.

Key issues highlighted and Recommendations:

Issues Highlighted	Recommendations by the committee
Lack of Transparency in the Judiciary	Recommend enacting a law requiring judges of the Supreme Court and high courts to declare assets annually . Emphasize that asset disclosure enhances trust and credibility in the judiciary.
Huge pendency of cases	Establish 4-5 regional benches of SC, wherein the regional benches may decide appellate matters
Non-publication of Annual Report	Currently, only a few HCs release their annual report . SC should direct HCs to publish Annual Reports in a unified format .

Long Court Vacations	Suggest doing away with long court vacations to address the perception of inconvenience to litigants.
	Acknowledge that vacations contribute to the pendency issue .
Lack of Social Diversity in Judicial Appointments	Stress on appointing an adequate number of women and candidates from marginalized sections to high courts and the Supreme Court, promoting diversity and trust in the judiciary .
	Include this provision in the Memorandum of Procedure (MoP) . Currently, only 15% of registered advocates are women
Increasing the Retirement Age of Judges	Propose amending the Constitution to increase the retirement age of high court and Supreme Court judges . The current retirement age is 62 years for HC judges and 65 for SC judges
	Reassess judges' performance based on health, judgment quality, and quantity delivered.
	This can contribute to impartiality and quality in post-retirement assignments .

Other major Issues in the Indian Judiciary:

Issues	Description
Inadequate Physical and Digital Infrastructure	Shortage of courtrooms, basic facilities, and parking spaces causing overcrowding and procedural delays.
	Need for digital infrastructure for virtual hearings, underscored by the Covid-19 pandemic.
	Live streaming of court proceedings is limited in most courts, excluding certain case categories.
Limited Use of Alternative Dispute Resolution (ADR)	Underutilization of ADR mechanisms like mediation and arbitration, contributes to court burden.
Recruitment Delays	Slow filling of judicial vacancies, resulting in inadequate judge-to-population ratio.
	High courts with almost 400 vacancies; around 35% of vacancies are in the lower judiciary.

Other improvements required:

- **Strengthen E-Court System:** Implement a robust e-court system for digitized records, online filing, e-summons, and video conferencing for hearings.
- **Transform Appointment System:** Fill judicial vacancies promptly, establish clear appointment timelines, and consider All India Judicial Services (AIJS)
- **Case Management Software:** Develop software to track case progress, automate tasks, and improve coordination among stakeholders.
- **Data Analytics and Case Prediction:** Utilize data analytics and AI to predict case outcomes, aiding judges in informed decisions.
- **Public Legal Education:** Promote awareness programs to empower citizens with legal knowledge, reducing unnecessary litigation.
- **Citizen Feedback Mechanism:** Establish a feedback system to identify areas for improvement in the judicial process.

Insta Links: [The problem of vacancies in the Indian Judiciary](#)

Mains Links:

Critically examine the Supreme Court's judgement on the 'National Judicial Appointments Commission Act, 2014' with reference to the appointment of judges of higher judiciary in India. (150 words)

Prelims Links:

Q. Consider the following statements: (UPSC 2019)

1. The 44th Amendment to the Constitution of India introduced an article placing the election of the Prime Minister beyond judicial review.
2. The Supreme Court of India struck down the 99th Amendment to the Constitution of India as being violative of the independence of the judiciary.

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

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

Ans: B

5 YEARS OF AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA (AB-PMJAY)


Context:


The "[Ayushman Bharat Pradhan Mantri Jan Arogya Yojana](#)" (AB-PMJAY) has marked **five years of success in providing accessible healthcare** to economically vulnerable populations.

Features:

About ABPM-JAY

- It is the **world's largest health assurance scheme** (launched in 2018 by MoH&FW). It provides medical insurance of Rs 5 Lakh to over 10 Cr marginalized families (identified through SECC 2011 data) for secondary and tertiary care hospitalization.
- Centrally sponsored scheme
- Funding: 60:40 & 90:10 (NE states and three Himalayan states- J&K, Himachal and Uttarakhand)
- No limit on family size covered or age of members.
- It covers pre-existing diseases
- Implementation by National Health Authority





Ayushman Bharat Digital Mission (ABDM)

- It aims to develop the **digital backbone** for integrated digital health infrastructure.
- launched in 2021, it is **Central sector scheme**
- It contains: ABHA health account numbers; ABHA App; Health Facility Registry and Unified Health Interface (for patients and health provider interactions)
- Implementation: **National Health Authority** under MoH&FW.

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Impact of the Scheme:

- Out of Pocket Expenditure:** It provides support to more than **12 crore families**, aiming to encompass **50% of India's population**.
 - By doing so, it **reduces out-of-pocket health-care expenses** and has saved over Rs 1 lakh crore in treatment costs.
- Gender Equality:** The scheme promotes gender equality, with **48% of treatments benefiting women**, ensuring equitable healthcare access.
- Universal Health Coverage:** AB-PMJAY aligns with Sustainable Development Goal 3.8 by moving India closer to **universal health coverage**, guaranteeing quality healthcare regardless of economic status.
- Easy Access:** With over **27,000 hospitals accepting the Ayushman Card** for free treatment, patients can access care in any state with AB-PMJAY, particularly benefiting migrants.
- Fraud Prevention:** The scheme employs the **National Anti-Fraud Unit (NAFU)** and state-level units, along with **Aadhaar-based authentication**, AI, and ML technologies to detect and prevent fraud.
 - It has de-empaneled **over 210 hospitals for violations**.
- Feedback System:** Patients receive **post-treatment calls** to assess the quality of services, enhancing accountability and service improvement.

Challenges in implementing the scheme:

Challenges	Details
Cooperation of States	States' cooperation is required for harmonizing state health insurance schemes with PMJAY; Some states like West Bengal and Odisha have not implemented PMJAY

Burden of Costs	Costs disputed between care providers and the Centre; For-profit hospitals find government proposals financially unviable
Inadequate Health Capacities	Public sector health facilities lack equipment and capacity; Need partnerships with the private sector; Accountability of service providers is crucial
Unnecessary Treatment	National Health Policy 2017 suggested "strategic purchasing" from secondary and tertiary hospitals; Contracts with providers must ensure adherence to guidelines and treatment protocols to prevent unnecessary treatment

Issues identified as per the latest CAG Report:

Audit Findings	Details
Beneficiary Irregularities	Over 7 lakh beneficiaries are linked to a single mobile number in the Beneficiary Identification System (BIS) of the scheme
Household Size Inconsistencies	Unrealistic family sizes in 43,197 households (11 to 201 members) indicate validation control issues
Pensioner Inclusion	Pensioners in states like Chandigarh, Haryana, etc. availing PM-JAY benefits led to excess payments to insurers
Ineligible Beneficiaries	Delayed removal of ineligible beneficiaries caused improper benefits and extra premium payments
Errors in Beneficiary Identification	Nearly about 73% of targeted households are actual beneficiaries
Claims management issues	Overlap of beneficiaries with state-sponsored schemes , excess payments, inadequate validation checks, etc.,
Grievance redressal issues	Only about 10% of the complaints were redressed within the timeframe

Improvements:

- Communication and Verification:** The National Health Authority (NHA) aims to rectify inconsistencies through **BIS 2.0**, disallowing the use of the same mobile number for multiple families.
- The NHA is also developing a policy to **disable the 'Add Member' functionality** in case of any beneficiary family with **more than 15 members**

Recommendations:

- **Implement robust validation checks** to enhance the accuracy and reliability of the provided data
- **Promote the participation of additional private hospitals** in the scheme
- Establish effective **oversight of claim processing and payment**
- **Establish District Implementing Units** for efficient scheme implementation at the local level.

Conclusion:

Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY) has made **significant strides in expanding healthcare accessibility** and **reducing out-of-pocket expenditure**. Addressing these challenges will be crucial to ensuring the continued success and effectiveness of PMJAY in providing quality healthcare to millions of beneficiaries across India.

Insta Links: [Ayushman Bharat](#)

Mains Links:

The Ayushman Bharat Digital Mission (ABDM) aims to develop the backbone necessary to support the integrated digital health infrastructure of the country. Critically analyse. (250 words)

CENTRE'S BILL ON ELECTION COMMISSION APPOINTMENTS

Context:

A Bill ([Chief Election Commissioner and other Election Commissioners](#) (Appointments, Conditions of Service, Term of Office) Bill) has been proposed by the Centre in the Rajya Sabha to amend the process of **appointing Chief Election Commissioners (CEC) and Election Commissioners (ECs)** in order to address the impact of a Supreme Court verdict.

Background:

[In March this year, the Supreme Court ruled that](#) a **committee comprising the Prime Minister, Leader of Opposition in Lok Sabha, and Chief Justice of India** must appoint CEC and ECs until a relevant law is enacted by Parliament. The court noted that the **Constitution lacked provisions for the appointments**. The judgment brought the appointment process **on par with that of the CBI Director**.

The new Bill's Aim: The proposed Bill seeks to **replace the Chief Justice of India** with a nominated Cabinet Minister in the committee for appointments.

Major features of the new bill:

Feature	Description
Committee Composition:	The bill proposes a committee for selecting members of the Election Commission of India (ECI) . The committee comprises the Prime Minister, the Leader of the Opposition in the Lok Sabha, and a cabinet minister nominated by the Prime Minister.
Search Committee:	A Search Committee will be established, led by the Cabinet Secretary . The Search Committee will consist of two other members not below the rank of Secretary to the government , knowledgeable in matters related to elections. This committee will prepare a panel of five individuals eligible for appointment .
Qualifications for Appointment:	The Chief Election Commissioner (CEC) and other Election Commissioners (ECs) must be individuals of integrity . They should have held or currently hold a post equivalent to the rank of secretary . Candidates should possess knowledge and experience in the management and conduct of elections . Earlier, there was no rule prescribing the qualifications for appointment to the posts
Appointments Process:	The Selection Committee, consisting of the Prime Minister, the Leader of the Opposition in the Lok Sabha, and the nominated Cabinet Minister , will appoint the CEC and ECs from the prepared panel.
Impeachment Process:	The bill introduces a provision for the removal of Election Commissioners through an impeachment-like process , similar to the removal process for Supreme Court judges.
Protection of Election Commissioners:	The bill aims to protect Election Commissioners from arbitrary removal by aligning their removal process with that of Supreme Court judges.
Addressing Constitutional Validity:	The bill aims to address the concerns raised in the 2015 public interest litigation challenging the constitutional validity of Centre-appointed members of the Election Commission.
Enhancing Transparency:	The introduction of a Search Committee and a panel of eligible candidates aims to enhance transparency and accountability in the selection process.

Debate:

The Bill's composition has raised concerns about independence, as the Prime Minister and a nominated Cabinet Minister could potentially outvote the Leader of the Opposition, raising questions about impartiality in the selection process.

Issues with the proposed bill:

Issue	Explanation
Composition of Selection Committee	The committee consists of the Prime Minister, the nominated Cabinet Minister, and the Leader of the Opposition. This potentially gives the Executive dominance in appointments, undermining the independence of the Election Commission.
Lack of Chief Justice's Involvement	The Bill replaces the Chief Justice of India with a nominated Cabinet Minister in the appointment process. This reduces judicial representation in the committee and might affect impartiality.
Search Committee	While the inclusion of a Search Committee is positive, its effectiveness in selecting suitable candidates and avoiding bias needs to be evaluated.
Decision Beyond Shortlist	The Bill allows the Selection Committee to choose anyone from outside the shortlisted candidates, undermining the purpose of the shortlisting process.
Downgrading of Election Commissioners' Rank	The rank of Election Commissioner is being reduced in the warrant of precedence. This could impact their stature

Conclusion:

To ensure the utmost transparency, credibility, and impartiality of the Election Commission, it's advisable for the government to consider broader consultations and maintain a balance between various stakeholders, thereby reinforcing the institution's role as a bastion of democratic integrity. One important suggestion by **former Chief Election Commissioner of India S Y Quraishi** to improve the bill is to have a **unanimous verdict** as a precondition to the appointment process.

Existing Provisions for Appointment to ECI
Constitutional Provisions: Part XV (Article 324-329) of the Indian Constitution: Deals with elections and establishes a commission for these matters.
Structure of ECI: According to Article 324, the Election Commission shall consist of the CEC and such number of other election commissioners, if any, as the President may from time-to-time fix.

Appointment Procedure: Article 324(2): The appointment of the CEC and other Election Commissioners shall be made by the President, subject to the provisions of any law made on that behalf by Parliament

Suggestions: The **Law Minister suggests a pool of suitable candidates** to the Prime Minister for consideration. The President makes the appointment on the advice of the PM.

Service Conditions: The President determines the conditions of service and tenure of office of the Election.

They have a tenure of **six years, or up to the age of 65 years, whichever is earlier.**

Removal: They can resign anytime or can also be removed before the expiry of their term. The CEC can be removed from office only through a process of removal similar to that of a SC judge by Parliament. Any other EC cannot be removed except on the recommendation of the CEC.

Insta Links: [How are the CEC and ECs appointed?](#)

Prelims Links:

Q.1 Consider the following statements: (UPSC 2017)

1. The Election Commission of India is a five-member body.
2. Union Ministry of Home Affairs decides the election schedule for the conduct of both general elections and bye-elections.
3. Election Commission resolves the disputes relating to splits/mergers of recognised political parties.

Which of the statements given above is/are correct?

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

Ans: D

Mains Links:

Q.1 In light of the recent controversy regarding the use of Electronic Voting Machines (EVM), what are the challenges before the Election Commission of India to ensure the trustworthiness of elections in India? (UPSC 2018)

Q.2 To enhance the quality of democracy in India the Election Commission of India has proposed electoral reforms in 2016. What are the suggested reforms and how far are they significant to make democracy successful? (UPSC 2017)

CAG AUDIT: NATIONAL SOCIAL ASSISTANCE PROGRAMME (NSAP)

Context:

An audit conducted by the [Comptroller and Auditor General of India \(CAG\)](#) has revealed that approximately Rs 79 crore was improperly transferred to ineligible beneficiaries under the [National Social Assistance Programme \(NSAP\)](#) of the Ministry of Rural Development between 2017 and 2021.

- **Article 151 of the Constitution** mandates the CAG to present audit reports to the President.

Key findings of the audit report include:

Issue	Description
Ineligible Payments	A substantial portion of transferred funds was disbursed to ineligible beneficiaries, including those who had passed away. Nearly Rs 3 crore was diverted for campaigning in respect to other ministry schemes.
Lack of Beneficiary Database	Most states (except Haryana and Kerala) failed to maintain a proper database of eligible beneficiaries, resulting in the exclusion of eligible individuals.
Age Inaccuracies	Ineligible payments made to individuals below the required age for specific pension schemes like INGOAPS and IGNWPS in multiple states/UTs.
Disability Pension Mismanagement	Payments meant for disability pensions disbursed to ineligible individuals, and inaccuracies in assessing the degree of disability in some cases.
Deceased Beneficiaries	In 26 states/UTs, payments continued to be made to over 2,100 individuals even after their death, a concerning finding.
BPL List Maintenance	Many states relied on outdated or incomplete BPL lists instead of the mandated SECC to identify beneficiaries, leading to the exclusion of eligible individuals.
Inefficient Fund Usage	Some states diverted NSAP funds for other purposes, and certain funds remained unused for years. NSAP Advisory Committee held only a few meetings.

Impact:

This misallocation of funds led to several eligible beneficiaries being excluded from the program. **Over 4.65 crore** people availed of benefits during 2017-21

Significance of the Report:

This report underscores the need for more **rigorous oversight and transparent management of social assistance programs** to ensure that funds are allocated appropriately to those who truly need them. The findings indicate significant **deficiencies in beneficiary identification**, record-keeping, and fund utilization, which have collectively resulted in a substantial amount of misallocated funds and the exclusion of eligible recipients from the NSAP.

About The National Social Assistance Programme (NSAP)

Aspect	Details
About	The National Social Assistance Programme (NSAP) is a welfare programme first launched in 1995 as a Centrally Sponsored Scheme and administered by the Ministry of Rural Development. It was included in the ' Core of Core ' schemes of Centrally Sponsored Schemes (CSS) in 2016.
Aim	To provide social assistance to Below Poverty Line (BPL) households , specifically targeting the elderly, disabled individuals, widows, etc.
Implementation Area	Implemented in both rural and urban areas .
Components	<ul style="list-style-type: none"> • Indira Gandhi National Old Age Pension Scheme (IGNOAPS) - Since NSAP's inception in 1995 • National Family Benefit Scheme (NFBS) – 1995 • Annapurna Scheme - Launched in 2000 • Indira Gandhi National Widow Pension Scheme (IGNWPS) - Launched in 2009 • Indira Gandhi National Disability Pension Scheme - Launched in 2009.
Constitutional Basis	<p>Article 41 and Article 42 of the Constitution provide the basis for NSAP:</p> <ul style="list-style-type: none"> • Article 41 directs the State to provide public assistance to citizens in cases of unemployment, old age, sickness, disablement, and undeserved want within its economic capacity. • Article 42 emphasizes securing just and humane conditions of work and maternity relief.

National Maternity Benefit Scheme (NMBS)	Originally part of NSAP, it was later transferred from the Ministry of Rural Development to the Ministry of Health and Family Welfare.
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Insta links: [National Social Assistance Programme](#)

GS3

NATIONAL RESEARCH FOUNDATION (NRF) BILL HAS BEEN INTRODUCED IN THE LOK SABHA

Context:

The [Anusandhan National Research Foundation \(NRF\) Bill](#) has been introduced in the Lok Sabha. It will establish NRF and repeal the Science and Engineering Research Board (SERB) – subsuming it into the NRF.

What is NRF?

The National Research Foundation (NRF) Bill is a **proposed legislation aimed at establishing the NRF as an apex body** to provide strategic direction for **scientific research in India**, following the recommendations of the [National Education Policy \(NEP\)](#).

Aim: It seeks to **allocate ₹50,000 crore over five years** for promoting research and innovation across various levels of research institutions, colleges, and universities in the country.

More about NRF:

National Research Foundation (NRF)	
About	NRF will be established as an apex body at a total estimated cost of ₹50,000 crores from 2023-28 (the government will contribute ₹14,000 crores and ~₹36,000 crores are expected to come from the private sector as investments).
Recommendation	National Education Policy (NEP) 2020
Implementation	DST, Ministry of S&T
Governed by	A Governing Board: The PM will be the ex-officio President of the Board and the Union Minister of S&T and Union Minister of Education will be the ex-officio Vice-Presidents. It will also consist of eminent researchers and professionals across disciplines. An Executive Council: Chaired by the Principal Scientific Adviser to the Government of India.
Purpose	NRF will seed, grow and promote R&D and foster a culture of research and innovation throughout India's universities, colleges, research institutions and R&D laboratories.
How?	<ul style="list-style-type: none"> By prioritising research funding and ensuring that scientific research was conducted and funded equitably with greater participation from the private sector. Currently, the IITs and IISc receive the majority of research funds, whereas State universities receive a very little portion (~10%). By forging collaborations among the industry, academia, and government departments and research institutions and creating an interface mechanism for their participation and contribution. By creating a policy framework and putting in place regulatory processes that can encourage collaboration and increased spending by the industry on R&D.
Significance/need of NRF/Bill	<ul style="list-style-type: none"> India barely spends 0.7% of its GDP on R&D, which is extremely low compared to the US (2.83%), China (2.14%), Israel (4.9%), Brazil, Malaysia and Egypt. NRF will promote the democratisation of science funding, finding solutions to the big problems facing Indian society, etc. The Bill was necessary because current laws made it hard for private research organisations to contribute to a funding body such as the NRF.

Importance of the Bill:

- **Stimulate increased industry investment** in research and development (R&D).
- **Foster partnerships** between industry, academia, and government divisions.

- **Advocate research across natural sciences**, humanities, social sciences, and the arts to nurture creativity.

Issues with the Bill:

Issues	Examples
Corporate Influence	Private sector funding (70% allocation) may prioritize profit-driven research , hindering societal benefit .
Centralized Decision-Making	Lack of diverse and pluralistic research approaches due to centralization.
Neglecting State Participation	The exclusion of state higher education councils and state governments may undermine cooperative federalism.
Limited Focus on Public Good	NRF's heavy reliance on corporate funding may neglect research for public welfare .
Inadequate Research Evaluation	Closed peer reviews without broader public engagement may hinder effective knowledge utilization.
Disconnect from Government Goals	Lack of alignment with the government's 2% GDP target for R&D , hindering national development.
Uncertain Funding Mechanism	The private sector's notional commitment to funding lacks transparency and enforceability.

Conclusion:

For the NRF to achieve its intended impact, a **balanced approach is necessary**. While private sector involvement is crucial, it should be complemented by increased public investment in research and development.

About SERB

- It is a statutory body under the **Department of Science and Technology (DST)** established in 2009 (by the SERB Act, 2008).
- It was set up for promoting **basic research in science and engineering and to provide financial assistance** to scientists, academic institutions, R&D laboratories, S&T start-ups, etc.

Insta Links:

- [National Research Foundation \(NRF\)](#)
- [R&D ecosystem in India](#)

Mains Links:

Q. Scientific research in Indian universities is declining, because a career in science is not as attractive as our business operations, engineering or administration, and the universities are becoming consumer-oriented. Critically comment. (UPSC 2014).

WMO: 2022 STATE OF THE CLIMATE IN ASIA REPORT

Context:

The [World Meteorological Organisation \(WMO\)](#) has come up with its 2022 State of the Climate in Asia report, indicating that in 2022, Asia experienced extreme climate events, including high temperatures, droughts, floods, and cyclones, leading to significant socioeconomic impacts.

Key points of the Report are:

Points	Examples and Impacts
Global Climate	<ul style="list-style-type: none"> The annual mean near-surface temperature in 2022 was 1.15 °C above pre-industrial average Ocean heat content reached a new high Global mean sea level reached a new high due to ocean warming and ice sheet loss.
Temperature	<ul style="list-style-type: none"> 2022 had the second or third-highest mean surface temperature on record Northern Siberia, Central Asia, and Western China experienced above-average temperatures
Precipitation	<ul style="list-style-type: none"> Regions in Iraq, Ganges-Brahmaputra Rivers, Korean Peninsula faced precipitation deficits South Pakistan, Southeast Asia, and northeast China experienced excessive rainfall Central India and the Himalayas recorded high precipitation Floods in Pakistan and India displaced millions and damaged agriculture.
Glaciers	<ul style="list-style-type: none"> 23 glaciers in High Mountain Asia showed a continued mass reduction Urumqi Glacier No 1 in Tien Shan had the second most negative mass balance in 2021-22 (see explanation down)
Extreme Events: Cyclones	<ul style="list-style-type: none"> 25 tropical cyclones formed in the western North Pacific Ocean and the South China Sea The Nanmadol typhoon affected Japan, causing evacuation, deaths, and economic damage.

Floods	<ul style="list-style-type: none"> Severe floods in Pakistan displaced 14% of the population, causing deaths and displacements. Heavy monsoon affected North-east India and Bangladesh, causing deaths and destruction Floods were India's worst natural disaster in 2022
Droughts	<ul style="list-style-type: none"> The Yangtze River basin in China experienced the worst drought in six decades, impacting crops, energy, and economy Iran faced its third consecutive year of drought, leading to decreasing water bodies and economic loss.
Economic Impact	<ul style="list-style-type: none"> Floods in Pakistan, China, and India caused economic losses exceeding the average observed over 20 years Droughts in China and Iran resulted in significant economic damages Cyclones and storms led to milder economic losses compared to previous years.

What is "Negative mass balance" for glaciers?

It refers to a situation in which the **amount of ice or snow lost from a glacier or ice sheet through melting**, sublimation, or other processes exceeds the amount of new ice or snow accumulation. In other words, the **glacier is losing more mass than it is gaining**, resulting in a decrease in its overall size and volume over time.

About World Meteorological Organization:

The World Meteorological Organization (founded 1950; HQ: Geneva; Parent organization: United Nations Economic and Social Council) is a **specialized agency of the United Nations** responsible for promoting international cooperation on atmospheric science, climatology, hydrology and geophysics.

Insta Links:

- [State of the Global Climate 2022](#)
- [Synthesis Report of IPCC AR6](#)

MINES AND MINERALS (DEVELOPMENT AND REGULATION) AMENDMENT BILL, 2023

Context:

Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2023, (MMDR Amend-

ment) in a bid to **attract private sector investment** in the exploration of critical and deep-seated minerals in the country.

What are critical and deep-seated minerals?

- **Critical Minerals:** Critical minerals are natural resources that are essential for various industries, including technology, manufacturing, and clean energy. E.g., Lithium, nickel, cobalt etc.
- **Deep-Seated Minerals:** Deep-seated minerals refer to minerals that are found deep within the Earth’s crust and are typically more challenging and costly to explore and mine compared to minerals closer to the surface. E.g., Gold, Copper, Diamonds etc.

India’s import dependency for critical and deep-seated minerals:

India is **highly dependent on imports for critical and deep-seated minerals** like

- **100% dependency:** lithium, cobalt, nickel, niobium, beryllium, tantalum,
- **Very high dependency:** copper, zinc, lead, gold, silver, platinum group elements (PGEs), and diamonds.

India’s current status:

- India is the **world’s 4th largest producer of iron ore** and the **2nd largest producer of coal** as of 2021.
- India is the **second-largest producer of Aluminium** globally
- India’s mineral demand is projected to **rise by 3% in 2023**, fuelled by **expanded electrification** efforts and overall economic growth

The issue with the import dependency:

This import dependency poses challenges due to **vulnerabilities in global supply chains** and the potential for supply disruptions and increased prices. Moreover, the cost of importing these minerals is rising for India.

Private sector participation is crucial for the exploration of critical and deep-seated minerals in India due to:

- **Geological Potential:** India has substantial geological potential for hosting valuable mineral resources, similar to mining-rich regions globally.
- **Limited Exploration:** India has explored only a small fraction of its geological potential, with **less than 2% of known** resources being mined.
- **Government Dominance:** Exploration efforts have been largely led by government agencies like the **Geological Survey of India and Mineral Exploration Corporation Limited**, with limited private sector involvement.
- **Complex Exploration Techniques:** Mineral exploration demands specialized techniques like aerial surveys, geological mapping, and geochemical analyses.
 - These operations are resource-intensive,

time-consuming, and carry financial risks.

Background

- **The MMDR Act, 1957** has undergone several amendments to address various issues in the mineral sector.
- **Amendments in 2015** introduced auction-based mineral allocation, established DMF for community welfare, and NMET for exploration promotion.
- **Amendments in 2016, 2020, and 2021** focused on emerging challenges and reforms, including **removing the captive vs. merchant mine distinction**.

Need for further Amendment:

The mineral sector requires **more reforms, particularly in exploring and mining Critical Minerals** crucial for economic growth and national security. **Limited availability** and **extraction concentration** of these minerals poses supply chain vulnerabilities and disruptions. Critical minerals have gained importance due to India’s **energy transition commitment** and goal of achieving **Net-Zero emissions by 2070**.

Key provisions of Mines and Minerals (Development and Regulation) Amendment Bill, 2023

Key Provisions	MMDR Act 1957	MMDR Amendment Bill
Private Sector to Mine Atomic Minerals	Limited to State agencies for exploration.	Allows the private sector to mine 6 atomic minerals- lithium, beryllium, niobium, titanium, tantalum and zirconium. The central government can auction mining leases and composite licences for critical minerals.
Auction for Exploration Licence	No provision for an exploration licence auction.	The state government grants licences through competitive bidding, while the Central government prescribes auction details .
Maximum Area in which Activities are	Prospecting licence: Up to 25 sq. km.	Bill allows activities under a single exploration licence in an area of up to 1,000 square kilometres.

Incentive for Exploration Licence	The state conducts auctions for mining leases if resources are proven after exploration. Licensee receives a share in the auction value of the mining lease for prospected minerals.
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Mines and Minerals Bill 2023 endeavours to stimulate private sector involvement through:

- **Expanding Mining Opportunities:** The Bill excludes six atomic minerals that were previously reserved exclusively for government entities
- **Enabling Exploration Activities:** The Bill overturns the Act's prohibition on certain exploration activities like pitting, trenching, drilling, and sub-surface excavation.
- **Introduction of Exploration License (EL):** The Bill introduces a new exploration license (EL) aimed at promoting reconnaissance-level and prospective-stage exploration by private players.
- **Defining Exploration Area:** The Bill specifies the maximum exploration area, allowing activities within 1,000 square kilometres under a single exploration license.
- **Central Government Auctions:** The Bill empowers the central government to conduct auctions for **composite licenses and mining leases** specifically for critical and strategic minerals.

Case study:

In countries like Australia, private junior explorers take risks to discover potential mines and subsequently sell them to larger mining companies, fostering greater participation and multiplying exploration efforts.

Some potential issues and concerns raised by industry experts:

- **Delayed Revenue Generation:** Private companies' revenue from exploration depends on **premium shares after mine auctions**, subject to government clearance timelines and potential delays due to deposit complexity and geography. This could impact exploration project viability.
- **Uncertainty in Revenue:** Explorers might not know their revenue until mine auction success, dissuading potential private participation due to unclear investment returns during exploration.
- **Auctioning Challenges:** Auctioning exploration licenses is complex as the value of undiscovered resources is uncertain. This may reduce private sector interest due to unpredictability in the auction process.
- **Government Control over Discoveries:** The pol-

icy limits private explorers to sharing premiums post-discovery, instead of selling discoveries directly. This contrasts with global practices where private explorers can sell findings to mining companies.

- **Investment Assurance:** Companies may hesitate to invest significantly in exploration due to uncertainty about utilizing discoveries, affecting capital investment incentives.

Also, the Ministry of Mines, in June this year, came out **with a list of 30 minerals critical** to the country's economic development and national security.

Insta Links:

- [Amendment to Mines and Minerals \(Development and Regulation\) Act](#)
- [Offshore Areas Mineral \(Development and Regulation\) Amendment Bill, 2023](#)

Mains Links:

Q. Despite India being one of the countries of Gondwanaland, its mining industry contributes much less to its Gross Domestic Product (GDP) in percentage. Discuss. (UPSC 2021)

Q. "In spite of adverse environmental impact, coal mining is still inevitable for development". Discuss. (UPSC 2017).

COASTAL AQUACULTURE AUTHORITY (AMENDMENT) BILL, 2023

Context:

The Lok Sabha has passed the [Coastal Aquaculture Authority \(Amendment\) Bill, 2023](#), to decriminalize offences related to coastal aquaculture activities, promoting ease of business.

What is Aquaculture?

[Aquaculture](#) involves **cultivating aquatic organisms such as fish, shellfish, and aquatic plants** under controlled conditions. It is a controlled environment where aquatic organisms are **bred, reared, and harvested** for various purposes, including food production, research, and conservation.

Fisheries refer to the activities related to **catching, harvesting, and managing wild fish and other aquatic organisms** from natural water bodies such as oceans, rivers, and lakes. Unlike aquaculture, fisheries rely on capturing organisms **from their natural habitats** rather than cultivating them in controlled environments.

Need for this bill:

The bill introduces amendments to the **Coastal Aquaculture Authority (CAA) Act of 2005**. The old rules said that some activities related to aquaculture **didn't need special permission**. But a recent decision by a [National Green Tribunal \(in 2022\)](#) ruled that the CAA Act of 2005 no longer **exempted**

coastal aquaculture from the CRZ Notifications issued in 2011 and 2019. This ruling highlighted the **need for changes to the CAA Act** to align with the updated CRZ regulations.

Aim of the Bill: The bill aims to **expand the scope of coastal aquaculture** while reducing compliance burdens and maintaining environmental protection rules.

Key provisions of the bill:

Provisions	Explanation
Decriminalization of Offences	The bill removes the possibility of jail time for certain offences in coastal aquaculture and replaces it with fines. Instead of jail time, the bill imposes fines of up to ₹1 lakh for certain offences .
Expansion of Scope	The bill widens the scope of the Coastal Aquaculture Authority's activities and reduces regulatory gaps. The Coastal Aquaculture Authority's procedures will be adjusted to be more responsive to stakeholders' needs.
Promotion of Environment-friendly Aquaculture	The bill encourages newer forms of eco-friendly aquaculture , like cage culture and seaweed culture.
Quality Assurance and Safe Products	The bill promotes safe and high-quality aquaculture products by preventing harmful substances.
Disease-free Broodstocks and Seeds	The bill supports the creation of disease-free and improved aquatic life for coastal aquaculture.

Nodal Ministry:

Ministry of [Fisheries, Animal Husbandry and Dairying](#)

Government Initiatives Related to [Fisheries](#):

- Matsya Setu
- Fisheries and Aquaculture Infrastructure Development Fund (FIDF).
- [Blue Revolution](#)
- Marine Products Export Development Authority (MPEDA)
- Kisan Credit Card (KCC)
- [Pradhan Mantri Matsya Sampada Yojana](#)

India is the **second largest fish-producing country** in the world accounting for over **7.5 %** of global production. India is the **4th largest exporter** of fish in the world.

About [CRZ](#):

Coastal regulation zones are areas along the **coastline of India**, where development, **infrastructure, construction, tourism** and other activities are regulated by the government of India.

CRZ notification issued by the **central government under the Environment Protection Act, 1986** for regulation of activities in the coastal area. The **Ministry of Environment, Forest and Climate Change** is the nodal ministry for CRZ regulations.

Insta Links:

- [Aquaculture](#)
- [Government Introduces Aquaculture Bill](#)

HOUSE PANEL URGES GOVERNMENT TO ENSURE FERTILIZER AVAILABILITY AND LOCAL PRODUCTION

Context:

The Standing Committee of Parliament on Chemicals and Fertilizers, led by Shashi Tharoor, has presented two reports highlighting concerns about fertilizer availability, subsidies, and GST rates on fertilizer components.

Concerns and Recommendations by the Committee:

Concerns	Details	Recommendations
Reliance on Imported Fertilizers	India heavily depends on imported fertilizers like urea, DAP, MOP, NPK, etc. (30% of urea, 100% muriate of potash, 60% Diammonium phosphate imported)	Increase local fertilizers production (especially urea) by facilitating investments for public, cooperative and private fertilizers manufacturers.
Fertilizer Availability	Irregularities in fertilizers sale such as diversion, black marketing, hoarding, sub-standard quality etc.	Creating a separate tariff code for urea used for non-agricultural purposes. Develop a central monitoring mechanism to conduct random checks

Review Nutrient-Based Subsidy (NBS) Policy	Current NBS policy excludes urea from subsidies . This creates price control for urea, unlike other fertilizers.	Review NBS policy to remove disincentives for using other fertilizers and promote balanced use.
Discrepancy in GST Rates	GST rate for fertilizers: 5%; GST rate for raw materials (sulphuric acid, ammonia): 18%; This highlights the inconsistency in GST rates between fertilizers and their raw materials .	Lower GST on raw materials to support fertilizer manufacturing and farmers.
International Price Fluctuations and Purchase Reforms		Implement purchase policy reforms. Advocated for long-term import contracts for fertilizers and raw materials.

What are Fertilisers?

A fertiliser is a natural or artificial substance containing chemical elements (**such as Nitrogen (N), Phosphorus (P) and Potassium (K)**) that improve the growth and productivity of plants.

There are 3 basic fertilisers in India - **Urea, DAP and Muriate of Potash (MOP)**

In India, **urea is the most produced, imported, consumed and physically regulated fertiliser** of all. It is **subsidised only for agricultural uses**. The MRPs of non-urea fertilisers are **decontrolled or fixed by the companies**. All Non-Urea based fertilisers (such as DAP and MOP) are regulated under the **Nutrient Based Subsidy (NBS) Scheme**.

Measures taken to Promote Balanced Fertilisation

- Introduction of the **Nutrient-Based Subsidy (NBS) regime** in April 2010
- In 2015, the Indian government mandated **neem-coating of all urea**
- Indian Farmers Fertiliser Cooperative Limited (IFFCO) launched liquid 'Nano Urea' in 2021.
- **First Liquid Nano Urea (LNU)** plant was inaugurated at Kalol, Gujarat.
- **'One Nation One Fertiliser'**

Prelims Links:

Q. With reference to chemical fertilizers in India, consider the following statements: (UPSC 2020)

1. At present, the retail price of chemical fertilizers is market-driven and not administered by the Government.
2. Ammonia, which is an input of urea, is produced from natural gas.
3. Sulphur, which is a raw material for phosphoric acid fertilizer, is a by-product of oil refineries.

Which of the statements given above is/are correct?

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

Ans: B

Q. Why does the Government of India promote the use of 'Neem-coated Urea' in agriculture? (UPSC 2016)

- (a) Release of Neem oil in the soil increases nitrogen fixation by the soil microorganisms.
- (b) Neem coating slows down the rate of dissolution of urea in the soil.
- (c) Nitrous oxide, which is a greenhouse gas, is not at all released into atmosphere by crop fields.
- (d) It is a combination of a weedicide and a fertilizer for particular crops.

Ans: B

REVISED DRAFT OF THE NATIONAL POLICY ON OFFICIAL STATISTICS

Context:

The Ministry of Statistics and Programme Implementation has released a revised draft of the **National Policy on Official Statistics**, emphasizing the utilization of big data analytics, artificial intelligence (AI), and machine learning (ML) to create and disseminate **economic and social statistics**.

Key features of the draft National Policy on Official Statistics:

Key Features	Description
Aim	This policy aims to provide reliable, timely, and credible data to support decision-making both within and outside the government.

In line with UNFPOS guidelines	The policy aligns with the UN Fundamental Principles of Official Statistics (UNFPOS) adopted by India in 2016 , which advocate for a high level of independence in national statistical systems and layout 10 guiding principles for official statistics.
Focus on emerging technologies	Emphasizes the use of Big Data Analytics, AI, and ML for creating and releasing economic and social statistics
Integrated Data System	Establish a unified data system for consistent data collection and dissemination
Administrative data Improve the efficiency and accuracy of administrative data used in official statistics	
Short, Medium, and Long-Term Plans	The policy outlines a phased approach to implementation , including short, medium, and long-term strategies
Coordination	Focuses on collaboration with regional governments for data collection and dissemination
Training and Capacity Building	Includes plans for training programs and capacity building to enhance statistical skills

To get a view of India's statistical system: [Click Here](#)

To Know Concerns Related to the Indian Statistical System: [Click Here](#)

Insta Links:

- [A short history of data](#)

CAG REPORT ON RAILWAY FINANCE

Context:

The [Comptroller and Auditor General \(CAG\)](#) reported that in the fiscal year 2021-22, the financial health of [Indian Railways](#) entered a "concern zone."

Key findings of the CAG:

Key Findings	Details
Operating Ratio (OR)	The railway operator spent ₹107 to earn ₹100 due to increased pension funding
Net Surplus	Indian Railways couldn't generate a net surplus in 2021-22
Total Expenditure	Ministry of Railways' total expenditure increased over 35% more than the previous year.

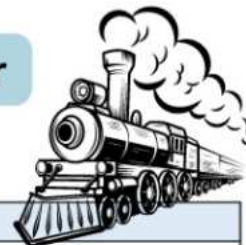
High revenue Expenditures	Over 75% of total working expenses are spent on staff costs, pension payments, and rolling stock lease charges
Dependence on Budgetary Support and Resources	Inadequate internal resource generation led to greater dependence on Gross Budgetary Support (GBS) and Extra Budgetary Resources (EBR)
Cross-Subsidization of Passenger Fares	Passenger fares subsidized by profits from freight operations

For Challenges hindering the development of Railways in India: [Click Here](#)

Key recommendations from Vivek Debroy's committee for Indian Railways:

Recommendations	Details
Restructuring and Unbundling	Separate Railways' functions into distinct verticals like operations, regulation, and infrastructure
	Create an independent regulatory body
	Form Rail Development Authority (RDA)
Commercial and Financial Autonomy	Enhance commercial and financial autonomy of Zonal Railways
Decentralization of Powers	Delegate more decision-making powers to lower levels of management
Resource Mobilization and PPP	Increase non-fare revenue through advertising, commercial use of stations, and land monetization. Explore PPP for projects
Technology Integration and Modernization	Integrate technology for better customer service, efficiency, and safety
Governance and Performance Management	Implement an outcome-oriented performance management system

Measures taken by Govt. in Railways Sector



Measure	Description
New Trains	<ul style="list-style-type: none"> Introducing Vande Bharat trains to stimulate local manufacturing and enhance travel experience Vistadome Trains for scenic routes and improved tourism
Special Freight Train Operations Scheme	Enables private enterprises to operate freight trains from their private terminals for faster cargo movement
Mission Raftaar	<ul style="list-style-type: none"> Aims to double the average speed of freight trains Increases average speed of Superfast/Mail/Express trains by 25 kmph
Amrit Bharat Station Scheme	Upgrades stations with facilities inspired by mega-upgraded stations like New Delhi and Ahmedabad , at lower cost
Indian Railway Management Service (IRMS)	Reforms management structure to rationalize top-heavy bureaucracy
TCAS (Train Collision Avoidance System)	Developed to minimize accidents due to human errors
National Rail Plan (NRP) for 2030	The objective of the Plan is to create capacity ahead of demand , which in turn would also cater to future growth in demand right up to 2050.
Measures to expedite project commissioning	<ul style="list-style-type: none"> Assure finance through extra-budgetary resources for throughput enhancement projects Focus on proper project preparation, land acquisition, EPC contracts, mechanization, and monitoring for faster commissioning

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Insta Links: [Growth in Indian railways](#)

Mains Links:

Q. Why is Public Private Partnership (PPP) required in infrastructure projects? Examine the role of the PPP model in the re-development of Railway Stations in India. (UPSC 2022)

CONTENT FOR MAINS ENRICHMENT

FEDIVERSE	<p>The fediverse is a collection of federated social networking services that operate on decentralized networks using open-source standards.</p> <p>In this system, a network of servers, managed by third parties, facilitates communication between users of various social media platforms, enabling seamless cross-platform interaction. Meta, the parent company of Facebook, Instagram, and WhatsApp, is planning to include its new Threads app in the fediverse.</p> <p>This approach allows users to communicate across different social media platforms without creating separate accounts for each one (similar to the benefits of UPI in payment space). Platforms like Pixelfed, PeerTube, Lemmy, Diaspora, and others already utilize the fediverse.</p>
DEVIKA: NORTH INDIA'S FIRST RIVER REJUVENATION PROJECT	<p>North India's first River Rejuvenation Project, named Devika, is almost finished, and was inaugurated by Prime Minister Narendra Modi. This project modelled after the 'Namami Ganga' initiative, is aimed at restoring the health of the Devika River (in Udhampur, Jammu & Kashmir).</p> <p>The Liquid Waste Management Project involves creating a network of pipes and man-holes connecting households under the Devika Rejuvenation Project. Additionally, a Solid Waste Management Project is planned to further enhance the river's restoration.</p>
ACES ON WHEELS	<p>Shiv Khanna, an 11th-grade student from Delhi, stands out in the world of tennis not for his own aspirations to excel in the sport, but for his dedication to promoting wheelchair tennis in India.</p> <p>He was inspired after witnessing wheelchair tennis at Wimbledon, leading him to successfully host a wheelchair tournament in Delhi. Alongside his father, they have established the "Aces on Wheels" foundation to bolster wheelchair tennis.</p> <p>Usage: The example can be used to show values of dedication to social impact, inclusivity, empowerment, compassion, support for underrepresented groups, equality, determination, and resource mobilization.</p>
DEEPOR BEEL	<p>Deepor Beel, a vital wetland in Guwahati, Assam, faces anthropogenic threats despite its protected status. Indigenous names like "beel" signify cultural and ecological connections, with local livelihoods intertwined with the wetland's resources.</p> <p>Efforts to sustainably coexist with the wetland include initiatives by local women who convert water hyacinths into products, offering employment and improving the ecosystem's health. Similarly, "Kumbhi Kagaz" produces biodegradable paper from water hyacinths, enhancing the wetland's condition and supporting alternative livelihoods.</p> <div style="border: 1px solid black; padding: 5px;"> <p>About the <u>Deepor Beel</u>:</p> <p>Situated in the southwest of Guwahati, Assam, Deepor Beel is not only one of the largest freshwater lakes in the region but also holds the distinction of being the state's sole <u>Ramsar site</u>. It's recognized as an Important Bird Area by Birdlife International and was once a water channel of the Brahmaputra River.</p> </div>

<h2>CHENNAI CITY PARTNERSHIP</h2>	<p>Context: The World Bank is set to provide funding for projects aimed at creating safe and efficient streets in Chennai as part of the second phase of the Chennai City Partnership. Its objectives include:</p> <ul style="list-style-type: none"> Enhancing the city's digital infrastructure for e-mobility and smart parking solutions Improving bus services, suburban rail services, and climate-resilient public infrastructure Establishing parking facilities, and transport hubs across various parts of the city. Creating walkable neighbourhoods. Special projects tailored to each neighbourhood, involving stakeholders, will be identified, and implemented. <p>The first phase of the Chennai Mega Streets Programme has already identified 110 km of arterial and sub-arterial roads for development.</p>
<h2>JANJATIYA GAURAV CORRIDOR INITIATIVE</h2>	<p>To boost rail infrastructure and enhance rail connectivity in tribal-dominated regions, the "Janjatiya Gaurav Corridor" initiative has been launched.</p> <p>The "Janjatiya Gaurav Corridor" with an allocated budget of ₹70,000 Crore for the fiscal year 2023-24 aims to establish an umbrella framework for new rail lines.</p> <p>Significance: The initiative is significant as it aims to enhance rail connectivity in tribal-dominated regions, promoting infrastructure development and socio-economic growth. This effort addresses connectivity gaps, supports tribal communities, and contributes to overall regional development.</p>
<h2>CHINA'S 'SPONGE CITIES'</h2>	<p>Context: China's recent devastating floods have raised questions about the effectiveness of its "sponge city" initiative launched in 2015 to reduce urban flood risks.</p> <p>What is a "sponge city"?</p> <p>A "sponge city" is an urban initiative that employs nature-based solutions like permeable surfaces, canals, ponds, and wetland restoration to enhance water absorption, drainage, and flood resilience. The goal is to mitigate waterlogging and urban flooding caused by rapid urbanization and impermeable surfaces.</p> <p>Issues with the "Sponge City"?</p> <p>Rapid urbanization and concrete development have compromised natural water absorption, leading to waterlogging and floods. Despite the initiative, many cities remain vulnerable to flooding. Limitations include the inability of sponge city infrastructure to handle extreme rainfall events and the need to catch up with the impacts of climate change in less-developed regions.</p>
<h2>NIVESHAK SARATHI</h2>	<p>The Investor Education and Protection Fund Authority (IEPFA) and Common Service Centre (CSC) have jointly launched "Niveshak Sarathi" (translates to "Investor Guide" or "Investor Mentor") Vans in Delhi-NCR as part of the Azadi ka Amrit Mahotsav celebrations.</p> <p>Aim: The initiative aims to enhance financial literacy and awareness about fraudulent schemes in the region. The vans are equipped with a TV screen showcasing investor awareness movies, a public address system, and informative brochures.</p> <p>Process: The initiative included sessions conducted by Village Level Entrepreneurs (VLEs) from IEPFA at key locations. Common Service Centre served as the knowledge partner for this campaign.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>About IEPFA:</p> <p>The Investor Education and Protection Fund Authority (IEPFA) was established by the Ministry of Corporate Affairs to manage the Investor Education and Protection Fund. It focuses on refunding shares, unclaimed dividends, matured deposits, and debentures to investors, among other responsibilities.</p> <p>About CSC:</p> <p>The Common Service Centre (CSC) 2.0 Project, initiated under Digital India, aims to set up service centres in Gram Panchayats across India to deliver citizen-centric services.</p> </div>

FACTS FOR PRELIMS

GS1

TAMIL PALM MANUSCRIPTS: GNANAMUYARCHI

Context:

Palm manuscripts from the **18th Century** titled “Gnanamuyarchi” have been discovered in an **Armenian monastery** in **Northern Italy**.

What is a [manuscript](#)?

A manuscript is a **handwritten or typewritten document**, usually historical or literary in nature, before the age of printing. For example, ancient religious Sanskrit texts written on palm or birch leaf.

More about the News:

- The documents may contain a **copy of the first translation of Ignatius’ Spiritual Exercise** in Tamil, possibly by **Michele Bertoldi** (Gnanaprakasasamy).
- Initially categorized as ‘**Indian Papyrus Lamulic Language–XIII Century**’, the manuscripts were not recognized as Tamil texts.
- It’s suggested that **Armenians from Chennai** might have brought the manuscripts to Italy.

ADICHANALLUR ARCHAEOLOGICAL SITE (TAMIL NADU)

Context:

Union Finance Minister Nirmala Sitharaman laid the foundation stone for the ‘**Iconic Site Museum**’ at the **Adichanallur archaeological site** in Tamil Nadu.

- The museum will be built as a tribute to the **history of Iron Age culture** in southern India, in the context of Adichanallur.
- It is one of the five sites selected as ‘**Iconic sites**’ in the budget 2020-21 for development.
- Other sites are Rakhigarhi (Haryana), Hastinapur (UP), Dholavira (Gujarat), and Shivsagar (Assam).

About Adichanallur

It is an **ancient Iron-age burial site** located in the **Thoothukudi District** of Tamil Nadu, situated along the banks of the **Tamirabarani River**. It holds significance in showcasing the **megalithic culture**. Additionally, the **nearby ancient seaport of Korkai**, mentioned in Sangam literature, is nearby.

Other significant initiatives are:

- Development of ‘**Panchtheerth**’ sites based on Ba-

basaheb Ambedkar’s life

- Construction of the National War Memorial** and **National Police Memorial** in Delhi
- Establishment of **ten new Tribal Freedom Fighter Museums**
- Heritage sites like **Somnath** and **Kashi Vishwanath Temple** have been revitalized
- Tourism circuits under the **Swadesh Darshan Scheme**, such as the **Buddhist, Ramayana, Coastal, Desert, and Himalayan Circuits**, are being established
- Over 3 lakh manuscripts** containing **over 3 crore pages** have been digitized for knowledge preservation.
- Plans for a new **National Museum in Delhi** with **950 rooms** spread across the North and South Blocks have been announced
- ‘**Pradhanmantri Sangrahalaya**’ has been established to honour every Prime Minister of India since Independence.

ARUNACHAL RANG MAHOTSAV

Context:

The Prime Minister has **expressed delight** at **Arunachal Rang Mahotsav** being celebrated in different parts of India.

- ‘**Arunachal Rang Mahotsav**,’ is a **four-day theatre festival** held across various cities in India to **bring the lesser-known history of Arunachal Pradesh** to a wider audience.
- The festival celebrates **Arunachal Pradesh’s diverse cultural heritage** and is in line with the principles of national unity.

The festival featured four plays in each participating city, including Delhi, Mumbai, Kolkata, and Guwahati. These plays aimed to **shed light on the often-overlooked heroes who contributed significantly to India’s freedom struggle** against British colonial rule.

TIDAL ENERGY POTENTIAL

Context:

The **Standing Committee on Energy**, through a newly presented report in the Indian Parliament, has requested the **Union Ministry of New and Renewable Energy (MNRE)** to update them on initiatives and outcomes regarding the assessment of **tidal**, wave, and thermal energy potential in India.

- The committee discussed and adopted the 20th report titled “**Tidal Power Development in India**”.

The **potential for tidal and wave power in India** is estimated to be **12,455 Megawatts (MW)** and **41,300 MW**, respectively. However, this **potential is largely theoretical and not necessarily practically exploitable**. Ocean thermal energy potential has not been estimated yet.

About Tidal Energy:

- Tidal Energy is a form of power produced by the natural rise and fall of tides caused by the gravitational interaction between the Earth, the sun, and the moon.
- There are currently three different ways to get tidal energy: **Tidal barrages (dam-like structures)**, **Tidal lagoons (partly enclosed barrier)**, and a **Tidal stream (fast-flowing body of water created by tides)**

MISSION INDRADHANUSH

Context:

The Health Management Information System 2022-23 (HMIS) 2022-23 report reveals that **6 States/Union Territories (UTs) have attained full immunization coverage (FIC) of 100%**, while **17 States have achieved FIC of over 90%**.

- The [Mission Indradhanush](#) (MI) initiative, operating under the **Universal Immunization Program (UIP)**, focuses on low-immunization areas to vaccinate children and pregnant women who missed Routine Immunization.

In 2022, the **Intensified Mission Indradhanush (IMI) 4.0** was executed in **416 high-priority districts** across India.

GS2

DIGITAL HEALTH INCENTIVES SCHEME (DHIS)

Context:

The National Health Authority (NHA) has extended its **Digital Health Incentives Scheme (DHIS)** under the Ayushman Bharat Digital Mission (ABDM) until December 31, 2023.

What is Digital Health Incentives Scheme (DHIS)?

The Digital Health Incentives Scheme (DHIS) offers **financial incentives to hospitals, diagnostic labs, and digital health solution providers for adopting and enabling digital health technologies and practices**.

Amount: They can earn financial incentives of up to **Rs 4 crores based on the number of digital health records** created and linked to ABHA (Ayushman Bharat Health Account) numbers of patients.

Aim: The scheme aims to promote the **creation and linkage of digital health records to [Ayushman Bharat Health Account \(ABHA\) numbers](#)** of patients.

Significance: These incentives are intended to **encourage the adoption of transformative digitization** in healthcare delivery and contribute to building a digitally empowered healthcare ecosystem.

About NHA

The National Health Authority (founded in 2018) is an **attached office of the Ministry of Health & Family Welfare**. It is responsible for **implementing India's flagship public health insurance/assurance scheme [Ayushman Bharat Pradhan Mantri Jan Arogya Yojana](#)**.

SUPREME COURT VERDICT ON RAHUL GANDHI'S CONVICTION CASE

Context:

Recently Supreme Court put a **stay order on Rahul Gandhi's conviction** in a defamation case.

Background of the Case:

Rahul Gandhi was convicted of criminal defamation for comments made during an election rally. He accused individuals with the surname "Modi" of being involved in financial fraud. A Gujarat BJP leader filed a complaint, leading to his conviction and **disqualification from Parliament**.

What was the SC verdict?

- The Supreme Court's order has **stayed Rahul Gandhi's conviction**, effectively nullifying his two-year sentence in a defamation case.
- Disqualification Nullified:** His disqualification from Parliament was a result of the conviction. With the stay granted, there are **no grounds for his disqualification anymore**.

Once the Lok Sabha secretariat formally revokes the disqualification, Rahul can return to Parliament as an MP with his perks.

About Defamation:

SC in Lily Thomas case (2013): "A conviction which carries a sentence of two years or more will automatically result in disqualification of MPs/MLAs"

About	Description
Defamation	Any false and unprivileged statement published or spoken with the intention to damage someone's reputation.
Defamation in the Constitution	Article 19(2) has imposed reasonable exemption to freedom of speech and expression granted under Article 19(1)(a). Defamation is one of the exceptions.
Types of Defamation	Defamation could be both a criminal offence and a civil wrong. Criminal defamation has been defined as an offence under Indian Penal Code (IPC) (Sections 499 and 500) whereas civil defamation is based on tort law (for civil wrongs or injuries)
Section 500 of the IPC	It prescribes defamation as a criminal offence with a punishment of up to two years in prison or a fine.
Disqualification of MPs and MLAs can be for three reasons	1. Articles 102(1) and 191(1): For holding an office of profit, being of unsound mind or insolvent, or not having valid citizenship 2. 10th Schedule: Disqualification of the members on grounds of defection 3. RPA 1951 provides for disqualification for conviction in criminal cases
Disqualification in RPA, 1951	Section 8(3) of the RPA mandates that an MP can be disqualified if convicted and sentenced to not less than two years of imprisonment (from the date of such conviction and shall continue to be disqualified for a further period of six years since his release)—i.e., Immediate Effect (unless the conviction is stayed by a higher court) (SC in Lily Thomas vs. Union of India case and Lok Prahari vs. Union of India (2018))

To know more Visit Insights IAS Daily Current Affairs

ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS)

Context:

In the ongoing crisis in Niger, where a military coup ousted the president, [ECOWAS](#) has been active. The [Economic Community of West African States](#) (ECOWAS) is a regional bloc established in 1975 with the goal of **promoting economic integration among its 15 member countries** in West Africa.

Members: These countries include Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal, and Togo.

Aim: ECOWAS aims to achieve a **single common currency and create a large trading bloc** in various sectors like industry, transport, telecommunications, energy, finance, and culture.

- The organization is committed to democratic principles, the rule of law, and good governance.

Actions taken:

- ECOWAS has a history of **intervening in conflicts within the region**, having deployed peacekeeping forces and playing roles in resolving conflicts in countries like Liberia and Sierra Leone.
- It suspended members like **Mali, Guinea, and Burkina Faso** following coups in those countries, refusing to recognize their new governments.



KERALAM

Context:

The Kerala Assembly has passed a resolution to rename the state as “**Keralam**” in both the **Constitution and official records**.

While the state has been referred to as “**Kerala**” in English, the name in Malayalam is “**Keralam**.” The resolution aims to **align the English and Malayalam names**.

The term ‘**Kerala**’ has its **origins in ancient texts**, and ‘**Keralam**’ is considered a closer reflection of the original Malayalam pronunciation.

Historical Connections:

- Asoka’s Rock Edict:** The earliest historical reference to the region is in Emperor Ashoka’s **Rock Edict II of 257 BC**, where the local ruler is mentioned as “**Keralaputra**,” meaning “**son of Kerala**” or “**son of Chera**,” referring to the Chera dynasty.
- Unity of Malayalam-Speaking People:** The demand for a united territory for all Malayalam-speaking communities gained momentum during the **Aikya Kerala movement** in the 1920s. This movement aimed to **integrate the regions of Malabar, Kochi, and Travancore** into a single territory.

Linguistic Connections:

- Origin from ‘Cheram’:** Scholars believe that the term ‘**Keralam**’ might have originated from the word ‘**Cheram**’.
 - Dr Herman Gundert, a German scholar who created the first Malayalam-English dictionary, noted that ‘**keram**’ is the Kannada form of ‘**cheram**.’ He described ‘**Keralam**’ as ‘**Cheram**,’ referring to the region between **Gokarnam and Kanyakumari**.
 - ‘**Cheram**’ signifies a region where ‘**cher**’ means to join, highlighting the unification of diverse areas.
- Keralam vs. Kerala Pronunciation:** ‘**Keralam**’ is considered to be a closer phonetic representation of the **original Malayalam pronunciation**. While the English version ‘**Kerala**’ was adopted for ease of pronunciation and writing, ‘**Keralam**’ maintains **linguistic authenticity in Malayalam**.

Significance:

The move to rename the state as ‘**Keralam**’ aligns more closely with the native pronunciation, historical roots, and cultural identity of the region’s people.

To rename a state in India, the following process is followed:

- State Government Proposal:** The state government drafts a resolution expressing the desire to change the name of the state.
- Ministry of Home Affairs (MHA) Approval:** Since changing the name of a state involves altering the Constitution, approval from the MHA is required.
- No Objection Certificates (NOCs):** The MHA seeks No Objection Certificates (NOCs) from various central government agencies such as the Ministry of Railways, Intelligence Bureau, Department of Posts,

etc.

- **Constitutional Amendment:** If the MHA finds the proposal acceptable and all the necessary NOCs are obtained, a Constitutional amendment is initiated.
- **Bill in Parliament:** The Bill goes through the usual legislative process in both the Lok Sabha (Lower House) and the Rajya Sabha (Upper House). The Bill requires a **simple majority to be passed**.
- **President's Assent:** Once the President gives his assent, the Bill becomes law.
- **Implementation:** With the President's assent, the name change becomes official and is implemented.

VISA ISSUANCE SUSPENSIONS BETWEEN FRANCE AND MALI

Context:

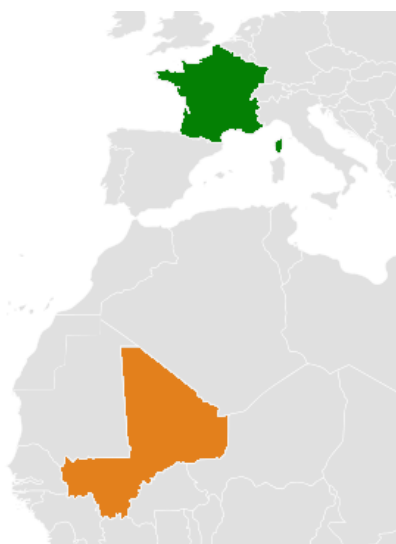
France and Mali have suspended the issuance of visas to each other's citizens, escalating a dispute between the two countries.

Background:

The conflict between France and Mali stems from Mali's 2020 military junta takeover, ousting the elected president over security and political failures. France's concerns about regional tensions increased Russian involvement, and security issues led to a phased withdrawal of its anti-jihadist force.

Mali is a landlocked country in West Africa. Mali is the eighth-largest country in Africa. The country is bordered on the north by Algeria, on the east by Niger, on the south by Burkina Faso and Côte d'Ivoire, and on the west by Guinea and Senegal.

In the late 19th century, during the [Scramble for Africa](#), **France** seized control of Mali, making it a part of **French Sudan**. French Sudan (then known as the Sudanese Republic) joined Senegal in **1959**, achieving independence in **1960** as the **Mali Federation**.



SUSWAGATAM PORTAL

Context:

The [Supreme Court](#) has introduced the '**SuSwagatam**' portal, an **online platform** that facilitates the issuance of e-passes for entering the apex court.

About the portal:

'SuSwagatam' is a user-friendly web application that enables advocates, visitors, and interns to register online and request e-passes for various purposes, including attending court hearings and meeting with advocates.

ATHIDHI PORTAL

Context:

The Kerala government is set to launch the '**Athidhi Portal**', which aims to expedite the **registration process** for [migrant workers](#) in the state.

Need of the portal:

- In light of recent incidents involving **sexual crimes against children allegedly carried out by migrant workers**, the government is taking measures to enhance the registration of "guest workers."
- The exploitation of unregistered migrants by contractors and the lack of social security

About the portal:

The portal will introduce a **unique identification system** and **facilitate the registration of workers by contractors, employers, and individual workers** themselves. The goal is to ensure **comprehensive registration and provide social security** for all migrant workers.

GS3

WATER NEUTRALITY IN INDIAN INDUSTRIES

Context:

The NITI Aayog, a government think-tank, has introduced a **standard definition and approach for water neutrality** in Indian industries.

What is Water neutrality?

Water neutrality is described as **achieving a balance between total freshwater consumption**, including both direct and indirect usage, and **quantifiable water savings** resulting from efficiency strategies.

Explanation using an example:

For instance, if a beverage company saves as much water through efficient production as it uses for making beverages and producing materials, it achieves water neutrality. If it saves more, it becomes water-positive; if it uses more, it's not water-neutral.

Steps to achieve water neutrality:

- Reduce water use by **increasing water efficiency**.
- **Install water reuse systems** such as rainwater harvesting or greywater recycling.
- **Offset remaining water demand** in the local region.

Significance:

- This concept aims to **save water, enhance its efficient utilization**, and enable the validation of **water neutrality claims** by industries.
- The [NITI Aayog's](#) report estimates that **following water neutrality standards could save 38.23 billion cubic meters of water over the next decade**.
- National Water Mission's Goal 4 (Increasing water use efficiency **by 20%**) includes the promotion of water-neutral and water-positive technologies.
- The Aayog emphasizes that **water neutrality/positive impact assessments** should consider both resource availability and quality, ensuring any remaining impacts are offset through sustainable water practices.

BHU-VISION

Context:

The **revolutionary IoT-based soil testing and agronomy advisory platform**, Bhu-Vision (also known as **KRISHI-RASTAA Soil Testing System**), has been officially **launched at the ICAR-IIRR**.

- The system can **perform 12 key soil parameter tests in just 30 minutes**, delivering accurate results via **mobile soil health cards to farmers and stakeholders**.

Significance:

- Indicating its **potential impact on completing the nation's soil health map** and enhancing **agricultural understanding**.
- It signifies a **promising future for agricultural technology in India**, contributing to a more comprehensive understanding of the nation's soil health and agricultural landscape.

EINSTEIN CROSS

Context:

Astronomers have discovered a rare example of an **"Einstein cross," a phenomenon predicted by Albert Einstein in 1915**.

- In this case, a **foreground elliptical galaxy**, located

around **6 billion light-years from Earth**, has **distorted and split a beam of light from a background galaxy about 11 billion light-years away**.

- The result is a **pattern of four blue smudges** around the **orange glow of the foreground galaxy**.
- The background light likely **originates from a quasar, a young galaxy with a supermassive black hole at its core emitting intense radiation**.

[Einstein's theory of general relativity](#) explains how massive objects warp space-time, and the strong gravity of the foreground galaxy curved the light from the quasar, creating the Einstein cross pattern.

5% OF BIRDS IN INDIA ARE ENDEMIC

Context:

A recent publication by the [Zoological Survey of India \(ZSI\)](#) reveals that **5% of India's bird species are endemic**, meaning they are **unique to the country and not found elsewhere**.

- Titled **"75 Endemic Birds of India,"** the publication was released on the **108th foundation day of the ZSI**. Out of **India's total of 1,353 bird species, 78 (5%) are endemic to the country**.

Key Findings:

- Three of these species have not been spotted in decades: **the Manipur Bush Quail, the Himalayan Quail, and Jerdon's Courser**.
- The **Western Ghats have the highest number of endemic species**, with 28 recorded.
- The **Andaman and Nicobar Islands** also have significant endemism, **hosting 25 bird species unique to the region**.
- The publication sheds light on the conservation status of these endemic species, **with 25 classified as 'Threatened' by the IUCN**, and a few listed as **'Critically Endangered,' 'Endangered,' 'Vulnerable,' or 'Near Threatened'**.

ISRAELI SPIKE NON-LINE OF SIGHT (NLOS) ANTI-TANK GUIDED MISSILES

Context:

The Indian Air Force (IAF) has **acquired Israeli Spike Non-Line of Sight (NLOS) anti-tank guided missiles**, capable of **hitting targets up to 30 km away**.

- It is developed and designed by Israeli company **Rafael Advanced Defense Systems**

Features:

- Lightweight, **fire-and-forget tactical precision-guided missiles** using **electro-optical and fibre-optic technologies**.

- The missiles will be integrated with Russian-origin **Mi-17V5 helicopters**, enhancing the **IAF's ability to engage hidden targets** behind mountains or hills.

Significance:

- The delivery of these missiles follows the IAF's interest in them due to **concerns over border tensions, particularly near the Line of Actual Control (LAC)** with China.
- The IAF aims to bolster its **arsenal through indigenous production and foreign acquisitions** to address security threats, as demonstrated by this acquisition of long-range anti-tank missiles.

AMRIT BHARAT STATION SCHEME

Context:

Prime Minister Narendra Modi laid the foundation stone for the **redevelopment of 508 railway stations across India**, signifying increased private participation.

Proposed features of Amrit stations:

Feature	Description
Green Building Standards	All Amrit stations will adhere to green building standards, contributing to environmental sustainability. This will be in line with the government's aims to make India's railway network operate on net zero emissions by 2030 .
Modern and Heritage Blend	Each station will embody both modern aspirations and ancient heritage, showcasing the country's rich cultural history.
Theme-Inspired Design	Stations will be designed based on specific themes, integrating local landmarks and cultural elements.
	E.g., Jaipur station's design will include elements resembling the iconic Hawa Mahal and Amer Fort of Rajasthan.
	E.g., Jammu Tawi station's design will draw inspiration from the renowned Raghunath Mandir in Jammu and Kashmir .

About the Scheme:

The Amrit Bharat Station Scheme (ABSS) was launched by the **Ministry of Railways in February 2023 with the aim of modernizing and enhancing railway** stations across India.

Objectives: Improve facilities beyond minimum essentials; Construct Roof Plazas and City Centers within stations; Introduce new amenities and upgrade existing ones; The scheme envisions a comprehensive transformation of railway stations, creating modern and passenger-friendly

spaces while also supporting local businesses and promoting India's heritage and culture.

NUCLEAR MEDICINE

Context:

India has expressed its support for South Africa's Integrated Early Warning systems and **Russia's BRICS Collaboration in Nuclear Medicine**

What is Nuclear Medicine?

Nuclear Medicine is a **medical speciality** that uses **radioactive substances** to diagnose and treat diseases.

- It involves the **use of small amounts of radioactive materials**, known as **radiopharmaceuticals**, which are introduced into the body.
- These substances **emit gamma rays that can be detected by specialized cameras** to create images of organs and tissues.
- This imaging technique helps in **diagnosing various conditions, such as cancer, heart disease, and bone disorders**, by providing detailed information about the functioning and structure of internal organs.
- Nuclear medicine treatments involve **using radioactive substances** to target and destroy specific cells or tissues, such as cancer cells.

IMS-1 SATELLITE BUS TECHNOLOGY

Context:

ISRO has transferred its **IMS-1 Satellite Bus Technology** to Alpha Design Technologies Pvt Ltd., promoting **private industry participation** in India's space sector.

- NewSpace India Limited (NSIL)**, ISRO's commercial arm, facilitated the technology transfer.

What is IMS-1 Satellite Bus Technology?

IMS-1 Satellite Bus is a platform developed by ISRO for **cost-effective space access**. It serves as a **versatile vehicle for payloads**, enabling tasks like **Earth imaging, space science, and remote sensing**. Weighing around **100 kg and carrying up to 30 kg payload**, it features solar arrays generating **330 watts of power** and provides accurate pointing capabilities.

Significance:

- The transfer marks the **first instance of ISRO's satellite bus technologies** being shared with private companies.
- This move aims to **boost India's industrial growth**, promote technological self-reliance, and encourage

private sector participation in space research and exploration.

NEERAKSHI

Context:

India has introduced an innovative **Autonomous Underwater Vehicle (AUV)** named '**Neerakshi**' designed for mine detection (currently in the prototype stage)

Developed by: Garden Reach Shipbuilders and Engineers (GRSE) Ltd and AEPL, an MSME entity.

Features: 2.1-meter-long cylindrical AUV, weighing around 45 kg, can perform various tasks such as mine detection, disposal, and underwater surveys.

It has an **endurance of four hours and a depth of up to 300 meters**, making it a versatile tool for ensuring coastal safety and protection.



Significance: Important for Indian Navy, Coast Guard, and Army

AIR POLLUTION LINKED TO RISE IN ANTIBIOTIC RESISTANCE

Context:

A global study suggests that **air pollution** is contributing to a rise in **antibiotic resistance**, posing a significant threat to human health worldwide.

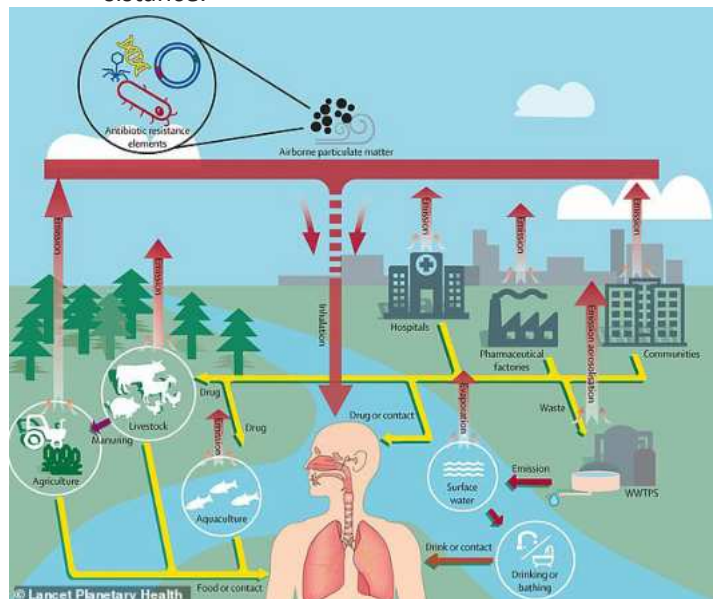
- The analysis shows a consistent link between increased air pollution and rising antibiotic resistance in every country and continent.
- Particulate matter PM2.5 in the air can contain antibiotic-resistant bacteria and genes, which might be inhaled by humans, potentially contributing to resistance.

Key findings:

- The study, the first comprehensive global analysis of this connection, suggests that reducing air pollution

could help mitigate antibiotic resistance.

- The study acknowledges that while air pollution is recognized as a pathway for disseminating antibiotic resistance, there is limited data on specific routes that antibiotic-resistant genes travel via air pollution.
- The research found that antibiotic resistance increases with PM2.5 air pollution, with a 10% rise in pollution associated with a 1.1% increase in resistance.
- A modelling scenario suggests that without changes to current air pollution policies, antibiotic resistance could rise by 17% by 2050, resulting in around 840,000 annual premature deaths attributed to resistance.



PLANT-EATING DINOSAUR SPECIES

Context:

Scientists from IIT-Roorkee and the Geological Survey of India (GSI) have discovered the fossil remains of a new dinosaur species in Jaisalmer, Rajasthan, naming it '**Tharosaurus indicus**'.

- This long-necked, plant-eating dinosaur belongs to the dicraeosaurid group. The name "Tharosaurus indicus" is derived from the Thar desert, where the fossils were unearthed, and "indicus" denotes its origin in India.

Significance:

- First in India:** The dicraeosaurid dinosaur had previously been found in the North and South Americas, Africa, and China. This is the first instance of such fossils being discovered in India.
- Oldest Diplodocoid Dinosaur:** The fossils were found in rocks estimated to be around 167 million years old. This makes the **Tharosaurus indicus** not only the oldest known dicraeosaurid dinosaur but also the oldest diplodocoid dinosaur globally.

HAVANA SYNDROME

Context:

The Indian Central government has informed the Karnataka High Court that it will **investigate the matter of the 'Havana Syndrome' in India**, in response to a petition from a Bengaluru resident.

- The petitioner had requested a writ of mandamus for an inquiry into the syndrome and the **prevention of high-frequency microwave transmission in India**.

About Havana Syndrome:

- Havana Syndrome refers to a **set of mental health symptoms experienced by US intelligence and embassy officials in various countries**. These symptoms include **hearing unusual sounds, nausea, vertigo, headaches, memory loss, and balance issues**. The syndrome originated in **Cuba in 2016**, affecting US officials there, and has **since been reported in multiple countries**.

While the exact cause of Havana Syndrome is not certain, it was initially suspected to be related to a **"sonic attack" due to the sudden onset of symptoms**. Later research suggested that high-powered **microwaves might be involved, damaging, or interfering with the nervous system**.

WHAT IS HAVANA SYNDROME?

No definitive cause has been found, but scientific studies have noted many of the acute symptoms are consistent with exposure to directed radio frequency energy

Acute symptoms (often occurring suddenly) **may include:**

- Pain in one or both ears
- Tinnitus, hearing loss
- Intense pressure or vibration inside the head
- Difficulty with memory or concentration
- Nausea
- Visual disturbances
- Unsteady gait, loss of balance, vertigo/dizziness

Chronic symptoms (can last weeks, months or longer) **may include:**

- Headache
- Insomnia
- Depression
- Impaired balance
- Impaired concentration, memory loss



Source: National Academy of Sciences

OS MAYA

Context:

Amidst rising **cyber and malware attacks on defence and critical infrastructure**, India's Defense Ministry plans to replace the **Microsoft Operating System (OS)** with a new **open-source OS called Maya**, developed locally based on **Ubuntu**.

- Maya offers a **similar interface and functionality as Windows**, easing the transition for users.
- A cybersecurity system called **Chakravyuh** is being **deployed for endpoint detection and protection**.

Developed by **government agencies within six months**,

Maya is expected to **mitigate the increasing malware and cyberattacks** that have targeted critical infrastructure and defence systems. This initiative aligns with past efforts to replace **Windows OS** with an indigenous alternative in the **Defense Ministry**.

SECOND WIN IN NUCLEAR FUSION REACTION

Context:

US scientists have **achieved net energy gain in a nuclear fusion reaction** for the **second time** since their initial breakthrough last year.

- Researchers at the **Lawrence Livermore National Laboratory** in California replicated their achievement in an experiment at the **National Ignition Facility (NIF)**, **surpassing the energy yield achieved in the previous breakthrough**.

About Nuclear fusion:

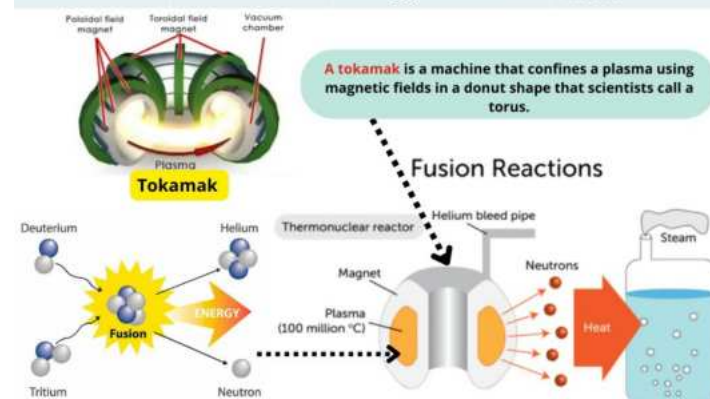
- Nuclear fusion involves **fusing light elements like hydrogen to create heavier elements, resulting in a release of significant energy**. This process, which mirrors the energy production of stars like the sun, **offers immense potential as a low-carbon energy solution**.
- Fusion energy holds **promise for abundant, environmentally friendly energy production, as it doesn't emit greenhouse gases or radioactive waste**.
- A small amount of fusion fuel, composed of **heavy hydrogen isotopes deuterium and tritium**, can provide as much energy as a large quantity of fossil fuels.

Nuclear Fusion

Nuclear Fusion reactor at South Korea have reached **temperature of over 100mn degree Celsius** (nearly 7 times that of core of Sun)

How nuclear fusion works

1	2	3	4
Hydrogen atoms are heated	Fusion reaction	Helium, neutron and energy released	Neutron energy heats water



BELEM DECLARATION

Context:

Leaders from eight Amazonian countries, including Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela, were unable to reach an agreement on the protection of the Amazon rainforest during the Amazon Summit organized by the Amazon Cooperation Treaty Organization (ACTO).

- The goal proposed by Colombia to protect 80% of the Amazon from deforestation and degradation by 2025 did not garner unanimous support.

The leaders focused on initiating a dialogue about the sustainability of mining and fossil fuel-related activities but failed to commit to stopping oil drilling in the region.

This lack of consensus has implications for global biodiversity goals, including those set under the Convention on Biological Diversity’s Global Biodiversity Framework in 2022, where countries agreed to protect 30% of land and sea by 2030.

About Belem Declaration:

The Belem Declaration is a statement released during the Amazon Summit, involving leaders from Amazon countries.

- It emphasizes the importance of Indigenous knowledge for biodiversity conservation and calls for Indigenous Peoples’ participation in decision-making.
- The declaration promotes sustainable forest use and diverse economic solutions, addressing concerns about deforestation and degradation in the Amazon region.
- It also underlines the need to protect land rights to prevent deforestation and preserve biodiversity within Indigenous territories.

VAQUITA PORPOISE

Context:

The International Whaling Commission (IWC) has issued its first-ever extinction alert for the critically endangered vaquita porpoise, the world’s smallest porpoise native to Mexico’s Gulf of California.

- The vaquita’s population has dwindled to just nine or ten individuals due to illegal gill net fishing, which aims to catch the totoaba fish for its valuable bladder in the Asian market.

The IWC’s scientific committee highlighted an alarming 83% decline in the Vaquita population between 2015 and 2018. This alert is driven by the need for a new mechanism to voice extinction concerns for various cetacean species and populations.

About Vaquita porpoise:

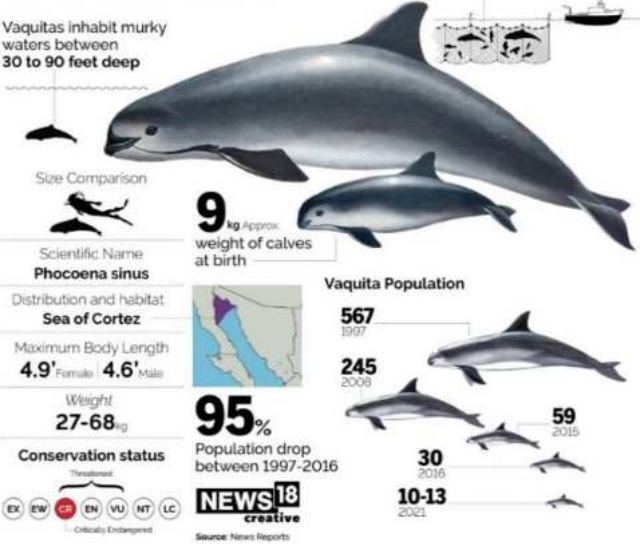
- The vaquita (Phocoena sinus) is the world’s smallest cetacean.
- They are only distant relatives of dolphins.

Protection Status:

- IUCN Red List: Critically Endangered.
- CITES: Appendix I

Vaquita porpoise

World’s smallest, critically endangered vaquita at risk from illegal gill nets in Mexico’s Gulf of California. Urgent conservation, fishing bans, net removal needed for survival



INDIAN WEB BROWSER DEVELOPMENT CHALLENGE (IWBDC)

Context:

The Ministry of Electronics & Information Technology (MeitY) introduced the Indian Web Browser Development Challenge (IWBDC) at the India Habitat Centre in New Delhi.

Aim of the Challenge:

The challenge aims to encourage technology enthusiasts and developers across India to create an indigenous web browser with advanced features and heightened security.

Collaborations:

The initiative is a collaborative effort of MeitY, the Controller of Certifying Authorities (CCA), and C-DAC Bangalore.

Key points of the IWBDC launch:

Aspect	Details
Challenge Objective	The IWBDC inspires developers to create a homegrown web browser equipped with its trust store containing a Controller of Certifying Authorities (CCA) India root certificate. Browser features should encompass cutting-edge functionalities, robust security, data privacy, accessibility, and user-friendliness.

Digital Signatures	The proposed browser envisions incorporating the ability to digitally sign documents using a crypto token , thereby enhancing secure transactions and digital interactions.
Competition Structure	The IWBD C comprises three rounds: ideation, shortlisting, and the final round.
Participation	The launch event drew over 200 participants from various sectors, including government departments, industry, academia, and startups. The challenge welcomes individuals and groups to submit innovative browser ideas.
Internet Resilience	Developing an Indian Web Browser with an inbuilt India Root Certificate enhances the nation's internet resilience by reducing dependence on foreign entities for SSL certificates.

Significance:

- The IWBD C launch signifies a **significant step toward fostering local innovation, ensuring data security, and achieving digital self-sufficiency for India.**
- The challenge aligns with [the Aatmanirbhar Bharat \(self-reliant India\) initiative](#), aiming to achieve self-sufficiency and bolster India's digital sovereignty.
- **Championing Digital India:** Recognizing web browsers' critical role in shaping online experiences, the challenge contributes to the ongoing Digital India transformation by fostering indigenous innovation.

What is an India root certificate?

The India Root Certificate is a digital certificate issued by a **trusted authority in India**. It serves as a foundational element for establishing secure digital communications and transactions within the country's online ecosystem. This certificate verifies the authenticity of websites, software, and digital signatures, contributing to enhanced security and trust in online interactions.

Top browsers like **Chrome and Firefox do not include CCA** in their root stores. Due to this, for **digital certificates or Security Sockets Layer (SSL) certificates**, India has depended on SSL certificates issued by **Roots of Foreign Entities**.

About CCA:

The controller of Certifying Authorities (CCA) was appointed under the Information Technology (IT) Act 2000 of MeitY, to issue certificates only to Certifying Authorities (CAs). CAs issue **Digital Signature Certificates** to end entities.

[Digital Signatures](#) are valid under IT Act 2000. For identifying and verifying CAs, CCA established the **Root Certifying Authority of India (RCAI)** under IT Act.

SCIENTISTS DESIGN 2D COMPOSITE QUANTUM MATERIAL

Context:

A team of scientists has used **computational techniques to design a novel 2D composite quantum material** that exhibits an **exotic quantum property** called Rashba splitting.

What is composite quantum material?

A composite quantum material combines two different quantum properties in one substance.

For instance, a **2-D carbide structure named Mo₂COX** displays both the Rashba effect and nonlinear anomalous Hall effect, offering the potential for advanced spintronic devices.

What is Spintronics?

Spintronics is a technology (used on next-generation nano-electronic devices) that exploits the intrinsic spin of electrons alongside their charge for innovative electronic devices.



An example is a spin transistor, where electron spin is used for information storage and processing, potentially leading to more energy-efficient and faster electronic devices.

What is Rashba splitting?

Rashba splitting is a quantum phenomenon in materials where **spin-up and spin-down** electrons separate due to interactions with an electric field.


For instance, in a **2-D carbide material**, **Rashba splitting causes momentum-dependent** separation of electron spin bands, enabling novel spintronic device applications.

Quantum materials possess unique physical properties that stem from quantum effects like **coherence and entanglement**. These properties have the potential to revolutionize quantum technology applications, including quantum computing, communication, sensors, and memory devices.

Quantum Computing

Context: Union Cabinet has approved the National Quantum Mission (NQM)



Quantum computing uses quantum bits (qubits) that can be both 0 and 1 at the same time, allowing for multiple calculations to be performed simultaneously, making quantum computing exponentially faster than traditional computing for certain types of problems.

About National Quantum Mission

	Description
Objective	Develop and promote Quantum Technology in India
Timeframe	2023 – 2031 (8 years)
Major themes	<ul style="list-style-type: none"> • Quantum Computing: Develop physical qubit computers with a capacity ranging from 50-1000 qubits (to be completed within 3-8 years) • Quantum Communication: Develop secure satellite-based communication with a range of 3000 km and communication lines using Quantum Key Distribution over 2000 km (to be completed within 3-8 years) • Quantum Sensing and Metrology: Develop quantum sensors (magnetometers with high sensitivity in atomic clock systems) for Navigation, healthcare and diagnostics, defence, and energy sectors (to be completed within 8 years) • Quantum Material and Devices: Develop devices and materials (superconductors, novel semiconductor structures, and topological materials) for quantum technology (to be completed within 3-8 years)
Key Agencies Involved	Department of Science & Technology, Department of Atomic Energy, Department of Telecommunications, DRDO, ISRO
Other Aim	The Mission also aims to establish four thematic hubs (T-Hubs) at research institutes and R&D centres (based on above themes)
Significance	India will be among the top six leading nations (US, Canada, France, Finland, China and Austria,) involved in the research and development in quantum technologies.
Other programmes	National Mission for Quantum Technologies and Applications (NM-QTA); Quantum-Enabled Science & Technology (QuEST); C-DOT's Quantum Communication Lab and Quantum Key Distribution (QKD) solution.

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ZAYED TALWAR

Context:

The Indian Navy's ships **INS Visakhapatnam** and **INS Trikand** have arrived in Dubai to conduct the bilateral exercise '**Zayed Talwar**' with the UAE Navy.

Aim:

The exercise aims to **enhance interoperability and cooperation** between the two naval forces. The visit seeks to **strengthen the maritime partnership**, share best practices, and **foster a common understanding of security challenges** in the region.

Other exercises between India and UAE:

- Exercise Desert Flag (Air Force)
- In-UAE BILAT (bilateral naval exercise)
- Desert Eagle (bilateral air force exercise)

tionless credit delivery with open architecture and APIs, allowing seamless connectivity for all financial sector players.

About UPI:

A unified payment system (UPI) **powers multiple bank accounts into a single mobile application** (of any participating bank), merging several banking features like Instant transfer of funds, bill-sharing facility, etc. It has been developed by: National Payments Corporation of India.

About UPI-Lite: UPI-Lite is an on-device wallet service that **enables low-value transactions** without utilizing a Remitter bank's core banking systems in real-time.

RBI LAUNCHES NEW FEATURES FOR UPI

Context:

The [Reserve Bank of India](#) (RBI) has introduced several measures to further advance **digital payments** through the [unified payments interface](#) (UPI):

Features are:

- **Conversational Payments with AI:** The RBI is launching "**conversational payments**" (audio interaction with AI bots) on UPI, enabling users to interact with an AI-powered system to initiate and complete transactions safely.
 - This innovative mode aims to enhance ease of use and expand UPI's reach.
- **Offline Transactions with NFC:** The RBI proposes enabling offline transactions using Near Field Communication (NFC) technology.
 - This approach supports digital payments in scenarios **with weak or no internet connectivity**, enhancing speed and accessibility.
- **Transaction Limit Increase for Small-Value Payments:** The transaction limit for small-value offline digital payments will be **increased to ₹500**.
 - The overall limit of **₹2,000 will remain to mitigate risks**. This adjustment facilitates faster, more reliable, and contactless payments for everyday small-value transactions.
- **Expansion of UPI-Lite:** The UPI-Lite wallet introduced by RBI, aimed at optimizing processing resources for banks, **now processes over 10 million transactions** a month, enhancing transaction reliability.
- **Digital Public Tech Platform:** The Reserve Bank Innovation Hub is developing a digital platform for **fric-**

DEFLATION

Context:

China has entered a **state of deflation due to challenges** in its post-pandemic recovery efforts, as evidenced by recent data.

What is Deflation?

Deflation is an economic phenomenon characterized by a sustained decrease in the general price level of goods and services within an economy. It is the opposite of [inflation](#), where prices tend to rise over time. Deflation occurs when **the supply of goods and services exceeds demand**, leading to a decrease in consumer spending.

Effects of Deflation: While lower prices might seem advantageous, they can hinder economic growth by causing businesses to cut jobs, freeze hiring, and offer discounts to maintain sales.

Reasons for deflation in China:

- Government intervention in IT, Real estate industries
- Crackdown on polluting industries
- Rising wages in China
- Geopolitical tensions leading to the trade war with the USA
- **Challenges to Recovery:** China's post-COVID-recovery momentum has faltered as domestic demand weakens.
- **Consumer Price Index (CPI) Dropped** in China
- **Product Price Index (PPI) Decline:** The product price index, a measure of wholesale prices, continued its downward trajectory

THE GANGA AFFORESTATION PROJECT FALLS SHORT OF TARGET

Context:

An afforestation initiative aimed at **protecting the Ganga**

River has concluded its first phase **without achieving its goals**, according to a [Right to Information \(RTI\)](#)-based investigation.

- The project, **which aimed to plant trees along the banks of the Ganga River**, managed to cover only a little over 22% of the target area during its initial phase (2016-2021).

The project, overseen by the [National Mission for Clean Ganga \(NMCG\)](#), aimed to enhance water retention, reduce erosion, and improve the overall hydrological cycle.

About NMCG:

This mission was established under the **Societies Registration Act, 1860** as a registered society.

Objectives:

- The mission incorporates **rehabilitating and boosting the existing STPs (Sewage Treatment Plants)** and **instant short-term steps to curb pollution** at exit points on the riverfront in order to check the inflow of sewage.
- To **regenerate and maintain the natural vegetation of the area**.
- To conserve and regenerate the aquatic biodiversity as well as the riparian biodiversity of the river Ganga basin.
- To allow the **participation of the public in the process of protection, rejuvenation, and management of the river**.

RISING PEST THREATS

Context:

Tea planters in southern India are facing an urgent issue as **the tea mosquito bug**, a serious **pest of fruits and tea plantations**, is spreading to **high-elevation areas** where it was **previously uncommon**.

- The bug is causing **significant damage to tea production in both low and high-elevation plantations** across northern and southern states.
- This expansion of the bug's territory is attributed to climate change**, as warming temperatures and **shifts in rainfall patterns** create more suitable conditions for pests.

In addition to the tea mosquito bug, other pests are also adapting to the changing climate. **Aphids, soft-bodied insects that feed on plant sap, are particularly affected**. Rising temperatures allow them to **reproduce more frequently**, and **their populations can increase significantly with even small temperature rises**.

Changes in rainfall patterns and **soil conditions are also impacting pest behaviour**, leading to new challenges for farmers. The **increase in carbon dioxide levels in the atmosphere**, a result of greenhouse gas emissions, is **exacerbating the abundance and behaviour of herbivorous insects**, further threatening crops.

MANGROVES

[Mangroves](#) make up only about **0.15% of India's land area** but provide numerous benefits to coastal communities over its vast coastline (**spanning 7516km**)

Benefits of Mangroves for India:

Benefits	Examples
Coastal Protection	Mangroves act as natural barriers against erosion, storms, and cyclones. They reduce wave impact, protecting coastal areas from damage .
Flood Mitigation	Mangroves stabilize sedimentation and help mitigate coastal flooding . In the Sundarbans region , mangroves help prevent inland flooding during monsoon seasons.
Biodiversity Habitat	Mangroves provide critical habitats for various plant and animal species, including endangered ones like the Bengal tiger and the Ganges river dolphin . E.g., Sundarbans , the world's largest mangrove forest , hosts a diverse range of species, supporting biodiversity.
Livelihood Support	Mangroves contribute to the livelihoods of fisher communities . Programs in the Sundarbans demonstrate how involving local communities can lead to sustainable livelihoods for fisherfolk .
Water Quality Improvement	Mangroves act as natural filters, trapping sediments, pollutants, and excess nutrients. They improve water quality and benefit marine ecosystems.
Climate Change Mitigation	Mangroves absorb and store carbon dioxide (CO2) from the atmosphere, aiding in climate change mitigation.
Resilience to Climate Change	Mangroves show adaptability to sea-level rise and increased storm intensity . They recover relatively quickly from climate-related impacts .

Government initiatives:

Amrit Dharohar:

- Objective:** Revive and conserve wetlands, enhance biodiversity, eco-tourism, and livelihoods of local communities.
- Approach:** Optimal utilization of wetlands, public participation, and Ramsar site designation.

Key Features:

- Encourages sustainable ecosystem use.
- Combats wetland degradation.
- Ensures water availability for migratory birds.
- Foster's intelligent wetland use.
- Public participation for wise wetland management.

MISHTI (Mangrove Initiative for Shoreline Habitats & Tangible Incomes):

- Objective: Plant mangroves along coastlines and salt pan lands, promote intensive afforestation, and ensure sustainable livelihoods.
- Approach: Convergence of MGNREGS, CAMPA Fund, and other sources for mangrove plantation.

Key Features:

- Intensive coastal mangrove afforestation.
- Comprehensive coverage across states and territories.
- Sharing best practices through Public Private Partnership.
- Promotes eco-tourism, agroforestry, and alternative livelihoods.

INTERPOL GLOBAL ACADEMY NETWORK

Context:

The [Central Bureau of Investigation](#) (CBI) Academy has recently joined the **Interpol Global Academy Network** as its **10th member**.

What is Interpol Global Academy Network?

It is an initiative **launched by Interpol in 2019 to enhance global law enforcement training**. It fosters collaboration among law enforcement training institutions through joint programs, research, and knowledge exchange while promoting excellence and innovation in training.

About CBI Academy

The CBI Academy is the training institution of India's premier investigative agency, the Central Bureau of Investigation (CBI). Established in 1996, the academy is in Ghaziabad, Uttar Pradesh, aiming for professionalism, impartiality, and dedication. It offers diverse training on topics like cyber-crime, and anti-corruption, and collaborates with foreign agencies and international organizations.

About CBI: The Central Bureau of Investigation (CBI) was founded in 1963 to combat corruption and breaches of central laws. Operating under the **Delhi Special Police Establishment Act**, it investigates bribery, corruption, organized crime, and international cases.

The reserve is transitioning from a **low- to high-tiger-density area according to the All India Tiger Estimation 2022**.

Manas, situated in Assam and traversed by the Manas and Beki rivers, experiences a **tropical monsoon climate**. The primary forest types include **semi-evergreen forests, mixed moist and dry deciduous forests**, alluvial grasslands, creeper swamp forests, Eastern seasonal Swamp forests, and Cane and bamboo brakes. Notably, endemic plant species like the **Catechu tree, Sissoo, and White siris thrive** here, while the endemic fauna includes the Pygmy hog, Golden langur, and Assam roofed turtle. This area is a **World Natural Heritage site, encompassing a wildlife sanctuary, national park, and tiger reserve**, safeguarding its unique biodiversity.



ARASH-DORRA GAS FIELD

Saudi Arabia and Kuwait have rejected **Iran's claims to a disputed gas field** located in the offshore area known as **Arash in Iran and Dorra in Kuwait and Saudi Arabia**. The dispute over this field dates back to the **1960s between Saudi Arabia, Iran and Kuwait**.

The Arash-Durra gas field is an **offshore natural gas field located in the neutral zone between Kuwait, Iran and Saudi Arabia**. It was discovered in **1967**. It began production in 2013 and produces **natural gas and condensates**.

MAPPING

ASSAM'S MANAS TIGER RESERVE

Context:

Assam's [Manas Tiger Reserve](#) is facing significant staffing challenges, with nearly **63% of required positions vacant**.



OMKARESHWAR RESERVOIR (MADHYA PRADESH)

NTPC Renewable Energy Limited has successfully secured a bid for an **80 MW** floating solar project at the [Omkareshwar Reservoir](#) in Khandwa, Madhya Pradesh.

The largest floating solar project in India is a **100 MW installation** located at NTPC Ramagundam in Telangana.



The Omkareshwar Dam is a **gravity dam** on the Narmada River just upstream of Mandhata in Khandwa district, Madhya Pradesh, India. It is named after the Omkareshwar temple located just downstream.

GHANA

Ghana has approved a **new policy** to maximize benefits from **mining green minerals**, aligning with the global demand for clean energy resources. It prohibits exporting **critical minerals** in raw form to add value to the economy. This move follows similar actions by Namibia and Zimbabwe.

Ghana is a country in West Africa. It abuts the Gulf of Guinea and the Atlantic Ocean to the south, sharing borders with Ivory Coast in the west, Burkina Faso in the north, and Togo in the east.

Ghana has rich mineral resources such as **gold, diamonds, manganese, limestone, bauxite, iron ore** as well as various clays and granite deposits. Ghana is the **second largest producer of gold** in Africa.



KENYA

Kenya's Environment and Land Court has issued a **14-day stay** on President Ruto's decision to repeal a logging ban introduced in 2018 to protect forests. Environmentalist has argued that lifting the ban could harm the environment, threaten communities reliant on forests, and lack proper scientific and participatory basis.

Kenya is in East Africa with a coastline on the Indian Ocean. It encompasses the **savannah, Lakelands, the dramatic Great Rift Valley** and mountain highlands. From Nairobi, the capital, safaris visit the **Maasai Mara Reserve**, known for its annual **wildebeest migrations**, and **Amboseli National Park**, offering views of Tanzania's 5,895m Mt. Kilimanjaro.



INDONESIA'S ACEH PROVINCE

Context:

Authorities in Indonesia's Aceh province have issued an **order requiring men and women not immediately related or married** to stay apart in vehicles and public spaces. This move aims to **enforce stricter adherence to Islamic law** in the ultra-conservative province of Aceh.



DEADLY WILDFIRES STRIKE MAUI (HAWAII, USA)

Context:

A devastating [wildfire](#) swept through Maui, Hawaii, leading to destruction, fatalities, and evacuations.

Maui is an island in the Central Pacific, part of the Hawaiian archipelago. The Hawaiian Islands are an archipelago of **eight major volcanic islands**, several atolls, and numerous smaller islets in the North Pacific Ocean, extending some 1,500 miles from the island of Hawai'i in the south to the northernmost Kure Atoll.

Formation: The Hawaiian Islands were formed by a **hot spot occurring in the middle of the Pacific Plate**. While the hot spot itself is fixed, the plate is moving. So, as the plate moved over the hot spot, the string of islands that make up the Hawaiian Island chain was formed.



KATCHATHEEVU ISLAND (TAMIL NADU)

The island of [Katchatheevu](#) is a tiny uninhabited **landmass located in the Palk Strait between India and Sri Lanka**. The island, which was ceded to Sri Lanka by the Indian government in 1974, has sparked **ongoing debates and protests in Tamil Nadu** due to its historical and cultural significance, as well as its **impact on fishermen's livelihoods**. Tamil Nadu continues to call for the retrieval of Katchatheevu from Sri Lanka.

