



ENSURE IAS

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A. POLITY & GOVERNANCE

1. Ladakh: Demand for Inclusion in 6th Schedule

In March 2024, Environmentalist Sonam Wangchuk, ended his 21-day fast to demand the implementation of the Indian Constitution's **6th Schedule and statehood** for the Union Territory (UT) of **Ladakh**.

Why is Ladakh protesting for inclusion in 6th schedule?

1. A **majority** of the population in Ladakh belongs to **Scheduled Tribes**.
2. The **6th Schedule** grants significantly **greater autonomy** to tribal communities compared to the Fifth Schedule.
 - Under the **5th Schedule**, the Governor holds special powers to protect tribal interests, including the authority to restrict the application of certain laws in scheduled areas **but the 6th Schedule**, however, reduces the Governor's role to organize and reorganize the autonomous districts but empowers the respective council and other bodies within the autonomous regions.
3. Inclusion under **6th Schedule** would allow Ladakh to create Autonomous District and Regional Councils (**ADCs and ARCs**) — elected bodies with the power to administrate tribal areas.
 - This would include the power to make laws on subjects such as forest management, agriculture, administration of villages and towns, inheritance, marriage, divorce and social customs.
4. The **Schedule also gives ARCs and ADCs the power** to collect land revenue, impose taxes, regulate money lending and trading, collect royalties from licences or leases for the extraction of minerals in their areas, and establish public facilities such as schools, markets, and roads.

Background

1. **After the repeal of Article 370** in August 2019 and the subsequent enactment of the Jammu and Kashmir Reorganisation Act, 2019, Ladakh has been recognised as a separate Union Territory “without legislature”.
 - a. Earlier Ladakh had been represented by **4 members in the J&K Assembly and 2 in the Legislative Council** before the abrogation.
 - b. The Ladakh Autonomous Hill Development Councils of Leh and Kargil, formed to administer the region, also have limited powers.
 - c. This led to concerns among locals about loss of identity, resources and bureaucratic overreach. Since then, there have been demands for Statehood and greater representation for Ladakh.

Demand by Ladakh Leaders

1. The Ladakhi leaders approached the MHA with four demands:
 - a. **Statehood** for Ladakh
 - b. Inclusion of Ladakh under the 6th Schedule of the Indian Constitution
 - c. Setting up of a separate Public Service Commission for Ladakh
 - d. Two parliamentary seats for Ladakh.
2. The environmentalists have also raised serious concerns regarding mining and industrialization in the fragile glacial region. Activists are demanding 6th schedule to protect the high-altitude desert, alpine meadows and glaciers.
3. These areas are very crucial habitat for rare and endangered species.
4. The MHA delegate agreed in principle to negotiate the last two demands. But the ministry downright rejected the demands for statehood and the 6th Schedule.



Ladakh

1. In terms of area, it is the largest Union Territory of India.
2. It is the second least populous union territory of India, after Lakshadweep.
3. According to census 2011, it has population of 2.74 lakh.
4. In Ladakh, more than 97% of the population belong to Scheduled Tribes while Kargil is a Muslim-majority region.
5. Ladakh is also culturally rich and vibrant.



Difficulty Behind Ladakh’s Inclusion in 6th Schedule:

1. The 6th Schedule was originally designed for the tribal areas of the Northeastern states, aiming to protect their unique cultures, customs, and land rights.
2. No region outside the Northeast has been included in the Sixth Schedule so far.
3. For tribal areas in the rest of India, **the 5th Schedule** plays a similar role. **It safeguards tribal rights, land, and governance.** States like Chhattisgarh, Jharkhand, and Odisha have tribal-dominated regions governed by the 5th Schedule.
4. Even in **Manipur**, where certain areas have predominantly tribal populations, the autonomous councils are **not included** in the Sixth Schedule. Despite being highly tribal-dominated states, **Nagaland and Arunachal Pradesh** are also **not** part of the Sixth Schedule.
5. **Ladakh’s Unique Position:** If Ladakh were included in the Sixth Schedule, it would indeed be

an unprecedented move. As the only Union Territory (UT) considered for this status, Ladakh’s case stands apart, necessitating a constitutional amendment to grant it such a special status.

What is the 6th Schedule of the Constitution?

1. The 6th Schedule under Article 244(2) and 275(1) contains provisions as to the administration of tribal areas in the 4 north-eastern states of Assam, Meghalaya, Tripura, and Mizoram.
2. The Sixth Schedule under Article 244 of the Constitution protects tribal populations, allowing for the creation of Autonomous Development Councils which can frame laws on land, public health, agriculture.
 - As of now, 10 autonomous councils exist in Assam, Meghalaya, Tripura, and Mizoram.
3. So, inclusion under 6th Schedule would allow Ladakh to create ADCs and ARCs — elected bodies with the power to administrate tribal areas.

Such councils (ADCs & ARCs) have certain powers to govern these areas: -	
Legislative Powers	Making laws on specific subjects such as land use, forests, agriculture, local customs, and traditional practices.
Administrative Powers	Control over local administration, including the power to appoint civil servants and officials within the council’s jurisdiction.
Judicial Powers	Establishment of village councils and courts to settle disputes within the tribal areas. (But the Governor handles serious offences punishable by death or more than 5 years of jail.)
Financial Powers	The authority to impose and collect taxes, regulate money lending and trading, and issue licenses for mineral extraction.
Developmental Powers	Planning and implementation of development schemes and projects.



Tribal Areas under Sixth Schedule

- a. **Assam:** North Cachar Hills District, Karbi Anglong District, Bodoland Territorial Areas District.
- b. **Meghalaya:** Khasi Hills District, Jaintia Hills District, Garo Hills District.
- c. **Tripura:** Tripura Tribal Areas District.
- d. **Mizoram:** Chakma District, Mara District, Lai District.

Drawbacks of 6th Schedule Status:

1. **Creation of Multiple Power:** The establishment of ADCs & ARCs parallel to District Magistrates & Governors, etc can make decision-making confusing because there are too many leaders in charge.

- 2. **Conflict of Interest:** The district councils might refuse to implement laws passed by the state government causing conflicts and poor implementation of such laws.
- 3. **Demand for Greater Autonomy:** Tribal communities may demand greater autonomy beyond what is provided under the 6th Schedule, leading to tensions and conflicts with the central and state governments.
- 4. **Inter-Tribal Conflicts:** The presence of multiple tribal communities within the same region governed by the 6th Schedule can lead to inter-tribal conflicts over resources, land, and political representation.
- 5. **Underdevelopment of Region:** All the above things with no uniformity in administration lead to the underdevelopment of the region.

Arguments in Favour	Arguments Against
1. Following the reorganization of Jammu and Kashmir in 2019, Ladakh was designated as a Union Territory (UT) without a Legislative Assembly. This change led to concerns about the loss of local autonomy and representation in decision-making processes. Earlier Ladakh had 4 members in J&K’s assembly and 2 in the Legislative Council. When Ladakh was part of erstwhile Jammu and Kashmir, the Ladakh Autonomous Hill Development Council (LAHDC), an elected body that governed the region, enjoyed significant autonomy.	1. While concerns about autonomy and representation are valid, inclusion in the 6th Schedule may not be the most effective solution. This can make administrative processes more complex and hinder development initiatives.
2. The lack of a legislative body means that decision-making has shifted away from public participation and towards bureaucratic processes.	2. Shifting decision making from public participation to bureaucratic processes may be a temporary challenge that can be addressed through reforms within the existing administrative framework rather than inclusion in the 6th Schedule.
3. People in Ladakh fear that if there are industries, each industry will bring lakhs of people and this fragile ecosystem cannot support so many people.	3. While the fear of over-population and pressure on the ecosystem is understandable, it is necessary to find sustainable development solutions rather than solely relying on legal mechanisms such as the 6th Schedule.
4. The delicate situation in Ladakh is compounded by its borders with both China and Pakistan. The ongoing military standoff with the Chinese PLA in eastern Ladakh, combined with Pakistan’s persistent efforts to stoke tensions in India’s border areas, presents a significant security challenge.	4. Security challenges arising from border issues with China and Pakistan require comprehensive national strategies and cooperation between different agencies. Inclusion in the Sixth Schedule may not directly address these security concerns.



5. Inclusion in the 6th Schedule would provide legal safeguards to protect Ladakh’s unique cultural heritage and traditional customs.	5. While legal safeguards are important to protect the cultural heritage of Ladakh, alternative mechanisms can be explored within the existing legal framework without inclusion in the Sixth Schedule.
6. Four years have passed since the establishment of the Union Territory, but the absence of a Public Service Commission has created a sense of anger among the youths.	6. The absence of a Public Service Commission can be addressed through administrative reforms and capacity building within the existing administrative framework rather than requiring its inclusion in the Sixth Schedule.

The democratic representation in Ladakh should be a crucial component of India’s security strategy. Ecological issues, and myriad others, warrant constitutional safeguard for Ladakh under the 6th Schedule. Without such protection, this land with multi-coloured mountains, verdant valleys, turquoise lakes and azure sky that attract people from remote corners of the world would turn into a former shadow of itself.

In summary, Ladakh’s inclusion in the 6th Schedule would be a constitutional milestone, requiring thoughtful deliberation and a nuanced approach. Policymakers must weigh cultural preservation, economic development, and security imperatives to make an informed decision.

2. One Nation One Election

1. In March, 2024 The 6-member High-level Committee (HLC) on Simultaneous Elections, headed by Ram Nath Kovind (former President of India), submitted its Report (comprising 18,626 pages) to President Droupadi Murmu.
 - This panel was set up in September 2023 by Union Government to check feasibility of simultaneous elections.
 - Its objective is to improve governance, reduce election expenditure and reduce disruptions caused by frequent elections.
2. HLC has suggested a 2-step process to synchronize election cycles of the 3 tiers of government.

Step 1: Synchronizing Lok Sabha and Assembly Elections	Step 2: Integrating Local Body Polls
1. Aligning the election schedule of the Lok Sabha and State Assemblies	1. Will integrate elections to local bodies, including municipalities and panchayats
2. This will be achieved through a “ one-time temporary measure ”, where a “ fixed date ” is identified by the central government immediately after the Lok Sabha elections.	2. Conducting these local bodies elections within 100 days of the integrated Lok Sabha and Assembly elections.
3. Any state assemblies that are supposed to end after that date will end on the same day as the Lok Sabha.	3. The panel suggested a new constitutional provision, Article 324A , which would authorize Parliament to make laws to ensure simultaneous municipal and panchayat elections with general elections.
4. Basically, some state legislatures might have to end early this one time so that all the elections happen at the same time.	4. Committee also advised amending Article 325 of the Constitution to allow the Election Commission of India, in consultation with State Election Commissions, to prepare a common electoral roll and issue a single Elector’s Photo Identity Card (EPIC) for all elections.



Other Major Recommendations

1. Amend the Constitution to **enable a common voter list and a single voter ID card** for all elections.
2. Introduce new constitutional provisions (**Article 324A**) to empower Parliament to ensure simultaneous local body elections.
3. In case of mid-term elections, hold fresh elections only for the remaining term to maintain synchronicity.

What are the Benefits of Simultaneous election

1. **Resource** will be saved as they will be used only once in 5 years.
2. **Administration staff** will have to come for election duty only once in 5 years so they will better focus on their work.
3. **Model Code of Conduct** will be imposed only once in 5 years so there will be continuity of policies.
4. **Voter turnout** may increase as election will happen only once in 5 years.
5. Similar type of party will win at all 3 tiers so there will be smooth relation between Centre-State-local bodies.

Challenges in Simultaneous Election

1. For Synchronizing elections, Constitutional Amendments will have to be done.
2. Simultaneous Elections may not be liked by some states which have different agenda from Centre.
3. Simultaneous Elections may ignore regional issues and small regional parties.
 - So, Simultaneous Election will require changes in those state laws.
4. More infrastructure will be required, like more **EVMs** (electronic voting machines) and more **VVPAT (Voter Verifiable Paper Audit Trail Machines)** would be required.
5. Ensuring the availability of VVPATs everywhere poses a **logistical challenge**
6. The need for more armed forces and personnel at the same time will pose a challenge.
7. More number staff will be required.

Law commission report on Simultaneous Election, 2018

Problem in Election	Solution proposed by Law Commission
1. Election Cycle is long (5 years).	1. Election cycle can be reduced (holding elections twice in five years).
2. Every year some or other elections keep happening.	2. If Simultaneous Elections are not feasible at least all elections can be conducted in 1 calendar year.
3. Sometimes after no Confidence Motion, no party is able to prove majority. It leads to further election.	3. There should be Constructive Vote of No-Confidence Motion. In this, ruling party can be ousted only if other party is able to form the government. Now no need for fresh election.
4. If no party secures majority and is not able to form government, again election may be required.	4. Opportunity should be given to largest or alliance to prove majority. This way election can be avoided.
5. In Anti-defection law, presiding officer takes huge time to decide disqualification as there is no time limit for him to decide.	5. Presiding officer should decide disqualification within 6 months.



3. No Immunity To Legislature For Accepting Bribes: Supreme Court

1. In March, 2024 A 7-judge Constitution Bench of the Supreme Court (SC) ruled that Members of Parliament (MPs) and state legislators **who accept bribes** to vote or speak in a particular manner in the House are **not immune from prosecution**.
2. This judgment overturns the Supreme court's **1998 judgment (JMM bribery case), which granted immunity** to such lawmakers.

Privileges and Immunities of MPs and MLAs:

1. **Definition:** Privileges refer to **special rights, immunities, and exemptions** enjoyed by Parliament, state legislatures, their committees, and their members.
2. **Constitutional Provisions:**
 - a. Freedom of speech for MPs (**Article 115 (1)**)
 - b. Immunity from legal proceedings for statements in Parliament or its committees (**Article 105(2)**)
 - c. Similar provisions for MLAs under **Article 194**.
 - d. These privileges are **considered special provisions**.

Purpose of Privileges and Immunities:

1. To ensure MPs and MLAs can **perform their duties and function properly without hindrances**, which is essential for the democratic functioning of legislatures.
2. Without these privileges, the **Houses cannot maintain their authority, dignity, and honor**, nor protect their members from obstruction in **discharging parliamentary responsibilities**.

Difference Between Article 19 and Article 105:

1. **Both articles pertain to freedom of speech.**
2. **Article 105** applies to **members of parliament** without reasonable restriction, **while Article 19(1)(a)** applies to citizens subject to reasonable restrictions.
3. **Article 105 is an absolute privilege for parliament members but can only be exercised within the parliament's premises.**

Background of the Present Case

1. In **1998 the P.V. Narsimha Rao Case** involved allegations of bribery against Jharkhand Mukti Morcha (JMM) leader Shibu Soren and some of his party MPs.

2. They were **accused of taking bribes to vote against a no-confidence motion** against the then P.V. Narasimha Rao government.
3. In a landmark decision, the **Supreme Court of India, by a narrow 3:2 majority, granted immunity from prosecution to MPs who accepted bribes and voted to save the Congress government in Parliament.**
 - a. The Court held that legislators enjoy immunity from **criminal prosecution for bribery in matters connected** to their speech and votes in Parliament and Legislative Assemblies.

Subsequent Developments

Matter Reached Supreme Court Again:

1. In **2012, JMM MLA Sita Soren** was accused of accepting a bribe in exchange for her vote for a candidate in the Rajya Sabha elections.
2. She approached the Jharkhand High Court to quash the chargesheet and criminal proceedings against her, **relying on the immunity provisions of Article 194.**
3. However, the High Court refused to do so, after which Sita Soren had to appeal to the Supreme Court.
4. In **March 2019, the Supreme Court observed that the decision in the P.V. Narasimha Rao Case directly dealt with such cases.**
5. However, recognizing the **narrow margin** of the earlier decision (**3:2 split among five judges**) and the substantial public importance of the issue, the **Court referred the matter to a larger bench.**
 - a. In September 2023, a **5-judge bench led by Chief Justice of India (CJI) D.Y. Chandrachud** identified **3 key issues that needed to be reconsidered and referred from the P.V. Narasimha Rao Case to a 7-judge bench.**

The Final Judgment:

1. **No Immunity for Accepting Bribes:**
 - a. Individual members of the legislature **cannot claim immunity** from prosecution for bribery under Articles 105 and 194.
2. **Bribery Not Linked to Lawmakers' Duties:**
 - a. **Accepting a bribe is a separate crime** unrelated to a lawmaker's actions or words within the legislature.

- b. Thus, immunity under Articles 105 and 194 **does not extend to cases of bribery.**
- 3. Threat to Parliamentary Functioning:**
- Granting such protection would create an **unregulated group exempt from the law.**
 - Corruption and bribery by legislators undermine the functioning of Indian parliamentary democracy.
 - Such a claim of immunity** fails to meet the two-fold test necessary for legislators' essential duties.
- 4. Completeness of Bribery Offense:**
- Bribery is considered complete once a bribe has been offered or a compromise has been made, regardless of whether the vote is cast in the agreed direction or not.

4. Chandigarh's Mayoral Election

The recent judgment of the Supreme Court regarding the **Chandigarh Mayor elections has ignited a widespread discussion about the status of municipal elections in India.** While national elections are widely praised for their efficiency and democratic practices, but local government elections do not always receive the same level of praise.

The Controversy in the 2024 Chandigarh Mayoral Election:

- Significance of the Election:** Chandigarh Mayor election was immense as it was the **first alliance between major opposition parties, presenting a united front against the ruling party.** This sets the stage for possible cooperation ahead of the upcoming Lok Sabha elections.
- Initial Postponement and Rescheduling:** The election, initially scheduled for January 18, was postponed due to the illness of the presiding officer. **Later the UT administration suggested February 6 as the new polling date.** However, opposition parties sought intervention from the Punjab and Haryana High Court, leading to the election being rescheduled to January 30.
- Election Day Chaos and Controversy:** On the day of the election, allegations were made that the ruling party got 16 votes while the opposition alliance got

12 votes. However, **8 votes were declared invalid by the presiding officer,** leading to allegations of unfair disqualification by the opposition.

- Legal Battle and Supreme Court Intervention:** Dissatisfied with the High Court's decision, the opposition parties appealed to the Supreme Court. **The top court issued critical comments and reaffirmed its commitment to preserving democracy,** ultimately overturning the preliminary results and declaring the opposition coalition's candidate the rightful winner.

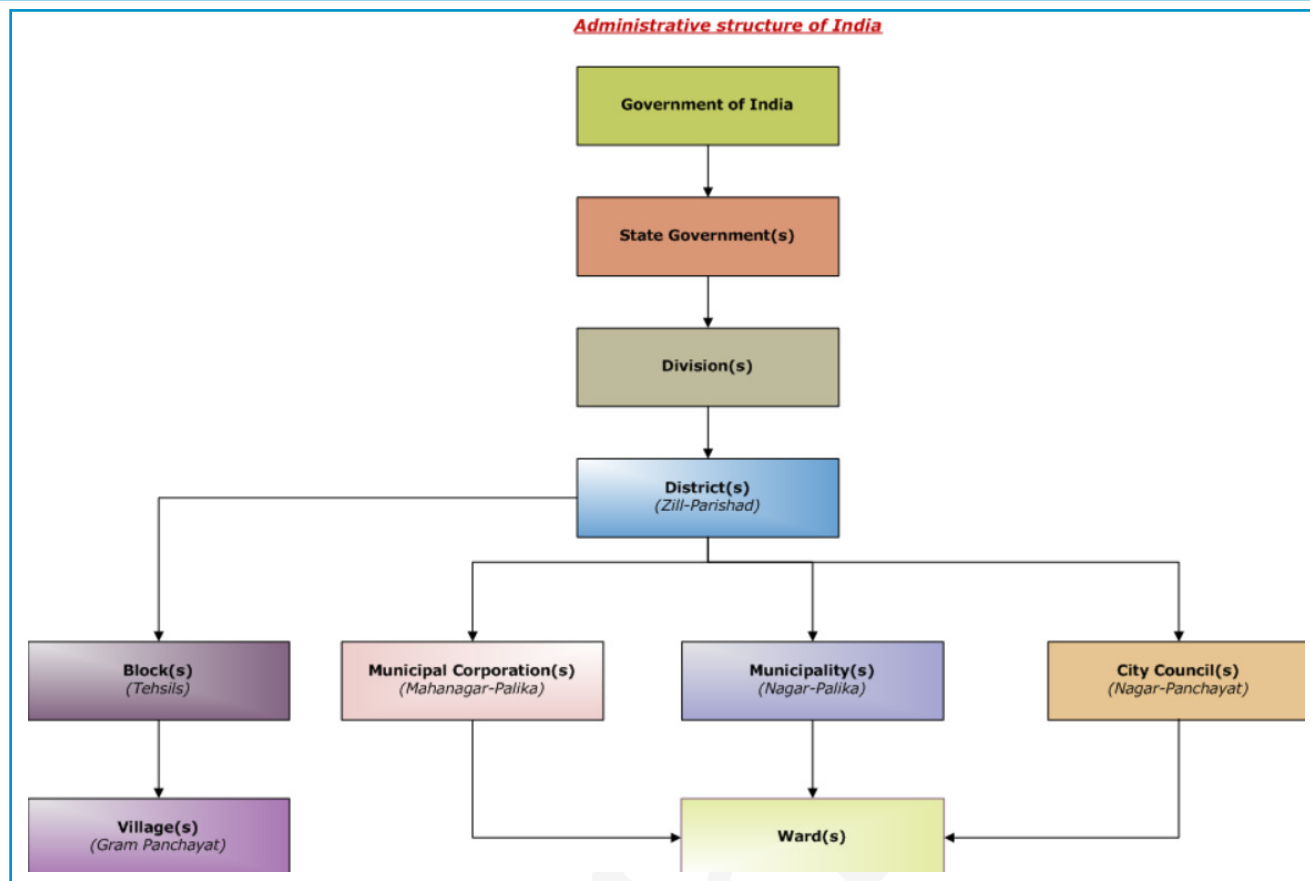
The Supreme Court's Verdict:

- Deliberate Efforts to Disqualify Ballots:** The Supreme Court found that the returning officer deliberately attempted to invalidate eight ballot papers in favor of a false winning party.
- Unlawful Conduct of Presiding Officer:** The Court criticized the conduct of the Presiding Officer, who changed the course of the election and made false statements, undermining the integrity of the electoral process.
- Ordered Show Cause Notice:** The judicial registrar was directed to summon the presiding officer and explain why action should not be taken against him.
- Preserving Electoral Democracy:** The Court highlighted its responsibility to protect electoral democracy, prevent its subversion and uphold democratic principles. It considered intervention necessary to protect the essence of electoral democracy.

Key Provisions for Urban Local Government in India:

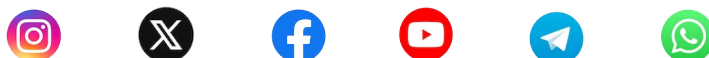
- 74th Constitutional Amendment Act, 1992:** The 74th Constitutional Amendment Act constitutionalized urban local government in India, adding Part IX-A to the Constitution and providing detailed provisions for municipalities and their functions.
- Constitutional Mandate:** The amendment provides them with constitutional status.
- Elections to Municipalities:** The State Election Commission is responsible for the supervision and conduct of elections to municipalities, and state legislatures may make provisions relating to these elections.





Problems Faced by Urban Local Bodies in India:

Problem Faced by Urban Local Bodies	Solutions
<p>Delayed Elections: Municipal elections are frequently postponed or delayed, sometimes for extended periods. This violates constitutional mandates and leaves many municipalities without elected councils, disrupting their ability to function effectively and represent the people.</p>	<ul style="list-style-type: none"> * Enforce strict constitutional adherence for regular election schedules. * Establish clear timelines and penalties for delaying elections without a substantially valid reason. * Explore alternative electoral systems, such as staggered elections, to reduce disruption while maintaining regular representation.
<p>Incomplete Formation of Councils: Even when elections take place, there can be significant delays in forming the councils and electing key officials such as mayors or chairpersons. This hampers the effective functioning of local governments and creates a leadership vacuum.</p>	<ul style="list-style-type: none"> * Set mandated deadlines for the formation of councils after elections. * Create procedures for swift resolution if deadlines are not met. * Consider legal recourse for unjustified delays in council formation.
<p>Shortened Terms and Frequent Elections: In some urban local governments, mayors hold office for terms far shorter than five years. This necessitates frequent elections, fostering instability, hindering long-term planning, and increasing administrative costs.</p>	<ul style="list-style-type: none"> * Mandate a minimum term length for elected officials to ensure stability and long-term planning. * Align the election cycles of urban local bodies with state or national elections where appropriate to reduce the frequency of polls.



<p>Discretion and Undue Influence: The discretion given to government officials in deciding election schedules provides an opportunity for delays in politically sensitive areas. This raises concerns about undue influence by the state government, particularly when opposing parties are in power at different levels.</p>	<p>* Limit the discretionary power of government officials in scheduling elections, potentially shifting power to independent electoral bodies. * Enforce conflict of interest safeguards to prevent undue influence from state governments.</p>
<p>Infrastructure and Resource Constraints: Many urban local bodies suffer from inadequate infrastructure, both physical and organizational. This directly impacts the delivery of essential services like water, sanitation, transportation, and waste management.</p>	<p>* Implement a robust revenue-sharing system between central, state, and local governments. * Empower urban local bodies to levy taxes and generate more revenue. * Explore innovative financing models like public-private partnerships.</p>
<p>Lack of Empowerment and Resources for State Election Commissions (SECs): SECs are responsible for conducting free, fair, and timely elections at the local level. However, they frequently lack sufficient authority, independence, and the financial/human resources to carry out their mandate effectively.</p>	<p>* Increase the authority and autonomy of SECs. * Provide adequate financial and human resources to SECs for effective electoral management. * Legislate to ensure the independence of SECs and protect them from interference.</p>
<p>Low Level of People’s Participation: Despite relatively high levels of literacy and education in urban areas, many city dwellers show limited interest in the functioning of urban local bodies. This results in a lack of responsiveness and accountability on the part of those local governments.</p>	<p>* Launch sustained civic education and awareness campaigns to promote citizen engagement. * Develop user-friendly platforms for citizens to interact with and provide feedback to local governments. * Decentralize decision-making by creating neighborhood councils and empowering local communities.</p>

5. Supreme Court’s Ruling on Patanjali’s Misleading Advertisements

1. The Supreme Court of India issued a contempt notice against Patanjali Ayurved for violating the Drugs and Magic Remedies (Objectionable Advertisements) Act of 1954 by publishing misleading advertisements.

Issues:

1. **Contempt of Court by Patanjali Ayurved:** The Supreme Court of India issued a contempt notice to Patanjali Ayurved for publishing misleading advertisements that claimed their products could cure various diseases, violating the Drugs and Magic Remedies Act. Despite previous assurances to the Court, the company continues to engage in such practices.

2. **Government Inaction:** The government did not take adequate action to inform the public that Patanjali’s product, Coronil, is not a cure for COVID-19 but only a supportive measure. The presence of Union ministers at the Patanjali press conference in 2021 provided credibility to the company’s claims about Coronil.

3. **False Advertising During the Pandemic:** Patanjali was accused of promoting its products as a panacea during the Covid-19 pandemic, which is a violation of the Act.

4. **Defiance of Court Orders:** Despite a warning from the Court on November 21, 2023, not to advertise permanent cures and the threat of a penalty, Patanjali continued to defend and promote its products, including holding a press conference the day after the Court’s warning and issuing newspaper advertisements in December and January.



5. **Potential Government Support:** Patanjali’s continued **misleading advertising may be due to the government’s support**, primarily because the company is based in Uttarakhand, where the government may have interests.
6. **Public Health Risks:** The danger of prioritizing commercial interests over public health and safety, emphasizing that government favoritism in health and medicine can have serious and harmful consequences.

Legal Arguments Against Patanjali:

1. **Violation of Laws:**
 - a. The Indian Medical Association contended that Patanjali’s advertisements violated the **Drugs & Other Magical Remedies Act (DOMA)** and the **Consumer Protection Act (CPA)**.
2. **Legal Provisions under DOMA:**
 - a. **Section 4 of DOMA prohibits publishing misleading advertisements** regarding drugs, punishable by imprisonment or fines.
 - b. It specifies that false or misleading advertisements are prohibited.
3. **Legal Provisions of Consumer Protection Act:**
 - a. **Section 89 of the CPA imposes stringent penalties for false or misleading advertisements**, including imprisonment and fines.

Supreme Court’s Response:

1. **Ban on Advertising:**
 - a. The Court prohibited Patanjali from advertising or branding products addressing diseases specified in the DOMA.

Steps needs to be taken :

1. Enforce court orders with penalties for non-compliance.
2. Ministry of Ayush should **proactively monitor and regulate advertisements**.
3. **Run consumer awareness campaigns about evidence-based medicine**.
4. Encourage companies to publish **peer-reviewed research to support their claims**.
5. **Take regulatory action against unsubstantiated health claims**.
6. **Legal action can be taken against misleading advertising**.

Conclusion:

The Supreme Court’s ruling against Patanjali highlights the **importance of ethical advertising and consumer protection**. The **Court’s decision holds corporations responsible for misleading practices and protects the healthcare industry’s integrity**. Therefore, regulatory bodies and corporations must adhere to strict advertising standards to safeguard public health and maintain trust.

6. Commissionerate System

Recently, a new book by Uttar Pradesh’s former State Director General of Police O.P Singh revealed that the state Chief Minister Yogi Adityanath approved the **Police Commissionerate System (replacing the Dual System)** in **Lucknow** and **Noida** shortly after protests against the Citizenship Amendment Act (CAA) erupted in 2019.

What is the Dual Command System and Police Commissionerate System?

Dual Command System	Police Commissionerate System
District Magistrate and Superintendent of Police (SP) share powers and responsibilities in a district.	Powers of policing and magistracy are concentrated with the commissioner, who is directly accountable to the state government and the state police chief.
DM issues arrest warrants and licenses and SP investigates crimes and makes arrests.	The Commissioner of Police exercises powers and duties of a District Magistrate.
Ensure lower concentration of power and make police more accountable to DM at the district level.	Empower police by centralizing authority under the commissioner, ensuring direct accountability to the state government and police chief.

What is the need for a Police Commissionerate System?

1. **Efficiency and Coordination:** By centralizing authority under a police commissioner, the system



facilitates quicker decision-making and better coordination of law enforcement activities. This centralized structure allows for a more efficient response to crime and emergencies.

- Urban Areas:** In big cities with tough law enforcement issues, the Commissionerate System lets police focus on specific areas like traffic, cybercrime, or narcotics. The police commissioner can assign the right resources and people where they're needed most.
- Focused Attention:** Police chiefs can concentrate solely on maintaining law and order, without being distracted by other responsibilities. DM also has a huge workload of implementation of developmental schemes.
- Clear Accountability:** With a single person in charge, it's easier to hold them responsible for any mismanagement of law and order situations, reducing confusion and blame games.

Evolution of the Commissionerate System in India:

1977-79	Introduction of Commissionerate System in Delhi
1983	National Police Commission (NPC) recommended implementing the system in cities with a population of 5 lakh and above
2005	Draft Model Police Act proposed extending the system to metropolitan cities and urban areas with a population of 10 lakhs and above
Present	The Commissionerate System is operational in more than 60 cities across 16 states in India

Concerns with the Commissionerate system:

- Lack of Trust in Police:** Since colonial times, people haven't seen the police as supportive of the poor or ordinary citizens.
- Centralization of Power:** The system can concentrate power in the hands of a few individuals, such as the commissioner, leading to potential abuses or biased decision-making.

- Confusion Over Responsibilities:** Even though the Supreme Court says police deal with "law and order" and magistrates handle "public order," these areas often mix. A small crime might turn into a big public problem, making it hard to know who's in charge of what. (Law and order emphasizes enforcing laws for societal stability, while public order encompasses broader societal harmony beyond legal enforcement.)

Conclusion:

Indian urban areas can adopt models like the Commissionerate system seen in Western democracies, where a directly elected Mayor and City Council oversee police actions and performance with transparency and public involvement. Also, we need to encourage the active involvement of civil society groups to keep an eye on the police.

7. Demand for Greater Tipraland

A 3-party agreement has been signed between the Central government, the State government of Tripura and the TIPRA Motha.

What is the TIPRA Motha?

- The Tipra Motha, also called the **Tipraha Indigenous Progressive Regional Alliance**, is a regional political party in Tripura.



2. It used to be a social organisation led by **Pradyot Bikram Manikya Deb Barma**.
 - a. A **social organization** helps people and communities with social issues, like education or healthcare, without directly involving politics.
 - b. A **political party** aims to win elections and influence government decisions by promoting specific policies and ideas.
3. Currently, it is the **2nd-largest party** in the Tripura Legislative Assembly.



What are the demands of the TIPRA Motha?

1. Demand for a separate state of **Greater Tipraland**:
 - a. Earlier the demand for a separate state named **Tipraland** existed for **Tiprasa**. “Tiprasa” is a term that refers to the indigenous tribal communities of Tripura.
 - b. It included the **Tripura Tribal Areas Autonomous District Council (TTAADC)** and some surrounding areas to be made into a separate state from Tripura. An Autonomous District Council (ADC) is a local self-government body established under the provisions of the **6th Schedule** of the Constitution of India.
 - c. It was supposed to cover **68%** of the total geographical area of Tripura.
 - d. But later on, a new demand for **Greater Tipraland** emerged, which is an expanded version of Tipraland. It includes additional regions from **Assam, Mizoram and Bangladesh** where Tripuri people live.

2. **More autonomy** for TTAADC including
 - a. Direct funding from the Central government
 - b. Own Police force
 - c. Share of revenue from gas exploration taking place in Tripura
3. Declaration of the **Roman script** as the official script for the **Kokborok language** in the state. (Kokborok is a Tibeto-Burman language spoken in Tripura and neighbouring areas of Bangladesh)

What are the reasons behind such demands?

1. **Demographic Change:** Historically, indigenous tribal communities comprised a significant majority of Tripura’s population. However, there has been a significant change in the tribal population due to the displacement of Bengalis from the erstwhile East Pakistan between 1947 and 1971 (as given below):

Year	1881	2011
Tribal Population in Tripura	63.8%	32%

Ethnic Conflicts: There have been fights between tribal and non-tribal people, leading to serious problems, including armed conflicts in the past. As a result, the demand for Greater Tipraland grew from earlier requests for autonomy to later demands for **complete sovereignty and independence**.

2. **Alleged Discrimination:** TTAADC alleged that discrimination takes place when resources are allocated in the state.

Population Share of TTAADC in Tripura	40%
Geographical Coverage	66%
Funds Allocation	Only 2% of the state’s funds

Does Parliament have the authority to create a new state (under the Constitution)?

Article 2	Parliament has the authority to make laws allowing new states to join the country or to create entirely new states.
Article 3	Parliament can adjust state borders, form new states, expand or shrink existing states, and rename states by law.



What does the 3-Party Agreement say?

1. It seeks to **peacefully settle** all problems faced by the indigenous people of Tripura.
2. To make this happen, a **joint working group** (a team from all sides) will be established to facilitate dialogue and cooperation between the concerned parties.
3. The agreement stresses the importance of peace, asking everyone involved to **avoid protests** or activities that could disrupt the peace process.

8. Can a Chief Minister Serve While in Jail?

The arrest of Delhi Chief Minister Arvind Kejriwal has raised questions over his ability to continue performing his role while in judicial custody.

Legal and Constitutional Considerations:

1. **Immunity for President and Governors:** According to Article 361 of the Indian Constitution, the President and governors enjoy immunity from civil and criminal proceedings during their terms. However, this protection does not extend to prime ministers and chief ministers.
2. **No Constitutional Bar to Continuing as CM:** Constitutional experts state that there are no constitutional or legal provisions that prevent Kejriwal from continuing as Chief Minister while in jail. He can only lose his position if:
 - a. He loses the majority in the Legislative Assembly
 - b. His party asks him to step down
 - c. He resigns from his position

Disqualification Requires Conviction:

- According to Section 8 of the Representation of the People Act, 1951, conviction is a precondition for disqualification from holding public office. Since Kejriwal has not been convicted, he can legally continue in office.

Practical Challenges:

Difficulty in Governing from Prison: Governing from prison presents practical challenges. Kejriwal will have to lead cabinet meetings, consult with colleagues and review minutes for approval. However, being in prison would subject him to prison rules, making it difficult to perform these tasks effectively.

Case Law Precedent:

Manoj Narula versus Union of India: In the case of Manoj Narula v. Union of India, the Supreme Court emphasized the importance of constitutional morality, good governance and constitutional trust in holding public office. The decision suggests that ethical considerations may play a role in determining whether Kejriwal can remain chief minister while in jail.

Conclusion:

The legal and practical implications of Arvind Kejriwal's arrest and subsequent judicial custody need to be carefully considered. Although there are no constitutional or legal provisions that explicitly bar him from remaining chief minister, the practical challenges of governing from prison and principles of constitutional morality may influence the decision.

9. Criminal Case Management System

Boosting India's fight against terrorism and organized crime, the Union Home Minister and Cooperation Minister virtually **inaugurated a unique Digital Criminal Case Management System (CCMS)** in New Delhi and also **launched a mobile app 'Sankalan'**.

1. Under the visionary leadership of **Prime Minister Shri Narendra Modi** the newly developed CCMS will **strengthen the NIA against terrorism and organized crime cases**
2. Home Minister **e-inaugurates NIA's 2 new branch offices in Jammu and Kochi** and a residential complex in Raipur



About Criminal Case Management System

1. This will enable National Investigation Agency (NIA) personnel to establish better coordination in cases of terrorism and organized crime, which will improve justice delivery.
2. The new stand-alone version of CCMS has been designed by the National Investigation Agency (NIA).
3. It is user-friendly and easy to deploy, customizable, browser-based software to help state police forces in their investigation and prosecution.
4. The state-of-the-art CCMS software will not only bring standardization in investigations but will also enable easy and streamlined compilation of terror-related data across the country

What is the Sankalan app?

1. The app has been designed to bridge old and new criminal laws and facilitate navigation through the new legal framework.
2. This app aims to serve as a comprehensive guide for all stakeholders involved in the criminal justice system.
3. The app’s offline accessibility ensures that even in remote areas regardless of internet connectivity.
4. The Sankalan app is available for download on Google Play Store, Apple Store. It can also be accessed on desktop computers through the official websites of the Ministry of Home Affairs (MHA) and the National Crime Records Bureau (NCRB).

Q1) What is the National Investigation Agency (NIA)?

It is functioning as the central counter-terrorism law enforcement agency of India. It also aims to set standards of excellence in counter-terrorism and other national security-related investigations at the national level with an oriented workforce.

10. India ‘One of the Worst Autocracies’: V-Dem Report on Democracy

According to a 2024 report by the V-Dem Institute, India has ranked 104 on the Liberal Democracy Index, which is part of the V-Dem Democracy Indices that tracks democratic freedoms worldwide. This index includes measures of civil liberties, checks and balances, and rule of law. The report also states that India has become “one of the worst autocratisers lately” and is in the “top ten autocratisers” in the world.

About the Report:

Aspect	Details
Released by	V-Dem Institute at Sweden’s University of Gothenburg
Data Collection	A collaborative effort involving 4,200 scholars from 180 countries
Scope	covering 202 countries from 1789 to 2023.
Key Findings	India ranks 104 in LDI, slipped to 110 in the Electoral Democracy Index, 92 in the Liberal Component Index
Regional Impact	South and Central Asia second most autocratic region globally, Bhutan sole liberal democracy
Component Indices	V-Dem LDI combines indicators from the Liberal Component Index (LCI) and Electoral Democracy Index (EDI)
	EDI Measures fairness of elections, freedom of expression, information, association, and suffrage
	LCI Emphasizes the protection of individual and minority rights against state oppression and majority rule



About V-Dem

1. The **V-Dem Institute (Varieties of Democracy)**, founded in 2014 by Swedish political scientist Staffan Lindberg, analyzes the characteristics of governments worldwide.
2. Based at the **University of Gothenburg's political science department in Sweden**, the institute publishes a series of prominent datasets.
3. These publicly accessible datasets, **updated annually**, provide information on various government aspects through hundreds of indicator variables.

The V-Dem Institute's Democracy Report: Monitoring the State of Democracy Worldwide

1. Introduction:

- a. The V-Dem Institute is known for its **comprehensive Democracy Report**, which highlights the **current state of democracy globally**.

2. Classification of Countries:

- a. Countries are **categorized into 4 regime types based on their scores in the Liberal Democratic Index (LDI)**:
 - i. Liberal Democracy
 - ii. Electoral Democracy
 - iii. Electoral Autocracy
 - iv. Closed Autocracy

3. Liberal Democratic Index (LDI):

- a. The LDI includes **both liberal (individual and minority rights) and electoral (free and fair elections) aspects of a democracy**.
- b. The LDI is composed of **71 indicators** divided into the Liberal Component Index (LCI) and the Electoral Democracy Index (EDI).

4. Measuring Liberal and Electoral Aspects:

- a. The LCI assesses **factors such as protection of individual liberties and legislative checks on the executive**.

- b. The EDI evaluates **indicators related to free and fair elections**, such as freedom of expression and association.

5. Additional Components Considered:

- a. Apart from the LDI, the **Democracy Report also incorporates the following components**:
 - i. **Egalitarian Component Index** (equality among different social groups)
 - ii. **Participatory Component Index** (health of citizen groups and civil society organizations)
 - iii. **Deliberative Component Index** (whether political decisions are based on public reasoning or emotional appeals, solidarity, or coercion)

6. Annual Publication:

- a. The **Democracy Report is published annually in March**, providing a timely update on the global state of democracy.

Key Findings of the Democracy Report 2024:

1. **Collaborative Effort**: The Democracy Report 2024 is a collaborative project involving **4,200 scholars from 180 countries**. It is based on a comprehensive analysis of 31 million datasets covering 202 countries from 1789 to 2023.
2. **Overall Findings**:
 - **Autocratization on the Rise**: In 2023, **42 countries, home to 35% of the world's population**, were undergoing autocratization.
 - **Growing Prevalence of Autocracies**: **71% of the world's population**, or 5.7 billion people, now live in **autocracies**, compared to 48% ten years ago.
 - **Decline in Global Democracy**: The **average person in the world now enjoys a level of democracy comparable to that of 1985**, indicating a substantial decline.



- **Regional Trends:** The sharpest **declines** in democracy have been **observed** in **Eastern Europe**, as well as **South and Central Asia**.
- **Critical Components:** The report identifies **freedom of expression, fair elections, and freedom of association/civil society** as the 3 most affected components of democracy in autocratizing countries.
- **Elections in 2024:** The report notes that **out of the 60 countries scheduled to hold elections in 2024, more than half (31) are currently experiencing a period of democratic decline**.

With respect to India:

- a. India was **downgraded to an electoral autocracy in 2018 but has since declined further on multiple metrics, becoming one of the worst autocracies**.
- b. According to a report, the level of liberal democracy enjoyed by the average Indian has **declined to levels last seen in 1975**, when Indira Gandhi declared a **state of emergency in India**.
- c. A liberal democracy is characterized by regular free and fair elections, judicial independence, constraints on executive overreach, and protection of civil liberties and equality before the law.

11. 'NITI for States' Platform

The Minister of Communications, Railways and Electronics & Information Technology launched NITI Aayog's NITI Forum for States and Develop India Strategy Room at Rang Bhavan Auditorium in New Delhi.

About NITI For States Platform:

1. **Description:** Cross-sectoral knowledge platform designed as a Digital Public Infrastructure (DPI) for policy and good governance.

Objective:

To facilitate the digital transformation of governance by providing robust, contextually relevant and actionable

knowledge and insights to government officials. It will also support state-of-the-art level functionaries such as **District Collectors** and **Block-level functionaries** by **providing access to innovative best practices** in various States and Union Territories.

Features:

1. **Repository:** 7,500 best practices, 5,000 policy documents, 900+ datasets, 1,400 data profiles, and 350 NITI publications.
2. **Sectors covered:** Agriculture, Education, Energy, Health, Livelihood, Manufacturing, MSME, Tourism, Urban, Water Resources and WASH.
3. **Cross-cutting themes:** gender and climate change.
4. **Accessibility:** User-friendly interface accessible through multiple devices including mobile phones.

Viksit Bharat Strategy Room:

1. **Description:** Interactive space to view data, trends, best practices and policies.

Features:

1. **Interaction:** Voice-enabled AI and video conferencing with multiple stakeholders.
2. **Plug-and-Play Model:** Designed for replication by states, districts and blocks.

Collaborations:

Various government organizations including **iGOT Karmayogi, National Data and Analytics Platform (NDAP), National e-Governance Division (NeGD), and Bhashini** collaborated for **multilingual support**.

Q1) What is Digital Public Infrastructure (DPI)?

1. **Definition:** Shared tools for multiple purposes, key enablers of digital transformation, improving public service delivery.
2. **Objective:** To help countries achieve national priorities and accelerate the Sustainable Development Goals.





B. INTERNATIONAL RELATIONS

1. Katchatheevu Island Issue

In March, 2024 PM Narendra Modi posted on social media platform 'X' (formerly Twitter) that he blamed the Congress for "callously" (insensitively) giving away Katchatheevu island to Sri Lanka.

Where is Katchatheevu?

- Katchatheevu is an **uninhabited island located in the Palk Strait** (that separates Tamil Nadu and northern Sri Lanka) **between India and Sri Lanka**.
 - It is **barren**, has no drinking water or infrastructure, except a sole Catholic structure **dedicated to St. Anthony**.
- The island has been a subject of **dispute and controversy** between the 2 countries for many decades. It is **currently under the control of Sri Lanka**.



Historical Background:

- Katchatheevu has a long and complex history, having been under the control of various entities over the centuries.
- During the British colonial era**, the island was ruled by both India and Sri Lanka (then **known as Ceylon**).
- After **India's independence in 1947**, Sri Lanka **claimed** the island due to its **strategic location**.

The Story of Katchatheevu Island

Transfer to Sri Lanka:

- In 1974, then **Prime Minister Indira Gandhi signed an agreement with Sri Lanka**, handing over Katchatheevu to the island nation **without any discussion with the Indian people or parliament**.
- The move was seen as an attempt to **gain Sri Lanka's support for India's nuclear tests** and garner support from neighbours.

Controversies and Issues:

- The **transfer of Katchatheevu to Sri Lanka has created many problems for Indian fishermen**.
- The 1974 agreement secured Indian fishermen the right to dry their nets and **use the island's church for religious rituals**.
- However, the **delimitation of the International Maritime Boundary Line (IMBL) in 1976 superseded the 1974 agreement**, effectively revoking the rights of Indian fishermen to engage in these activities on the island.
- The **abolition of Katchatheevu in India is considered illegal** as it was **not approved by the Indian Parliament**.
- The Supreme Court of India ruled in the **Berubari Union case (1960)** that the **ceding of Indian territory to another country must be approved by the Parliament** through a Constitutional Amendment Act.
- Therefore, the transfer of Katchatheevu is considered **unconstitutional and illegal** by some people in India.

Sri Lanka's Stance:

- Sri Lanka has been claiming **Katchatheevu** for years and has been denying Indian fishermen rights to the island.
- The Sri Lankan government says the Indian court cannot void the 1974 agreement and claims it gave India an island called "**Vegabank**" in return.



Recent Developments

1. In March 2024, Indian Prime Minister Narendra Modi criticized the Congress Party for alleged negligence in handing over Katchatheevu to Sri Lanka.

- His comments came in response to an RTI query by Tamil Nadu BJP chief K Annamalai, which revealed that the Indira Gandhi-led government had handed over the island to Sri Lanka in 1974.
- PM Modi accused Congress of weakening the unity of India through this action.

Conclusion

The controversy surrounding Katchatheevu is a matter of real concern for Indian Tamils. To avoid further problems in the future, a discussion-based solution should be adopted that clarifies the issues and seeks consensus. Diplomatic efforts and dialogue are necessary to resolve the long-standing dispute between India and Sri Lanka and ensure the rights and welfare of the affected communities on both sides.

Q. Katchatheevu Island was in news. The Island is located in:

- [A] Bay of Bengal
[B] Gulf of Kutch
[C] Gulf of Khambat
[D] Palk Strait

Ans. D

2. PM Modi Receives Bhutan's Highest Civilian Award

1. In March 2024, PM Narendra Modi visited Bhutan at the invitation of Bhutanese PM Tshering Tobgay.
2. During his two-day state visit, he received Bhutan's highest civilian award, the Order of the Druk Gyalpo.
3. With this he became the 1st non-Bhutanese to be honored with the Order of the Druk Gyalpo.
 - Notable, this was PM Modi's 1st visit since the award was announced in 2021.
 - The award is given to individuals who have made significant contributions to Bhutanese society and culture.

4. This award is a symbol of the enduring friendship and cooperation between the two countries.
5. Noteworthy, from 14-18 March, 2024 PM of Bhutan was in India on an official visit, which was his first overseas visit after assuming office in February 2024.

Key Highlights of the India-Bhutan Bilateral Talks

1. Both countries signed an agreement on the supply of petroleum products to ensure a reliable and sustained supply from India to Bhutan.
2. Bhutan's Food and Drug Authority and India's Food Safety and Standards Authority (FSSAI) signed an agreement to enhance cooperation in food safety measures.
3. Both countries signed an MoU on energy efficiency and conservation that demonstrates a commitment to sustainable development.
 - India aims to assist Bhutan in enhancing energy efficiency in households,

Key Facts

1. India and Bhutan have a strong bond of friendship based on mutual trust, goodwill, and cooperation. Both nation share a 376-mile border.
2. Both Nations are founding member of the SAARC (South Asian Association for Regional Cooperation).
3. Both Nations also share other multilateral forum such as BBIN (Bangladesh, Bhutan, India and Nepal), BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)
4. Both Nations established diplomatic relations in January 1968 with the establishment of an office in Thimphu.
5. Both Nations signed the Treaty of Friendship and Cooperation in 1949.
6. Bhutan was also one of the 1st countries to recognize India's independence in 1947.
7. India is Bhutan's largest trading partner. India has provided significant assistance to Bhutan's socio-economic development since 1961, when Bhutan launched its 1st Five Year Plan.
8. The two countries have a free trade regime and signed a Trade and Commerce Agreement in 1972.



Significance of Bhutan for India

- Bhutan’s strategic location makes it an important **buffer state for India’s security interests**.
 - In 2017, during the **Doklam standoff between India and China**, Bhutan played a crucial role in allowing Indian troops to enter its territory to resist Chinese incursions.
- India is Bhutan’s **largest trading partner** and Bhutan’s major export destination.
 - Bhutan’s **hydropower potential** is a **significant source of revenue for the country**, and India has been instrumental in assisting Bhutan in developing its hydropower projects.
- Bhutan is a predominantly **Buddhist country**, India also has a vibrant Buddhist community alongside its Hindu majority, making both countries **share strong cultural ties**.

Major Challenges in the India-Bhutan Relations

- China’s increasing presence in Bhutan**, particularly along the disputed border between Bhutan and China, has raised concerns in India.
 - China and Bhutan** have **not established diplomatic relations** yet, but have maintained friendly exchanges.
- India is Bhutan’s largest trading partner, accounting for over 80% of Bhutan’s total imports and exports.
 - However, there have been some concerns in Bhutan over the **trade imbalance**, with Bhutan importing more from India than it exports.
- Bhutan** has been **seeking greater access to the Indian market** for its products, which could help to **reduce the Trade Deficit**.

conclusion :

- India can **help Bhutan by investing in infrastructure** development, tourism, and other sectors. This will help Bhutan to create **employment opportunities for its people**.
- India and Bhutan can **promote cultural exchange** programs to foster greater understanding and appreciation of each other’s culture, art, music, and literature.
- A **visa-free movement** of peoples from both countries can strengthen sub-regional cooperation.

- India and Bhutan can strengthen their strategic cooperation to address shared security concerns. They can work together to combat terrorism, drug trafficking, and other transnational crimes.

Major awards and honours received by PM Narendra Modi	
Country/Organisation	Award Name
1. Saudi Arabia	Order of Abdulaziz Al Saud (2016)
2. Afghansitan	Stat order of Ghazi Amir Amanullah Khan (2016)
3. Palestine	Grand Collar of the State of Palestine Award (2018)
4. South Korea	Seoul Peace Prize (2018)
5. Russia	Order of St. Andrew Award (2019)
6. UAE	Order of Zayed Award (2019)
7. Maldives	Order of the Distinguished Rule of Nishan Izzuddin (2019)
8. USA	Legion of Merit (2020)
9. Egypt	Order of Nile (2023)
10. France	Legion of Honour (2023)
11. Greece	Order of Honour (2023)
12. Bhutan	Order of The Druk Gyalpo (2021)
13. United Nations	Champions of the Earth Award (2018)
14. Bill & Melinda Gates Foundation	Global Goalkeepers Award
15. The Straits Times	Asian of the Year

3. RBI signs MoU with Bank Indonesia

- In March, 2024 India (RBI) and Indonesia (BI) sign an agreement to promote use of **local currencies** viz., the Indian Rupee (INR) and the Indonesian Rupiah (IDR) for cross-border transactions.
 - Earlier in **2023 India and Malaysia** announced that they will settle trade in INR in addition to other currencies.
- This agreement has the potential to reduce trade barriers between India and Indonesia, promoting economic growth.





Key Details

1. **Memorandum of Understanding (MoU):** Establishes a framework for **INR-IDR** transactions.
2. **Signatories:** RBI Governor Shaktikanta Das and BI(Bank Indonesia) Governor Perry Warjiyo.
3. **Scope:** Covers **current account transactions**, some capital account transactions, and other mutually agreed financial dealings.

Goals

1. **Promote India-Indonesia Trade:** Reduce reliance on **3rd-party currencies** (e.g., US dollar).
2. **Deepen Financial Integration:** Strengthen economic ties between the countries.
3. **Develop INR-IDR Foreign Exchange Market:** Facilitate **more direct exchange** between the currencies.

Benefits

1. **Lower Transaction Costs:** Avoids **multiple currency conversions**.
2. **Faster Settlement Times:** Time saving trade processes.
3. **Enhances Economic Ties:** Builds on **historical, cultural, and economic** connections.

Efforts for the Internationalisation of the Rupee

Internationalisation of the Rupee means, increase the use of Indian rupee in cross-border transactions.

1. **Liberalisation of Capital Markets:**
 - a. India increased the availability of rupee-denominated financial instruments, such as **bonds (Masala Bond) and derivatives**, to enhance the rupee's appeal.

2. **Promotion of Digital Payment Systems:**
 - a. Initiatives like the **Unified Payments Interface (UPI)** have facilitated digital transactions in rupees.
 - b. Recently, **Sri Lanka and Mauritius** have adopted UPI.
3. **Special Vostro Rupee Accounts (SVRAs):**
 - a. India permitted **authorized banks from 18 countries (Ex. Russia and Malaysia)** to open **Special Vostro Rupee Accounts (SVRAs)** for settling payments in rupees at market-determined exchange rates.
 - b. Objectives of the Mechanism are lower transaction costs, greater price transparency, faster settlement time, and overall promotion of international trade.
4. **Currency Swap Agreements:**
 - a. Signed by the RBI with several countries (Ex. **Japan, Sri Lanka and SAARC members**) enables the exchange of rupee and foreign currency between respective central banks, bolstering the international usage of the rupee.
5. **Bilateral Trade Agreements:**
 - a. The government's signing of bilateral trade agreements with other countries has facilitated greater cross-border trade and investment, promoting the use of the rupee in international transactions.

India-Indonesia Relations

1. **Commercial Relations**
 - a. Indonesia has emerged as the **2nd largest trading partner of India in the ASEAN region**.
2. **Political Relations**
 - a. Both countries were chief **supporters of independence for Asian and African countries**, leading to the **Bandung Conference of 1955** and the formation of the **Non-Aligned Movement in 1961**.
 - b. Since India adopted the '**Look East Policy**' in **1991**, there has been rapid development in bilateral relations.
 - c. Both countries are members of **G20, East Asia Summit** and the **United Nations**.

3. Cultural Relations

- a. The **Hindu, Buddhist and later Muslim faiths** travelled to Indonesia from the shores of India. The stories from the great epics of **Ramayana and Mahabharata** form a source of Indonesian folk art and dramas.

4. India-EFTA Trade Agreement

1. In March, 2024 **India and the EFTA** (European Free Trade Association) signed a **Free Trade Agreement** called **Trade and Economic Partnership Agreement (TEPA)**.
2. **TEPA is the 4th major deal** signed by India to promote trade and economic cooperation in the last 3 years. The others are with Australia, Mauritius and the UAE.

About EFTA

1. The EFTA is the intergovernmental organisation of Iceland, Liechtenstein, Norway and Switzerland (all 4 are not a part of the European Union).
2. It was founded by the Stockholm Convention in 1960.
3. **EFTA**, though not part of the **European Union (EU)**, is an organization that promotes free trade among its member countries.



Key Details of the Agreement

1. India is the EFTA's **5th-largest trading partner** after the European Union, the United States, Britain and China.
 - **Switzerland is India's largest trading partner** in this bloc of nations, followed by Norway.

2. India-EFTA trade was \$18.65 billion in 2022-23, with a trade deficit of \$14.8 billion
3. **Investment Commitment:** EFTA countries to invest **\$100 billion in India** over 15 years
4. **Scope:** Covers trade in goods, rules of origin, intellectual property rights, services, investment promotion, government procurement, technical trade barriers, and trade facilitation.

India's Relations with EFTA Nations

A. India and Norway

1. Both nations have been enjoying a cordial and **friendly relationship** since the establishment of relations in **1947**.
2. Norway has **supported India's membership** to export control regimes the Missile Technology Control Regime (**MTCR**), the Wassenaar Arrangement (**WA**) and the Australia Group (**AG**).
3. In 2020, the **India-Norway Task Force on Blue Economy** for Sustainable Development was inaugurated jointly by both countries
4. **HIMADRI, India's 1st research station** is located at the International Arctic Research base, NyAlesund, Svalbard, Norway.

B. India and Switzerland

1. A **Treaty of Friendship** between both nations was signed on 14th August 1948.
2. India is Switzerland's 4th-largest trading partner in **Asia and the largest in South Asia**.
3. More than 300 Swiss companies such as Nestle, Holcim, Sulzer, and Novartis operate in India, while Indian IT majors TCS, Infosys and HCL working Switzerland.

C. India and Iceland

1. Both nations established **diplomatic relations in 1972** and have strengthened their ties since 2005.
2. Iceland was the **1st Nordic country** to publicly extend **support to India's candidature for permanent membership** in the United Nations Security Council (UNSC).



- Both nations recently entered into a MoU to explore collaboration in renewable energy, green hydrogen, decarbonization initiatives, and geothermal energy.

D. India and Liechtenstein

- Both nations established **diplomatic relations in 1993**.
- As per RBI's data, the FDI inflow from Liechtenstein amounts to USD 44.68 million from April 2000 to March 2020.

Major Trade Agreements of India

1. Free Trade Agreement (FTA) with Neighbouring Countries

FTA is a comprehensive deal between nations, offering preferential trade terms and tariff concessions, with a negative list excluding specific products and services.

- India-Sri Lanka FTA
- India- Nepal Treaty of Trade
- India-Bhutan Agreement on Trade, Commerce and Transit

2. Regional FTA's of India

- India ASEAN Trade in Goods Agreement
10 ASEAN nations + India
- South Asia Free Trade Agreement: India, Pakistan, Nepal, Sri Lanka, Bangladesh, Bhutan and Maldives.
- Global System of Trade Preferences (41 nations + India).

3. India's CEPAs and CECAs

CEPA and CECA is broader than FTAs, addressing regulatory, trade and economic aspects comprehensively, with CEPA having the widest scope including services, investment etc. while CECA mainly focus on tariff and TQR rates negotiation.

- CEPA (**Comprehensive Economic Partnership Agreement**) with UAE, South Korea, Japan
- CECA (**Comprehensive Economic Cooperation Agreement**) with Singapore, Malaysia

4. Preferential Trade Agreement (PTAs)

Partners in a PTA grant preferential access to specific products by lowering duties on agreed traffic lines,

maintaining a positive list of products eligible for reduced or zero tariffs.

- Asia Pacific Trade Agreement (APTA)
- SAARC Preferential Trading Agreement (SAPTA)
- India's PTA with Chile, Afghanistan

5. Pancheshwar Multipurpose Project (PMP)

Recently, India and Nepal signed an agreement on long term power sharing without making any forward movement on Pancheshwar Multipurpose project (PMP).

ABOUT PANCHESHWAR MULTIPURPOSE PROJECT (PMP)

- It is a **bi-national hydropower project** to be developed on **Mahakali River** bordering Nepal and India.
- Development of PMP is **covered under integrated Mahakali Treaty** signed between Nepal and India according to which, **equal sizes of underground power house (i.e. of 3240MV)** will be constructed on each side of Mahakali River in India and Nepal.
- It offers **benefit of regulated water for irrigation** to a vast area of agricultural land both in Nepal and India along with benefit of flood control at downstream.

About Mahakali Treaty

- It is an **agreement** signed in 1996 between the Government of Nepal and the Government of India **regarding the development of watershed of Mahakali River**.
- It calls for an integrated development of barrage, dams and hydropower for mutual cooperation of the two countries by managing the water resources.
- It recognizes the Mahakali River as a boundary river between the two countries.

About Mahakali Or Sharda River

- The **Sharda River**, also called **Kali River and Mahakali River**, originates at Kalapani in the Himalayas in the Pithoragarh district in Uttarakhand, India.

2. It **flows along Nepal's western border** with India.
3. It **joins the Ghaghra River**, a tributary of the Ganges.
4. It takes the **name Kali River from the union** of the two streams at Gunji as it flows through the hills. After Brahmadev Mandi near Tanakpur, it enters the Terai plains, where it is called the Sharda River.

6. NB8 VISIT TO INDIA

1. Amidst the geopolitical landscape reshaped by Russia's full-scale invasion of Ukraine two years ago, the urgency of collaboration with global partners has never been more evident.
2. Recently, the representatives of the **Nordic-Baltic cooperation, known as the NB8**, gather in New Delhi and underscores the vital importance of trust, dialogue, and cooperation in times of upheaval and conflict.
3. **Nordic-Baltic cooperation or NB8** is a regional cooperation represent the governments of **8 countries** of the North: **5 Nordic countries** (Finland, Sweden, Norway, Iceland, Denmark) and **3 Baltic countries** (Estonia, Latvia and Lithuania) in order to discuss important regional and international issues in an informal atmosphere.

An Analysis of Nordic-Baltic Cooperation with India

1. Innovation and Technology:

- The cooperation extends in the fields of innovation and technology, where the Nordic-Baltic countries, known for their advanced economies, engage in knowledge exchange and collaborative initiatives with India.
- The focus on new technologies and artificial intelligence creates a mutual drive for innovation, contributing to the global technological landscape.

2. Green Transition and Sustainability:

- Both the Nordic-Baltic countries and India recognise the urgency of addressing climate change and environmental challenges.

3. Maritime Affairs and Trade

- Given the geographic proximity of the Nordic-Baltic region and India, maritime affairs play a crucial role in their collaboration.

- The nations explore avenues for enhancing maritime trade, ensuring secure sea routes, and addressing common challenges in the maritime domain.

4. Health and Well-being

- The cooperation extends to the health sector, reflecting a shared commitment to addressing global health challenges.
- Collaborative efforts encompass initiatives related to public health, medical research, and the exchange of expertise.

5. Space Cooperation and Future Technologies

- Collaborative ventures in space research, satellite technology, and futuristic innovations underscore the commitment to pushing the boundaries of scientific exploration.
- Space cooperation reflects a shared vision for advancing technology for the benefit of both regions.

7. NATO Celebrates Its 75th Anniversary

On 4 April 2024, The North Atlantic Treaty Organisation (NATO) celebrates its 75th anniversary.

About North Atlantic Treaty Organization (NATO)

1. NATO (**also called the Washington Treaty**) is a **Western security alliance founded on April 4, 1949**, with 12 founding members – Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States.
 - a. **France withdrew** from NATO's combined military command in 1966 but remained a member; it rejoined the military command in 2009.
 - b. In March, 2024 **Sweden** joined NATO as its **32nd member**.
2. NATO's **primary objective** is to safeguard the freedom and security of its members through political and military means.



3. **Functions:** NATO fulfills both **political** and **military** roles:
 - a. **Political:** It promotes democratic values, facilitates consultation, and promotes cooperation among members on defense and security-related issues.
 - b. **Military:** NATO is committed to peaceful dispute resolution, but maintains the military capability to undertake crisis management operations when diplomatic efforts prove insufficient.
4. **Article 5 of the Washington Treaty**, which defines the concept of “**collective security**” – an attack on any of the members is seen as **an attack on all of them**.
5. This was deemed **necessary in 1949** amid the **Cold War rivalry between the then USSR and the US**, over ideological and economic superiority.
4. **The Balance of Power in South Asia:** India’s regional position in South Asia plays a pivotal role in its decision to stay out of NATO. India’s decision to join NATO, a military alliance historically associated with the United States, could intensify the regional tensions, especially with Pakistan.
5. **Russia-India Relations:** India and Russia have been strategic partners for decades. Joining NATO, an alliance that was originally formed to counter the Soviet Union, would undoubtedly strain India’s ties with Russia.
6. **Economic Considerations:** Joining a military alliance can sometimes strain economic relationships, as it may escalate tensions with countries that are not part of the alliance or have different perspectives.

Why India Is Not a Part of NATO?

1. **The Roots of India’s Non-Alignment policy:** India chose to maintain its independence and sovereignty by not aligning itself with either bloc, a stance that remains at the heart of its foreign policy.
2. **Political Factors:** India’s policy of non-alignment reflects its desire to **make decisions independently**, free from the obligations and limitations that come with military alliances. Joining NATO would mean aligning with the policies and actions of the alliance, which could potentially compromise India’s ability to act in its best interests.

External Affairs Minister S. Jaishankar: “We would not align with any bloc or country’s perspective. My job is to protect the interests and rights of Indian citizens and I will do everything in my power to safeguard their rights.”

3. **Regional Dynamics:** India’s strategic interests are not limited to the Atlantic region, which is NATO’s primary goal. Instead, India’s security concerns extend into the broader Indo-Pacific region, where it faces complicated issues, including territorial disputes, terrorism challenges and naval security concerns.

Why Did the United States Invite India to Join NATO?

1. A recommendation has been made by a US Congressional Committee to **include India in “NATO Plus,”** a coalition **aimed at enhancing global defence cooperation**.
2. The development coincides with the visit of Indian **PM Narendra Modi to Washington in June 2023**.
 - **NATO Plus”** is a defence-oriented alliance led by the United States, comprising all NATO member countries and five additional nations: Australia, Japan, Israel, New Zealand, and South Korea.

Conclusion

As NATO celebrates its 75th anniversary in 2024, the alliance stands at a crucial juncture in its storied history. To remain an effective bulwark of peace and stability, NATO must continue to adapt and reform itself through greater investment in defence capabilities, streamlined decision-making processes, and a broadened focus on emerging arenas like cyber, space, and technological superiority.

India’s decision not to join NATO is a reflection of its historical commitment to non-alignment, its emphasis on strategic autonomy, and its unique geopolitical circumstances. While India cooperates with NATO member nations on various fronts, it prefers to maintain its flexibility in addressing regional and global challenges.





C. SECURITY

1. Agni-P: Next Generation Ballistic Missile

In April, 2024 The Strategic Forces Command (SFC), along with Defence Research and Development Organisation (DRDO), conducted a successful test flight of the next-generation ballistic missile, Agni-Prime (Agni-P) from Dr APJ Abdul Kalam Island off the coast of Odisha.

What are Agni Missiles?

1. Agni Missiles are a series of **surface-to-surface ballistic missiles** developed by DRDO.
 - a. **Surface-to-surface** refers to missiles that are launched from a surface, such as the ground or a platform, and target other objects or locations also on the surface.
 - b. **Ballistic missiles** are special rockets that go up in the air and then fall back down to their target without power. They use gravity and their initial push to move.
2. These missiles can carry **nuclear bombs** and travel different distances, from short to very long ranges.

About the Agni-Prime Missile:

1. Agni-P is a nuclear-capable, advanced variant of the Agni class of missiles (**under IGMDP - Integrated Guided Missile Development Program**).
 - a. **IGMDP**, started by Dr. A.P.J. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology.
 - b. IGMDP was **approved** by the Government of India in **1983** and completed in March 2012.
 - c. The **5 Missiles Systems (P-A-T-N-A)** developed under IGMDP are:
 - I. **Prithvi**: Short-range surface-to-surface ballistic missile.
 - II. **Agni series** : Ballistic missiles with different ranges.
 - III. **Trishul**: Short-range low-level surface to air missile.
 - IV. **Nag**: 3rd generation anti-tank missile.
 - V. **Akash**: Medium-range surface-to-air missile.

2. **Agni-P** is a **two-stage canisterized missile with a maximum range of 1,000 to 2,000 kilometers**.
3. It is the latest and the 6th variant of the Agni series
4. It is **lighter than all the earlier Agni series missiles**, weighing at least 50% less than the Agni 3 missile.
5. It includes **new guidance and propulsion systems**.
6. It **can be transported by road and rail and stored for long periods of time**, reducing the time required for preparation and launch.
7. The missile uses a **cold launch mechanism and can be fired in salvo mode**.

Other Agni Class of Missiles are:	
Agni-I	Range of 700-800 km.
Agni-II	Range more than 2000 km.
Agni-III	Range of more than 2,500 Km
Agni-IV	Range is more than 3,500 km and can fire from a road mobile launcher.
Agni-V	<p>The longest of the Agni series, an Inter-Continental Ballistic Missile (ICBM) with a range of over 5,000 km.</p> <ul style="list-style-type: none"> • ICBM is a long-range ballistic missile designed for intercontinental distances, forming a critical component of a country's nuclear triad, which includes land-based missiles, submarine-launched missiles (SLBMs), and strategic bombers. • They follow a ballistic trajectory, being launched into space before re-entering the Earth's atmosphere to reach their targets.



How Ballistic missiles different from Cruise missiles?

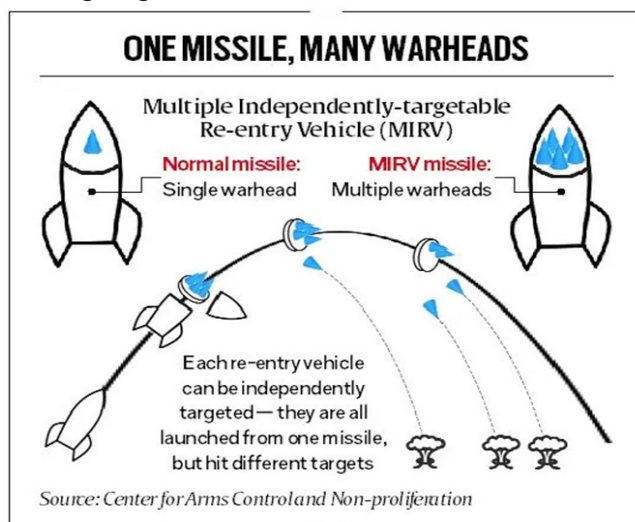
Ballistic Missile	Cruise Missile
1. It is propelled only for a brief duration after the launch.	1. Self-propelled till the end of its flight.
2. It is similar to a rocket engine .	2. It is similar to a jet engine .
3. Low precision as it is unguided for most of its path and its trajectory depends on gravity, air resistance, and Coriolis Force.	3. Hits targets with high precision as it is constantly propelled.
4. Long-range missiles leave the earth's atmosphere and re-enter it .	4. The flight path is within the earth's atmosphere .
5. Can have a very long-range (300 km to 12,000 km) as there is no fuel requirement after its initial trajectory.	5. The range is small (below 500 km) as it needs to be constantly propelled to hit the target with high precision.
6. Heavy payload carrying capacity.	6. Payload capacity is limited .
7. Can carry multiple payloads (Multiple Independently targetable Re-entry Vehicle)	7. Usually carries a single payload .
8. Developed primarily to carry nuclear warheads.	8. Developed primarily to carry conventional warheads.
9. E.g. Prithvi I, Prithvi II, Agni I, Agni II, and Dhanush missiles.	9. E.g. BrahMos missiles, Tomahawk

2. Mission Divyastra: 1st Flight Test of Agni-5 Missile

- In March, 2024 Defence Research and Development Organisation (DRDO) conducted a **1st successful flight test** of Indigenously Developed 'Agni-5' missile **equipped with MIRV** (Multiple Independently Targetable Re-entry Vehicle) technology.
 - The flight test named **Mission Divyastra**.
 - The project was **led by a woman scientist, Sheena Rani**, who has been working on the Agni missile systems since 1999.
- With this, **India joined the elite club of 5 nations** (US, Russia, China, France and the UK) to be equipped with MIRV capabilities capable of deploying MIRV-equipped missiles.
 - Earlier, India has carried out several tests of Agni-5 but it was for the first time that the flight test was carried out with MIRV.

Understanding MIRV Technology:

- Missiles equipped with **MIRVs can attack multiple targets simultaneously**, maximizing the potential damage they can cause to adversaries.
- MIRV technology enables **a single missile to carry multiple independently targetable warheads**.
- Each warhead can be programmed **to strike different targets**, providing flexibility and precision in targeting.



Integration with Agni Missile System

1. The integration of MIRV technology is a long-awaited upgrade for the **Agni family of Short, Medium and Intercontinental range ballistic missiles indigenously developed by the DRDO**. Agni missiles are the main **land-based delivery systems** for India's nuclear weapons.
2. **Developed in the 1990s**, the **1st -generation Agni missiles** were deployed in the armed forces in the mid-2000s.
3. **Agni-1 to Agni-4 missiles have ranges between 700 to 3,500 km** and can carry single payloads weighing between 12 and 40 kilotons.
4. **Agni-5**, equipped with MIRV technology, can travel more than 5,000 km, and can potentially enter the intercontinental range as well, considered to be 5,500 km and above.
 - a. **Agni-5 has been tested several times since 2012**, with new features and capabilities. Its previous flight happened in December 2022.
5. Meanwhile, DRDO has also been developing **Agni-P missiles**, which are **modernised versions of the short-range Agni-1 and Agni-2 variety**.

Conclusion

The **project Director for Mission Divyastra is a woman**, highlighting significant women's contributions to the project. The successful test of **Agni-5 with MIRV technology** represents an **important milestone** in India's strategic deterrent capability. This development highlights India's ability to adapt and innovate in response to emerging security challenges. As India enhances its defense capabilities, it is committed to ensuring peace and stability in the region while protecting its national interests.

Q.1 With reference to the Agni-5 missiles, consider the following statements:

1. It is a long-range missile developed indigenously by the Defence Research and Development Organisation.

2. The latest variant of Agni-5 missile is equipped with MIRV (Multiple Independently Targetable Re-entry Vehicle) technology.

Which of the statement(s) given above is/are correct?

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

Ans. C

3. AH-64E Attack Helicopters

1. **In March, 2024** Indian Army Aviation Corps inaugurated its **1st unit of AH-64E Apache Attack Helicopters** into its fleet at Jodhpur Air Base.
2. Apache will be the **2nd combat helicopter of the army after the indigenous Light Combat Helicopter (LCH)**.
 - a. Army is set to receive **3 Apache attack helicopters in May and 3 more in July**

AH-64E Apache Attack Helicopters

1. The **AH-64E Apache**, often referred to as the **"Apache Guardian"**, is renowned as the **world's most technologically advanced multi-role combat helicopter**.
2. It is manufactured by **Boeing in the United States**.
3. In **February 2020**, **India signed an agreement with Boeing to purchase Six AH-64E helicopters for the Indian Army, with an additional six added later**.
4. Numerous nations, including **India, Egypt, Greece, Indonesia, Israel, Japan, South Korea, Kuwait, Netherlands, Qatar, Saudi Arabia, Singapore, UAE, and the UK**, have acquired the AH-64E.

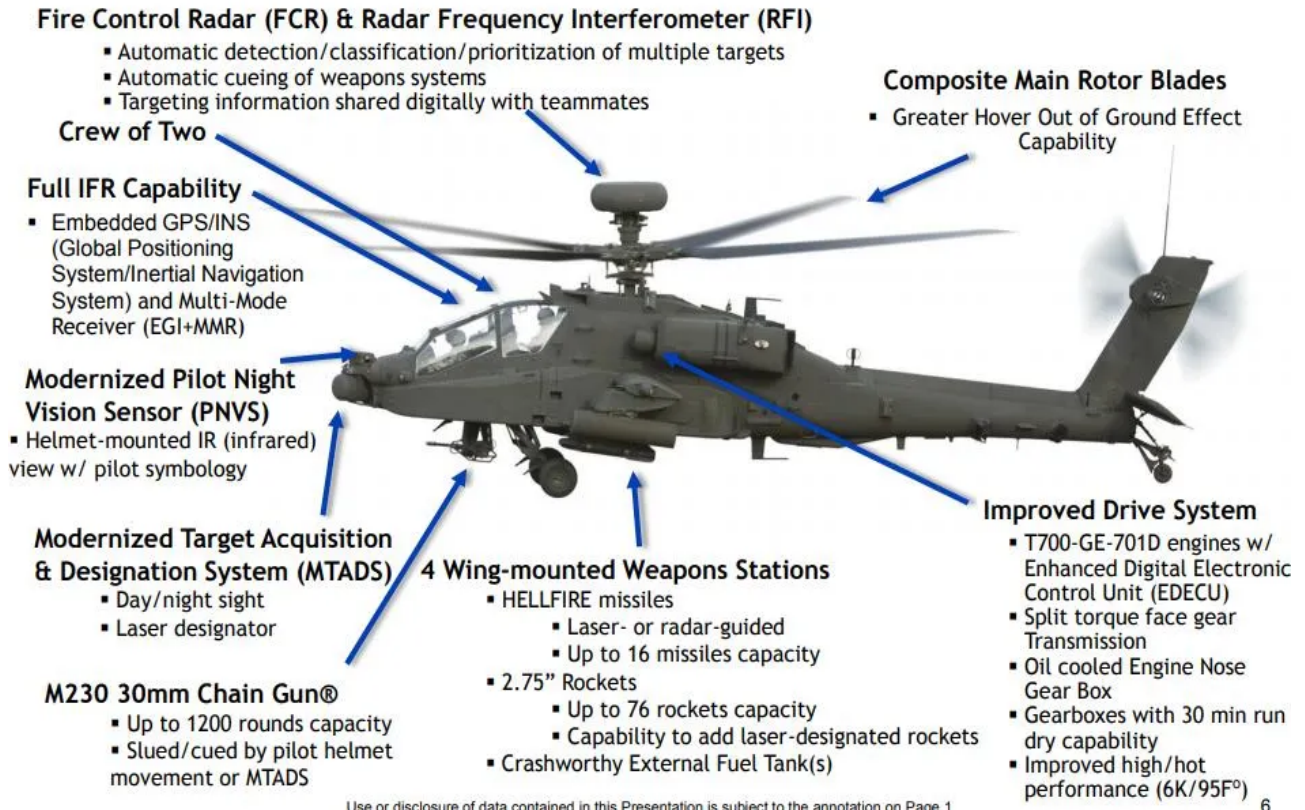
Its Features





Boeing

AH-64E Apache Helicopter Features



4. India's 5G Fighter Aircraft and LCA Tejas

The Cabinet Committee on Security (CCS) approved a Rs 15,000 crore project to design and develop India's 5th-generation combat multirole jet, the Advanced Medium Combat Aircraft (AMCA).

- In a related incident, a Court of Inquiry has been initiated to probe the reasons behind the crash of Indian Air Force Light Combat Aircraft (LCA) Tejas during an operational training flight in Rajasthan.

What defines 5th-Generation Fighter Jets?

- 5G fighter jets are designed for advanced battlefields with the ability to overcome current and anticipated threats.
- These jets offer stealth technology and supersonic speeds without the need for afterburners.

- They stand out from previous generations with their multi-spectral low-observable design, self-protection, radar jamming, and integrated avionics.
- Currently, only Russia (Sukhoi Su-57), China (Chengdu J-20) and the US (F-35) have 5G jets.

Why does India need 5th-Generation Fighter Jets?

- The current strength of 30 fighter squadrons of the Indian Air Force is less than the sanctioned strength of 42 squadrons.
- Aging aircraft like MiG-21s, MiG-29s, Jaguars, and Mirage 2000s will be phased out by the mid-2030s.
- In view of China's increasing military power, India needs to increase its air defence, because China has the upper hand in terms of number of aircraft.
- India aims to achieve self-reliance in defense by focusing on strengthening its air force and replacing aging aircraft, recognizing that acquiring fighter jets is a time-consuming process.

5. India is **developing Advanced Medium Combat Aircraft (AMCA)** based on the success of LCA Tejas. This indigenous project involves **collaboration between ADA, HAL and private industries.**
6. **Acquiring 5th-generation fighter jets** will place India among the select group of countries that possess this **advanced technology, including the US, Russia, and China.**

Key Features of India's Advanced Medium Combat Aircraft (AMCA):

Nodal Agency:	<ul style="list-style-type: none"> ● The Aeronautical Development Agency (ADA) under the Defence Research and Development Organisation (DRDO) will be responsible for executing the program and designing the aircraft. ● Manufactured by the state-owned Hindustan Aeronautics Limited (HAL).
Stealth Capabilities:	<ul style="list-style-type: none"> ● The 25-tonne twin-engine aircraft will surpass current Indian Air Force fighters in size and incorporate advanced stealth technology, exceeding the capabilities of global 5G stealth fighters.
Fuel Capacity and Armament:	<ul style="list-style-type: none"> ● The aircraft will have a large, hidden internal fuel tank with a 6.5 tonne capacity and an internal weapons bay capable of carrying a variety of weapons, including indigenous weapons.
Engine Configurations:	<ul style="list-style-type: none"> ● The AMCA Mk1 will be equipped with the US-built GE414 engine (90 kilo Newton class), while the more advanced AMCA Mk2 will utilize a more powerful 110 kN engine developed by DRDO's Gas Turbine Research Establishment (GTRE) in collaboration with a foreign defense major.
Development Timeline:	<ul style="list-style-type: none"> ● ADA aims for the aircraft's first flight within 4–5 years, with full development expected to take approximately 10 years. ● 5 prototypes will be prepared by HAL before manufacturing, in which private industry will also participate.

The Light Combat Aircraft (LCA) Tejas is an impressive aircraft with several notable features:

Origin:	<ol style="list-style-type: none"> 1. Initiated by the Government of India in 1984 to replace the aging Mig 21 fighter planes. 2. Managed by the Aeronautical Development Agency (ADA) under the Department of Defence Research and Development.
Design and Development:	<ol style="list-style-type: none"> 1. Designed by ADA, the LCA Tejas is the lightest, smallest, and tailless multi-role supersonic fighter aircraft in its class. 2. Manufactured by the state-owned Hindustan Aeronautics Limited (HAL).
Key Features:	<ol style="list-style-type: none"> 1. Capable of carrying a range of air-to-air, air-to-surface, and precision-guided weapons. 2. Equipped with air-to-air refueling capability, allowing extended flight duration. 3. Has a maximum payload capacity of 4000 kg. 4. Can attain a maximum speed of Mach 1.8. 5. Offers an operational range of up to 3,000 km.
Variants:	<ol style="list-style-type: none"> 1. Tejas Trainer: A 2-seater operational conversion trainer, used to train air force pilots. 2. LCA Navy: Twin- and single-seat carrier-capable variant designed for the Indian Navy. 3. LCA Tejas Navy MK2: This is phase 2 of the LCA Navy variant. 4. LCA Tejas Mk-1A: An improved version of the LCA Tejas Mk1, equipped with a higher thrust engine.



5. INS Jatayu

In March 2024, Indian Navy commissioned its new naval base, **INS Jatayu**, on Minicoy Island of Lakshadweep located in the **Indian Ocean Region (IOR)**.

About INS Jatayu

- It is the 2nd Naval base in Lakshadweep after **INS Dweep** (commissioned in 2012) in Kavaratti.
- Mythical Name- ‘Jatayu’**
 - The unit was named after Jatayu – the **mythical creature in the epic Ramayana** who tried to stop the abduction of Sita.
 - The unit will provide situational awareness to the Indian Navy as demonstrated by mythical creature Jatayu.

Significance

- The INS Jatayu has strategic importance as Minicoy is situated between important **Sea Lines of Communication (SLOCs)**.
 - SLOCs refer** to the principal **maritime routes linking ports** that are used for trade, logistics, and naval operations.
 - It is commonly employed in naval operations to ensure that SLOCs remain open or to close them during wartime.
- INS Jatayu to the west and INS Baaz to the east** in the Andamans serve as the Navy’s eyes and ears to protect our national interests.
- The new base will strengthen the Navy’s overall capability for anti-piracy and anti-narcotics operations in the western Arabian Sea.

About Minicoy Island

- Minicoy is the **southernmost island** of Lakshadweep.
- It is situated **215 nautical miles** southwest of Kochi.
- Minicoy island is on an important commerce route, therefore having a facility with better monitoring capabilities is critical for the country.

About the Lakshadweep Islands:

- India’s **smallest Union Territory** comprising **36 islands** over 32 km² with capital and principal town: **Kavaratti**.

- Out of these 36, 10 islands (Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni, and Minicoy) are inhabited.
 - Southernmost island, Minicoy, is situated close to the busy 9-degree Channel a critical shipping route.
- Islands situated 220 to 440 km from Kochi in the Arabian Sea.
 - “**Lakshadweep**” means ‘a hundred thousand islands’ in Malayalam and Sanskrit.
 - Originally named Laccadive, Minicoy, and Amindive, these islands were renamed Lakshadweep in 1973.
 - Tropical climate** with an average temperature of 27°C – 32°C. Ship-based tourism closed during monsoons.
 - Directly under the control of the Centre through an administrator.
 - The entire indigenous population is classified as **Scheduled Tribes** because of their economic and social backwardness. There are no Scheduled Castes in this Union Territory.
 - In 2020, the **world’s 1st sea cucumber conservation reserve** (Dr. KK Mohammed Koya Sea Cucumber Conservation Reserve) established, spanning 239 sq km in the **Cheriyapani Reef**.

Important Facts	
1. Eight Degree Channel	It separates Indian Minicoy Island from Maldives.
2. Nine Degree Channel	It separates the island of Minicoy from the Lakshadweep archipelago.

Conclusion

India has been eager to expand its capabilities in the Indian Ocean, focusing not just on its own islands but also assisting friendly countries in capacity building. With the commissioning of INS Jatayu, the Indian Navy will strengthen its foothold in the Lakshadweep islands and along with extending operational surveillance, reach and sustenance, it will usher in a new era of capacity building and comprehensive development of the island territories.



6. Martial Arts: Training For Indian Army Troops

- In response to the **violent clash in Galwan between India and China**, the Indian Army has included martial arts in its regular training program for soldiers.
- The initiative aims to enhance the combat skills of the soldiers and prepare them for challenging terrain like the **Line of Actual Control (LAC) at Kibithu in eastern Arunachal Pradesh**.
 - For example, the **Punjab regiment has incorporated Gatka** in the training regime and the **Udhampur-based Northern Command introduced** the Israeli-origin martial art **Krav Maga**.

Krav Maga, an Israeli origin martial art:

- Krav Maga, developed for the Israel Defense Forces, is a martial art that combines techniques from **aikido, judo, karate, boxing, and wrestling**. It is known for its focus on **real-world situations and its extreme efficiency**.

Martial Arts in India	
India has a rich tradition of martial arts, with various forms originating from different regions of the country. Here are some notable Indian martial arts:	
Khukri	<ul style="list-style-type: none"> The Khukri, a distinct short sword with a recurve in its blade, is the national weapon of Nepal and serves as a symbol of Gurkha soldiers in the Indian Army.
Kalaripayattu	<ul style="list-style-type: none"> Kalaripayattu, one of the oldest martial arts in India, is widely practiced in southern India. It includes mock duels, physical exercises, and various fighting techniques. Originated in the state of Kerala in the 4th century A. D. According to legends, sage Parasurama, who built temples and introduced martial arts, started Kalarippayattu.
Silambam	<ul style="list-style-type: none"> Silambam, a martial art from Tamil Nadu including Pandya, Chola and Chera, had promoted it during their reign, involving using different types of staves for combat.
Thang-ta and Sarit Sarak	<ul style="list-style-type: none"> Created by the Meitei people of Manipur, Thang-ta is an armed martial art, while Sarit Sarak is an unarmed form.
Cheibi Gad-ga	<ul style="list-style-type: none"> Cheibi Gad-ga, another martial art from Manipur, involves fighting with a sword and a shield.
Pari-khanda	<ul style="list-style-type: none"> Pari-khanda, a martial art from Bihar, involves using a sword and a shield.
Thoda	<ul style="list-style-type: none"> Thoda, a martial art from Himachal Pradesh, is a mixture of martial arts, sport, and culture.
Gatka	<ul style="list-style-type: none"> Gatka, a weapon-based martial art, is performed by the Sikhs of Punjab and features the skillful use of sticks, Kirpan, Talwar, and Kataar.
Mardani Khel	<ul style="list-style-type: none"> Mardani Khel, a traditional Maharashtrian martial art, focuses on weaponry skills, especially swords, swift movements, and low stances.
Inbuan Wrestling	<ul style="list-style-type: none"> Inbuan Wrestling, a martial art from Mizoram, has strict rules and emphasizes lifting the opponent off their feet. This art form was regarded as a sport only after the people of Mizoram migrated from Burma to Lushai hills.



Kuttu Varisai	● First mentioned in Sangam literature (1st or 2nd century B.C.), Kuttu Varisai, a martial art from Tamil Nadu, is known for “empty hand combat” and uses animal-based sets.
Musti Yuddha	● Musti Yuddha, a martial art from Uttar Pradesh, resembles boxing and incorporates physical, mental, and spiritual development.
Paika	● Paika, a martial art from Odisha, is performed by the Khandayat caste and Gopal caste and incorporates acrobatic maneuvers and the use of weapons.
Sqay	● Sqay, a martial art from Kashmir, involves fighting with a sword and shield.
Kathi Samu	<ul style="list-style-type: none"> ● Kathi Samu, a martial art from Andhra Pradesh, is practiced by royal armies and employs various kinds of swords. ● These martial arts not only serve as combat training but also hold cultural and historical significance, representing the diverse heritage of India.

Q. With reference to India’s culture and tradition, what is ‘Kalaripayattu’? Prelims PYQ (2014)

- It is an ancient Bhakti cult of Shaivism still prevalent in some parts of South India
- It is an ancient style bronze and brass work still found in the southern part of the Coromandel area
- It is an ancient form of dance-drama and a living tradition in the northern part of Malabar
- It is an ancient martial art and a living tradition in some parts of South India

Ans: d

7. DefConnect 2024: ADITI Scheme to Boost Defence Innovation

- In March 2024, During **DefConnect 2024** Ministry of Defence launched the **ADITI (Acing Development of Innovative Technologies with IDEX)** scheme.
- The initiative aims to support new ideas in critical defense technologies, providing grants to startups for research and development.
- Also, to develop about **30 deep-tech critical and strategic technologies** in the proposed timeframe.
 - It also envisages to create a ‘**Technology Watch Tool**’ to bridge the gap between the expectations and requirements of the modern Armed Forces and the capabilities of the defence innovation ecosystem.

Defence India Start-up Challenge (DISC)

- Initiative:** Unveiled the **11th edition**, introduced **22 problem** Indian Army (4), Indian Navy (5), Indian Air Force (5), Armoured Vehicles Nigam Limited (7) and Hindustan Shipyard Limited (1)
- Aim:** Tackle critical defence challenges and strengthen national security.
- Invitation:** Welcomed innovators to propose solutions enhancing defence capabilities.

Self-Reliance in Defence Production

- Significance:** Highlighted the significance of self-reliance for making independent decisions in line with national interests.
- Government Efforts:** Highlighted initiatives to boost domestic manufacturing and bolster the economy.
- Procurement Budget:** Allocated 75% of the defence capital procurement budget for Indian companies.

The launch of the ADITI Scheme, DISC 11, and other initiatives during DefConnect 2024 underscores the Government’s unwavering commitment to promote innovation, entrepreneurship, and self-reliance in defence production. These initiatives are poised to accelerate India’s journey towards becoming a global leader in defence technology and innovation, ensuring the nation’s security and sovereignty in the years to come.



8. Exercise/Operations In News

Name	Type	Participants	Key points
1. Sea Defenders-2024	Maritime Security Exercise	Indian Coast Guard (ICG) & United States Coast Guard (USCG)	<ol style="list-style-type: none"> 1. Concluded at Port Blair (March , 2024). 2. The exercise was aimed at enhancing maritime cooperation and interoperability between the two forces.
2. IMT TRILAT-2024	Joint maritime exercise	India - Mozambique - Tanzania Trilateral Exercise	<ol style="list-style-type: none"> 1. Edition-2nd 2. INS Tir and INS Sujata participated in the Exercise (March, 2024).
3. EXERCISE LAMITIYE – 2024	Joint Military Exercise (biennial training event)	Indian Army and Seychelles Defence Forces (SDF) .	<ol style="list-style-type: none"> 1. Edition- 10th 2. Conducted at Seychelles from 18-27 March 2024. 3. ‘LAMITIYE’ meaning ‘Friendship’ in the Creole language is a biennial training event and has been conducted in Seychelles since 2001.
4. Bharat Shakti	Tri-Services	Form of a Tri-Services Live Fire and Manoeuvre Exercise	<ol style="list-style-type: none"> 1. The PM Narendra Modi witnessed a synergised demonstration of indigenous defence capabilities in the form of a Tri-Services Live Fire and Manoeuvre Exercise in Pokhran, Rajasthan. 2. ‘Bharat Shakti’ showcased a range of indigenous weapon systems and platforms based on the country’s self-reliant initiative as a demonstration of the country’s power.
5. EX TIGER TRIUMPH – 24	Bilateral tri-Service Humanitarian Assistance and Disaster Relief (HADR) Exercise	India and the US, a bilateral tri-Service	<ol style="list-style-type: none"> 1. Participation: Indian Naval ships, Indian Naval aircraft, Indian Army personnel and Indian Air Force along with Rapid Action Medical Team (RAMT). 2. The exercise is aimed at developing interoperability for conducting HADR operations and refine Standard Operating Procedures (SOPs) to enable rapid and smooth coordination between forces of both countries.





D. ECONOMY

1. World Trade Organization (WTO)

The 13th **Ministerial Conference (MC)** in Abu Dhabi was recently concluded in March 2024.

Last 5 MC

1. MC 9 – Bali, 2013
2. MC 10 – Nairobi, 2015
3. MC 11 – Buenos Aires, 2017
4. MC 12 – Geneva, 2022
5. MC 13 – Abu Dhabi, 2024

About WTO

1. It is an international organisation whose primary purpose is to **open trade** for the benefit of all.
2. It is the only global international organization dealing with **trade rules** between nations.
3. It was created in **Uruguay Round** negotiations in 1986-94 and **established** in January 1995.
4. Its **headquarters** is in Geneva, Switzerland.
5. India is a **founding member** of the WTO.
6. It help its members use trade as a means to raise living standards, create jobs and improve people's lives.

About the Ministerial Councils (MC)

1. It is the **highest decision-making body** of the WTO and usually meets every two years.
2. It also has a **General Council** that meets regularly to carry out the functions of the WTO.

Reports Published by WTO

1. World Trade Report
2. World Trade Statistical Review
3. Global Trade Outlook
4. WTO Annual Report

Critical Issues in WTO

Public Stockholding (Agriculture & Food Subsidy)

1. The MC 13 ended without a permanent resolution to the issue of public stockholding (PSH), a **key demand by India**.
2. PSH allows governments to **purchase crops from farmers at MSP**, storing and distributing the food grains to the needy.

3. **DE MINIMUS limit**: limit countries' **subsidy bills** to 10% (for developing nations) or 5% (for developed ones) of production value, calculated using the **1986-88 reference price**.
4. **Developing countries**, demand increasing the de minimis limit. And amending the formula to calculate price support subsidies for government procurement.
5. **Developed countries**, argue against public stockholding (PSH) as market-distorting. Push for the elimination of export restrictions.

Peace Clause

1. **MC 9 in Bali** introduced a "peace clause" for public stockholding related to food security.
2. "Peace clause" initially set to be effective until MC 11. Extended due to **lack of consensus** among members.
3. India is advocating for a permanent solution to the public stockholding (PSH) issue. Seeking amendments to the formula for calculating the food subsidy cap.
4. A permanent solution would legitimize higher subsidies for food stockholding programmes.

Fisheries Subsidies Agreement

1. MC 13 ended with **no permanent solution** for curbing fisheries subsidies that lead to over-fishing.
2. The **Geneva Package** was adopted during the MC 12 in 2022. It aims to curb harmful subsidies that led to the widespread depletion of the world's fish stocks.
3. The agreement **has not yet been accepted by 39 countries**, it needs acceptance from two-thirds of WTO members to come into effect.

Why not accepted by India?

1. Countries (developed) **responsible** for fish stock depletion should bear more obligations. Subsidies should align with the **polluter pay principle (PPP)** and **common but differentiated responsibilities and respective capabilities (CBDR-RC)** principles.
2. The agreement should protect the **fishing community** in developing nations.
3. Propose a **25-year moratorium** on subsidies for Distant Water Fishing Nations.
4. Developing countries and small economies should be free to subsidize their fisheries sector.



2. Vocal for Local

To increase **self-reliance** and **entrepreneurship** at the local level, NITI Aayog has launched the ‘Vocal for Local’ initiative.

Key Highlights of Initiative

1. Launched under the **Aspirational Blocks Programme**.
2. The initiative aims to **foster self-reliance** among residents of Aspirational Blocks, empowering them to achieve sustainable growth and prosperity.
3. This approach will not only strengthen local economies but also promote **inclusive growth**.
4. The **Government e-Marketplace (GeM)** and **Open Network for Digital Commerce (ONDC)** platforms will assist entrepreneurs in various aspects of e-commerce, including onboarding, establishing connections, and improving financial and digital literacy.
5. The GeM portal features an “**Aakanksha**” window dedicated to showcasing indigenous local products from 500 Aspirational Blocks.

About ABP

1. Launched in 2023 by NITI Aayog, the ABP builds upon the success of the **Aspirational Districts Programme (ADP)**.
2. ABP aims to **enhance governance** to improve the quality of life in the most challenging and underdeveloped blocks of India.
3. Covering **500 blocks** from 27 states and 4 Union Territories.
4. Its progress monitors using 40 **socio-economic indicators** under **5 themes**.
 - a. Health & Nutrition
 - b. Education
 - c. Agriculture & Allied Services
 - d. Basic Infrastructure
 - e. Social Development

About ADP

1. Launched in 2018, ADP targets **112 underdeveloped districts**.
2. States lead ADP, focusing on **district strengths** for quick progress.

3. **Monthly rankings** track district improvements for accountability.
4. ADP aims to address socio-economic challenges and **foster sustainable development**.

3. Prepaid Payment Instruments (PPIs)

The **Reserve Bank of India (RBI)** has allowed banks and non-banks to issue PPIs for public transit services.

What are PPIs?

1. PPIs are the payment instruments that **facilitate the purchase of goods and services** using the stored value.
2. They come in forms like **smart cards** and **internet wallets**.
3. Cash withdrawals, refunds, or fund transfers are **not allowed** with PPIs.
4. Cash loading to PPIs is limited to **Rs. 50,000 per month**, subject to the overall limit of the PPI.
5. PPIs may include applications for “**Automated Fare Collection**” related to tolls, parking, etc.

4. National Urban Cooperative Finance and Development Corporation Limited (NUCFDC)

The government of India (GoI) has framed the NUCFDC, an **Umbrella Organisation (UO)** for **Urban Cooperative Banks (UCBs)**.

What is NUCFDC?

1. The need for a UO for India’s UCB sector was highlighted by an **RBI Working Group** chaired by **Shri N.S. Viswanathan** in 2006.
2. RBI granted **regulatory approval to NAFCUB** for the establishment of NUCFDC in 2019.
3. NUCFDC is registered with RBI as a **Type II - Non-Banking Financial Company-Non-deposit (NBFC-ND)**, indicating its intention to **accept public funds** and/or have a customer interface.
4. As a Type II NBFC-ND, NUCFDC will operate as a **Self-Regulatory Organization (SRO)** for the sector.
5. NUCFDC aims to **raise capital**, with a target of reaching a capital base of Rs. 300 crores to provide liquidity and capital support to Urban Cooperative Banks (UCBs).



6. Additionally, NUCFDC will offer **fund management** and **consultancy services** to UCBs.
7. It will facilitate **regulatory compliance** by assisting small banks in adhering to the Banking Regulation Act (BRA), 1949, and fostering communication between UCBs and regulators.
8. NUCFDC plans to develop a **shared technology** platform for UCBs, allowing them to expand their service offerings at a lower cost.

Issues in UCBs

1. The board members of cooperative banks must be elected from among the bank's members, but **poor governance** can lead to failures like the Punjab and Maharashtra Co-operative Bank (PMC).
2. Small Finance Banks (SFBs), FinTechs, etc., with advanced technology and substantial resources, pose a **threat to UCBs' traditional market** segments.
3. UCBs face challenges in raising capital due to **legal constraints** preventing the listing of securities on recognized stock exchanges.
4. According to the RBI's Financial Stability Report, UCBs' **Gross Non-Performing Assets (GNPA)** stood at 10.9% as of September 2023.

5. Krishi Vigyan Kendras (KVK)

The **Indian Council of Agricultural Research (ICAR)** marked the Golden Jubilee of the establishment of Krishi Vigyan Kendra (KVK).

About KVK

1. KVKs help farmers by testing specific **farming methods** for their area.
2. KVKs are the main places in each district where **farmers can get help** with farming and related activities.
3. They are part of a big system in India that helps with farming and **education about farming**.
4. KVKs share useful farming information between **scientists and farmers**.
5. They are like **hubs of farming knowledge** that connect research with farmers.
6. These centres are important for helping farmers **grow more food, earn better incomes**, and improve their lives.

7. Right now, there are about **731 KVKs** across the country, each serving its local farming community.

About ICAR

1. Established in 1929 as a registered society under **The Societies Registration Act, of 1860**.
2. Formerly known as the **Imperial Council of Agricultural Research**.
3. An **autonomous organization** under the Ministry of Agriculture and Farmers Welfare.
4. Serves as the **top authority** for coordinating, guiding, and managing research and education in agriculture, including horticulture, fisheries, and animal sciences.

6. Patents (Amendments) Rules, 2024

The **Ministry of Commerce and Industry** has notified the Patents (Amendments) Rules, 2024 under the Patents Act of 1970. The Patents (Amendment) Rules, 2024 have amended the Patents Rules, 2003.

Key Provisions of the Patents (Amendments) Rules, 2024

1. The **Certificate of Inventorship** is introduced to recognize inventors' contributions to patented inventions.
2. **Request for examination** must now be **filed within 31 months**, reduced from 48 months. Foreign application filing details must be furnished within three months, down from six months.
3. **Renewal fee** is reduced by 10% if paid in advance through electronic mode for at least 4 years.
4. **Frequency** to file the statements of working of patents reduced from once per financial year to once every three financial years.

What is a Patent?

1. A patent is an **exclusive right** granted for a new invention, either a product or a process, providing a novel solution to a problem.
2. To obtain a patent, detailed **technical information must be disclosed** in a patent application.
3. Patent protection **prevents others from using, making, or selling** the invention without the patent owner's permission.
4. **Patents are territorial**, valid only in the country or region where they are filed and granted.

Patents in India

1. Regulated by the **Patents Act, of 1970**, which replaced the Indian Patents and Designs Act, of 1911.
2. **Amended three times** in 1999, 2002, and 2005, with the 2005 Amendment aligning with the WTO TRIPS Agreement.
3. The **2005 Amendment expanded product patent protection** to pharmaceuticals and agricultural chemicals.
4. Under the Act, patents have a **duration of 20 years**.
5. Certain **things cannot be patented in India**, including whole plants or animals, seeds, and essentially biological processes for plant or animal production.

Regulation of Patents at the Global Level

1. The **World Intellectual Property Organization (WIPO) oversees patents** and other Intellectual Property Rights (IPR).
2. WIPO **manages conventions and treaties** concerning patents.
3. The **Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement**, under the World Trade Organization (WTO) since 1994, is the most comprehensive multilateral agreement on IP.
4. **TRIPS facilitates trade in knowledge and creativity** and resolves trade disputes over IP.

7. Project Gaia

Central banks including the European Central Bank and the Bank of Spain have introduced Project Gaia to evaluate the **climate financial risks**.

What is Project Gaia?

1. It's a **collaboration** involving the **Bank for International Settlements** Innovation Hub Eurosystem Centre, the Bank of Spain, etc.
2. It utilizes **generative artificial intelligence (AI)**, especially Large Language Models (LLMs), to analyze climate-related risks in the financial system.
3. It can **assess factors** like firm carbon emissions, green bonds, and optional net-zero commitment disclosures.
4. Benefits include **improved accessibility** to climate-related disclosures, efficient data extraction, harmonized climate metrics, scalability, and reliability.

8. UNNATI – 2024

The Government of India (GoI) approved the **Uttar Poorva Transformative Industrialization Scheme, 2024 (UNNATI – 2024)**.

About UNNATI – 2024

1. The Central Sector Scheme, managed by the **Department for Promotion of Industry and Internal Trade** under the Ministry of Commerce and Industry.
2. It aims to foster **industrial development and employment generation** in the **North East Region**.
3. With a budget of over Rs. 10,000 crore for ten years (with an additional eight years for committed liabilities), the scheme is administered by the **North-Eastern Development Financial Corporation Limited (NEDFi)**.
4. **New and expanding industrial units are eligible** for incentives, provided they commence production or operations within four years of registration.
5. The scheme **divides eligible districts into Zones A (Industrially Advanced) and B (Industrially Backward)**.
6. 60% of the budget is allocated to the eight Northeastern states, with disbursement following a **First-In-First-Out (FIFO)** basis.
7. There are both **negative and positive lists** for industries in the manufacturing and services sectors, respectively.
8. The scheme is implemented by DPIIT in collaboration with the states.
9. It is divided into two parts:
 - a. **Part A:** It caters to the incentives to the eligible units (97% of the total outlay) and has three components-
 - i. Capital Investment Incentive (CII),
 - ii. Central Interest Subvention (CIS), and
 - iii. Manufacturing & Services Linked Incentive (MSLI).
 - b. **Part B:** It is for implementation and institutional arrangements for the scheme. (3% of the total outlay).



9. Integrated Ombudsman Scheme (IOS)

The **Reserve Bank of India (RBI)** released the Annual Report of the **Ombudsman Scheme 2022-23**.

What is Integrated Ombudsman Scheme (IOS)?

1. RB-**IOS**, introduced in 2021, is part of RBI's **Alternate Grievance Redress (AGR)** Framework.
2. It **resolves customer complaints** regarding services offered by RBI's Regulated Entities promptly and affordably.
3. It **integrates three** Ombudsman Schemes:
 - a. Banking Ombudsman Scheme, 2006;
 - b. Ombudsman Scheme for Non-Banking Financial Companies, 2018; and
 - c. Ombudsman Scheme for Digital Transactions, 2019.
4. The scheme, framed by RBI under various acts, offers free resolution for customer complaints regarding **deficient services** from RBI-regulated entities.
5. It adopts the **'One Nation One Ombudsman'** approach, ensuring jurisdiction neutrality in the RBI Ombudsman mechanism.
6. RBI can **appoint one or more officers** as Ombudsman and Deputy Ombudsman, each serving for a maximum of three years.
7. Complaint resolution is managed by **24 RBI Ombudsman Offices (ORBIOs)** and the Centralised Receipt and Processing Centre (CRPC).

Key Findings of the Annual Report

1. In FY 2022-23, ORBIOs and CRPC received around **7 lakh complaints**, marking a 68.24% increase from the previous year.
2. Approximately 85.64% of complaints were received **through digital channels**.
3. ORBIOs achieved an overall **disposal rate of about 98%** in FY 2022-23, with an average Turn Around Time (TAT) of 33 days.
4. A **majority (57.48%)** of maintainable complaints resolved by ORBIOs were settled through **mutual agreement**, conciliation, or mediation.
5. Complaints **against banks** constituted the largest share, representing **83.78%** of complaints received by ORBIOs.

10. Electric Mobility Promotion Scheme – 2024

To accelerate the **adoption of Electric Vehicles in India**, the Ministry of Heavy Industries introduced the Electric Mobility Promotion Scheme 2024 (EMPS 2024).

About EMPS 2024

1. It's a **fund-limited scheme** with a budget of Rs. 500 crores for four months, starting from April 1, 2024, to July 31, 2024.
2. The scheme focuses on accelerating the adoption of **electric two-wheelers (e-2W)** and **three-wheelers (e-3W)** to promote green mobility and develop the electric vehicle (EV) manufacturing ecosystem.
3. It aims to support approximately 3.72 lakh EVs, including 3.33 lakh e-2Ws and 0.38 lakh e-3Ws.
4. The scheme prioritizes **providing affordable and eco-friendly public transportation** options, mainly targeting e-2Ws and e-3Ws registered for commercial use.
5. Additionally, **privately or corporate-owned** registered e-2Ws will also be **eligible** for the scheme, not just those used for commercial purposes.
6. To promote **advanced technologies**, incentives will only be extended to vehicles equipped with advanced batteries.
7. Consumers will receive upfront **reduced purchase prices** (Rs. 5,000 per kWh) for EVs, reimbursed to OEMs by the Government of India.
8. Scheme administration, including Information, Education, and Communication (IEC) activities, and fees for the Project Management Agency (PMA), will be covered.

11. Human Development Report (HDR) 2023-24

The **United Nations Development Report (UNDP)** has released the HDR 2023-24 titled **'Breaking the Gridlock: Reimagining Cooperation in a Polarised World'**.

What is HDR?

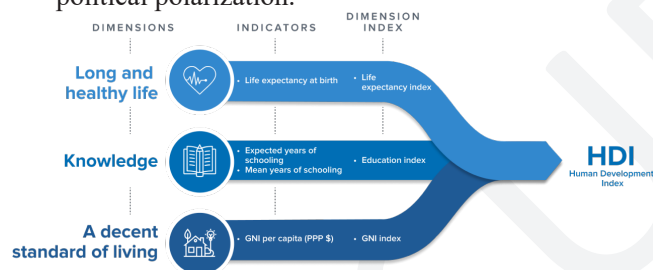
1. It is released by the UNDP.
2. It examines major **global challenges** impacting human development and provides recommendations.
3. The **Human Development Index (HDI)** serves as the cornerstone of the Human Development Report (HDR).

About the UNDP

1. Established in 1966 as a **leading agency** of the United Nations on international development.
2. It **aims** to end poverty, strengthen democracy and inclusive growth.
3. It works in three areas:
 - a. **Sustainable development**
 - b. **Democratic governance and peacebuilding**
 - c. **Climate and disaster resilience**

HDR Findings

1. In 2022, **Switzerland ranked first in the HDI** (India ranked 134th), followed by Norway and Iceland among 193 countries.
2. Wealthy nations show record human development levels, while **half of the poorest countries** remain below pre-crisis levels.
3. Almost **40% of global trade** in goods is controlled by three or fewer countries.
4. The two-decade trend of reducing **inequalities between wealthy and poor nations** is reversing.
5. People support democracy but back leaders **undermining democratic principles**, leading to political polarization.



12. Investor Information and Analytics Platform (IIAP)

The Government of India (GoI) has launched IIAP developed by IIT Madras.

About IIAP

1. The platform serves as a comprehensive **resource hub** for startups, providing easy access to Venture Capitalists (VCs), investor networks, government schemes, and more.
2. Entrepreneurs can efficiently **find information** on government agencies, incubators, investors, and VCs through the platform.
3. A key feature is “**StartupGPT**,” an AI-based conversational platform, that enhances information accessibility for those navigating extensive data.

13. Digital Monopolies

Google has recently **de-listed apps** from its Playstore, and the government of India (GoI) has termed it a Digital Monopoly.

What is Digital Monopoly?

1. Describes a scenario in which a **single company** or platform wields **substantial control** over digital ecosystems and markets.
2. Examples include major tech giants such as Google, Amazon, Facebook, Apple, and Microsoft.

Issues by Digital Monopolies

1. **Anti-steering:** Refers to actions that obstruct business users and consumers from switching to third-party service providers. Example: App stores enforcing the use of their payment systems.
2. **Platform Neutrality / Self-preferencing:** This occurs when a digital enterprise favours its own products on its platform, creating a conflict of interest.
3. **Adjacency / Bundling and Tying:** Involves combining core services with complementary offerings, compelling users to purchase related services.
4. **Data Usage:** Involves utilizing personal data for consumer profiling, raising concerns about data privacy.
5. **Pricing / Deep Discounting:** Involves predatory pricing strategies, setting prices below cost to exclude competitors.
6. **Exclusive Tie-ups:** Refers to exclusive agreements with business users or sellers, preventing them from dealing with other enterprises. Example: Apple’s restrictions on installing third-party applications on iPhones.

India to Prevent Digital Monopolies

1. **Consumer Protection (E-Commerce) Rules, 2020:** Aim to regulate e-commerce platforms and digital marketplaces. Focus on preventing anti-competitive practices, ensuring transparency, and safeguarding consumer interests.
2. **Competition (Amendment) Act, 2023:** Introduces new merger notification and deal value thresholds to address acquisitions of high-value, data-rich firms. The Competition Commission of India (CCI) investigates and acts against anti-competitive practices by digital platforms.
3. **Digital Personal Data Protection Act 2023:** Emphasizes data protection to prevent data concentration in the hands of dominant players.
4. **Proposed Digital India Act (DIA):** Aims to regulate various digital enterprises, including social media, AI platforms, and e-commerce.
5. **Draft National Data Governance Framework Policy:** Seeks to establish standardized data management and security for non-personal and anonymized data across government bodies.





E. SCIENCE & TECHNOLOGY

1. INDIA'S 2nd Spaceport At Kulasekarapattinam

Recently, the PM Narendra Modi laid the foundation stone for a new space port at Kulasekarapattinam in southern Tamil Nadu.

- Noteworthy, In August, 2023 government has approved the establishment of a new spaceport in Kulasekarapattinam, Tamil Nadu.

Overview of Kulasekarapattinam Spaceport:

1. **Location:** Located in Kulasekarapattinam, a coastal village near the temple town of Tiruchendur in Thoothukudi district.
2. This new spaceport will serve as India's 2nd space launch facility after the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota, Andhra Pradesh.
3. The Kulasekarapattinam Spaceport is specifically designed to launch **Small Satellite Launch Vehicles (SSLV) on a commercial basis.**
4. **Capacity:** With the capability to launch 24 satellites per year, the spaceport aims to streamline satellite deployment processes while ensuring **cost-effectiveness and operational efficiency.**
5. **Geographical Advantage:** The **strategic location** of Kulasekarapattinam enables **direct southward launches over the Indian Ocean, minimizing fuel requirements for small rocket launches compared to the existing launch site at Sriharikota**, where rockets need to follow a curved path to avoid landmasses.

Why does India need a new launchport?

1. With the Union government's recent policy announcing the opening of the space sector to private players, a sharp rise in the number of commercial launches is certain.
2. To ensure that ISRO's 1st launchport, the SDSC SHAR in Sriharikota, is **not overburdened** with

a high number of launches, the space agency has decided to build another facility.

3. While SHAR will be only used for **launching bigger and heavy-lift-off** missions, the Kulasekarapattinam launch port will be used to launch smaller payloads.
4. SHAR will also be available for India's big missions to the Moon, Venus, and human-flight mission.
 - SHAR has 2 launch complexes that are **routinely used to launch** the Polar Satellite Launch Vehicle (PSLV), the Geosynchronous Space Launch Vehicles (GSLV) and the Geosynchronous Satellite Launch Vehicle Mk-III, now renamed as LVM3.

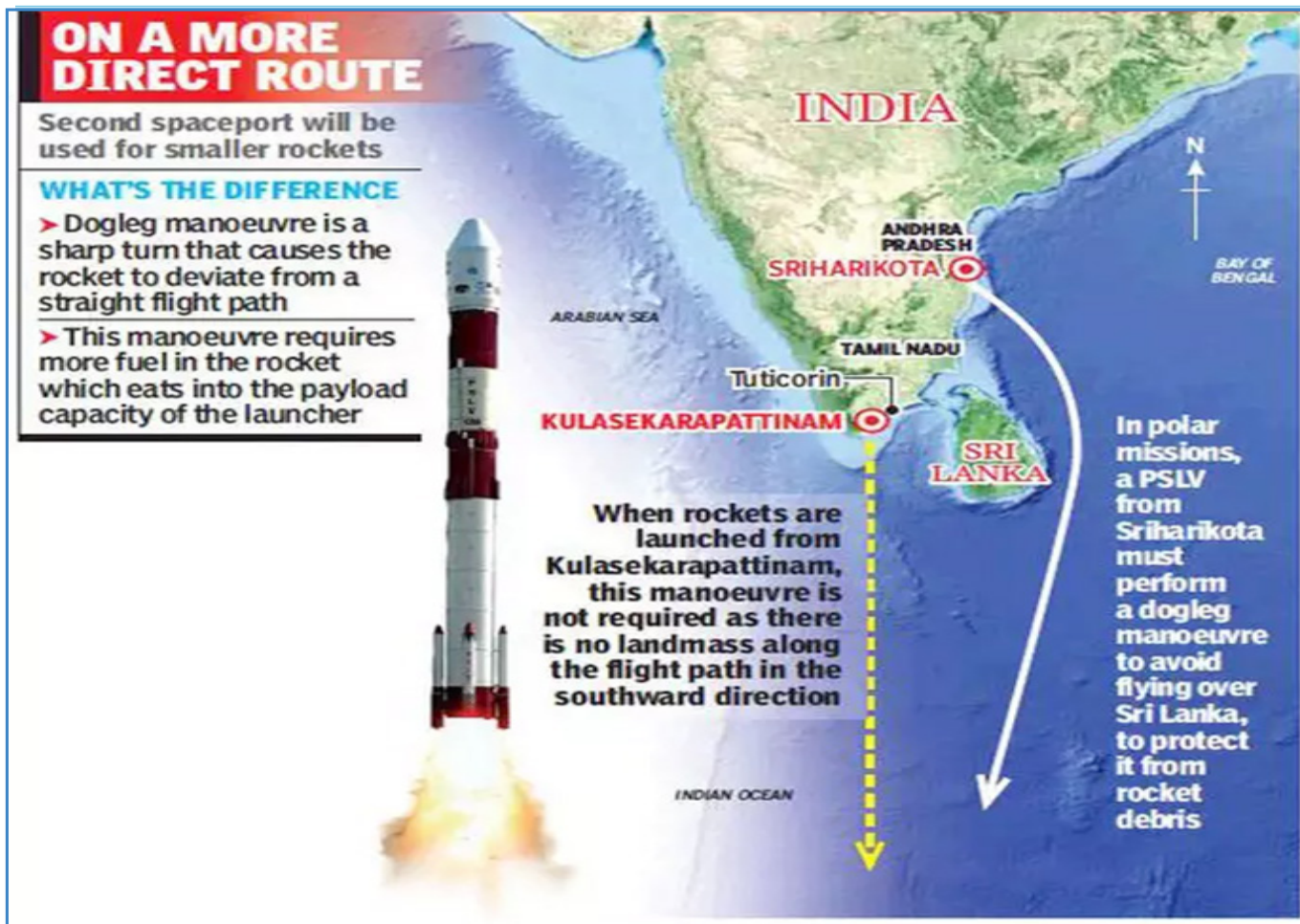
How India's 2nd launchpad offers a straight route to space?

1. **Kulasekarapattinam Advantage:** Direct southward launches possible with no need for dogleg maneuvers, improving payload capacity for small rockets.
2. **Dogleg Maneuver:** A **sharp trajectory change** during satellite launch to avoid flying over certain areas or **prevent debris from falling in populated zones.**
 - Dogleg maneuvers consume extra fuel, posing challenges for smaller rockets (like SSLVs) designed for smaller payloads.

Key Facts about Small Satellite Launch Vehicles (SSLVs):

1. SSLV is a **3-stage Launch Vehicle** equipped with **3 Solid Propulsion Stages** and a **liquid propulsion-based Velocity Trimming Module (VTM)** as a terminal stage, ensuring optimal performance and reliability.
2. With dimensions of 2 m diameter and 34 m length and a lift-off weight of 120 tonnes, SSLV is capable of launching a **500 kg satellite into a 500 km flat orbit**, meeting various mission requirements.





3. SSLV is characterized by its low cost, fast turnaround time, flexibility in accommodating multiple satellites, launch on-demand feasibility and minimal launch infrastructure requirements, making it a preferred choice for commercial satellite launches.

4. The 1st SSLV mission, SSLV-D1, carrying 2 satellites, including EOS-02 and AzaadiSat, in August 2022, was a failure.

- 6 months later, In February 2023, ISRO in its its second attempt successfully launched SSLV-D2.
- Both these launches were from SHAR.

The establishment of the **Kulasekarapattinam Spaceport highlights India's commitment to advance its space capabilities** and expand its presence in the global space market, paving the way for increased collaboration and innovation in the field of satellite technology.

2. Royalty Rates for Mining of 12 Critical and Strategic Minerals

- The Union Cabinet approved changes to the **Second Schedule (containing royalty rates) to the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act)** for setting royalty rates for **12 critical and strategic minerals**.
 - This approval allows the Central Government to **auction blocks** for these 12 minerals for the **1st time**.
 - This completes the process of setting royalty rates for all 24 critical and strategic minerals.
 - The **Mines and Minerals (Development and Regulation) Amendment Act, 2023** listed **24 critical and strategic minerals** for auctioning by the Central Government.
 - Minerals like Lithium, Rare Earth Elements (REE), Nickel, Platinum Group of Elements, Potash, Glauconite, Phosphorite, Graphite, Molybdenum, etc., are included in the auction.



- e. **Royalty** refers to payment made to the owner of certain types of rights (with the government as the mineral rights holder) by those who are permitted to exercise such rights.
2. **Critical and strategic minerals** are essential for economic development and national security but have limited supply and are subject to disruption.
 - a. **Its declaration Process** is a dynamic process that evolves with time, adapting to new technologies, market dynamics, and geopolitical factors.
 - b. Different countries create their lists of critical minerals based on unique circumstances and priorities.
 - c. **International Examples:**
 - The **US** recognizes 50 critical minerals for national security and economic development.
 - **Japan** identifies 31 critical minerals crucial for its economy.
 - The **UK** considers 18 minerals critical, while the **EU** and **Canada** list 34 and 31 critical minerals, respectively.
 3. **Importance of Critical Minerals**
 - a. Minerals like Cadmium, Cobalt, Gallium, Indium, Selenium, and Vanadium are crucial for various applications like batteries, semiconductors, and solar panels.
 - b. Beryllium, Titanium, Tungsten, Tantalum, etc., are essential for new technologies, electronics, and defence equipment.
 - c. Indigenous mining promotion aims to **reduce imports** and **boost related industries and infrastructure**, leading to increased employment in the mining sector.
 - d. India's growth in these sectors can create jobs, generate income, and drive innovation.
 - e. These minerals are vital for defense, aerospace, nuclear, and space applications.
 - f. They require high-quality and reliable materials capable of withstanding extreme conditions and complex functions.
 - g. They help reduce India's reliance on fossil fuels and greenhouse gas emissions.
 - h. Essential for achieving India's goal of reaching 450 GW of renewable energy capacity by 2030.
 4. **Exploration Efforts**
 - a. **Geological Survey of India (GSI)** and **Mineral Exploration & Consultancy Ltd. (MECL)** have submitted exploration reports for 13 blocks containing critical minerals.
 - b. These agencies are actively exploring for critical and strategic minerals across the country.
 5. **Concerns for India Regarding Critical Minerals**
 - a. Despite having significant reserves of minerals like rare earth elements (REEs), titanium, and thorium, India **lacks commercial production capability** due to **high exploration and extraction costs**.
 - b. India faces **high import dependency** on a few countries such as Democratic Republic of the Congo, Australia, and China for critical minerals.
 6. **India's Efforts for Critical and Strategic Minerals**
 - a. **Identification of Crucial Minerals:** India has identified **30 critical minerals** essential for self-sufficiency.
 - b. **Mineral Security Partnership (MSP):** India has joined the **Mineral Security Partnership (MSP)** to strengthen supply chains for critical minerals.
 - c. **International Partnerships:** India has partnered with **Australia** for **lithium** and **cobalt**, and with **Argentina** for **lithium**.
 - d. **Khanij Bidesh India Limited (KABIL):** It was established to identify, acquire, process, and utilize strategic minerals from overseas sources for supply within India.

3. Dry Ice

1. People in a restaurant in Gurugram mistakenly served dry ice, after which they were hospitalised.
2. Dry ice is a common name for **solid carbon dioxide (CO₂)**.
3. Unlike regular ice, **it doesn't melt into a liquid** when heated; instead, it **changes directly into a gas**, a process called **sublimation**.
4. It's made by **compressing and cooling gaseous CO₂**.
5. Dry ice is considered **harmful to human health** if handled improperly.
6. It's **used in various applications** such as hospitals and clinics, food processing and distribution, industrial cleaning and technical processes, as well as for theatrical and special effects



4. 10,000 Human Genomes Sequenced In India

- Recently, India's Genome India initiative achieved a significant milestone when **researchers completed sequencing of 10,000 healthy genomes** from different regions of the country.
 - The United Kingdom, China, and the United States are among the countries that have programmes to sequence at least 1,00,000 of their genomes.

What is the Genome India Project?

- Started in 2020:** Initiated by DBT on January 3.
- Goal:** Involves **studying 10,000 people's DNA to understand diseases better** and create predictive tests.
- Funded and coordinated** by the Department of Biotechnology (DBT).

Note

- First human genome sequenced in 2003, took 13 years and \$3 billion. India announced its first complete human genome in 2009.
- Now, it takes about 5 days to sequence a genome with quality checks.

Significance of Genome India Project:

- Local Mutation Awareness:** Helps to understand genetic mutations affecting **4.5% of the population**.
- Growing Life Sciences Sector:** India's biology field is rapidly growing and will be worth over **US\$130 billion in 2024**, influencing the country's future.

What is Genome Sequencing?

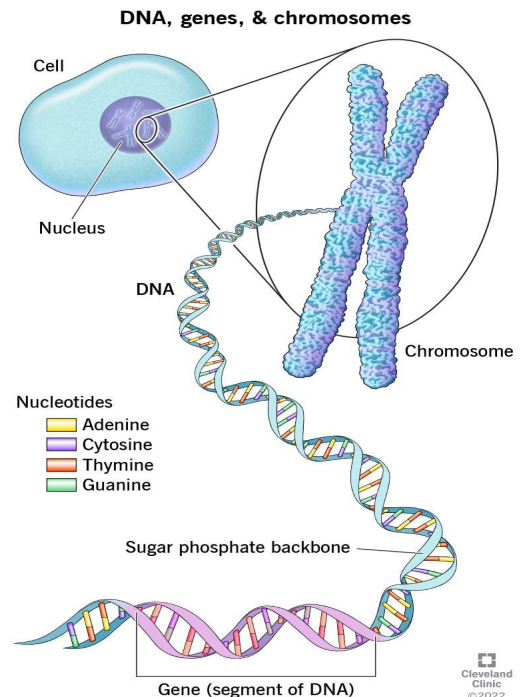
- Genome sequencing is a method to read the genetic information in DNA.
- It helps the scientists to understand the order of bases **Adenine (A), Cytosine (C), Guanine (G), and Thymine (T)** in the DNA of living things, like **bacteria, plants, and animals**.

Steps of Genome Sequencing:

- Collecting DNA:** Scientists take a sample, usually blood, to get DNA.
- Breaking it Down:** They break the DNA into smaller pieces.
- Adding Tags:** Each piece gets a special tag with a fluorescent marker to help identify it.

DNA, Genes, and Genome:

- DNA:** It's like a **set of instructions for living things**.
 - Genes:** These are **special parts of DNA that give instructions for making proteins**, which are important for life.
 - Genome:** It's like a **big book of all the instructions inherited from parents**, which decides how an organism will be.
- Reading the Pieces:** Using a machine called a DNA sequencer, they read the order of the DNA pieces.
 - Putting it All Together:** Computers help put the DNA pieces back in the right order to understand the genetic sequence.



Applications of Genome Sequencing:

- Biomedical Research:** Helps understand diseases, find mutations, and discover treatments.
- Pharmacogenomics:** Predicts how people will respond to drugs for personalized treatments.
- Agricultural Genomics:** Identifies genes for better crops and improves breeding.
- Evolutionary Biology:** Studies genetic differences and relationships between species.
- Conservation Biology:** Helps protect species by studying genetic diversity and planning conservation efforts.



5. Obelisks: A New Class Of Virus-Like Entities

1. Recently, Stanford University scientists have discovered a simple form of life named “**Obelisks,**” which occupy a unique position between **viruses and viroids**, expanding the spectrum of life forms. Obelisks were identified through an extensive analysis of RNA sequences from bacteria in the human gut, using next-generation sequencing (NGS) technology.

About Next-generation sequencing (NGS) technology

1. NGS is a DNA sequencing technology that uses parallel sequencing to determine the sequence of multiple small fragments of DNA. It is used to determine the order of **nucleotides** in entire genomes or targeted regions of DNA or RNA.
 - Nucleotides are organic molecules constituting the fundamental building blocks of nucleic acids like DNA and RNA.

About Obelisks

1. Obelisks represent a simple class of virus-like entities, comprising diverse RNA molecules residing within the human body and the global microbiome.
2. Obelisks exhibit **highly symmetrical, rod-like structures** resembling the iconic monuments (Obelisk).
3. Their genetic sequences are approximately 1,000 nucleotides long, with no detectable similarities to known biological agents.
4. Although RNA data from gut and oral bacteria were analyzed, the specific bacterial hosts for obelisks remain undetermined.
5. Initial indications hint at a potential association with *Streptococcus sanguinis*, a prevalent bacterium in the human oral cavity.

Key Characteristics of Obelisks:

1. **Conserved Functionality:** Obelisk genes perform consistent functions across various bacterial strains.
2. **Vertical Propagation:** They have the capability to vertically transmit from parent to offspring cells alongside their host bacteria.
3. **Integration:** Obelisks integrate into the bacterial genome without disrupting standard cellular mechanisms.

4. **Classification:** Positioned between **viruses and viroids** in terms of classification, obelisks resemble viroids in structure, being circular single-stranded RNA genomes without a protein coat, yet similar to viruses, they contain genes that are predicted to encode proteins.

The Difference between Viruses and Viroids are as follows:

Features	Viruses	Viroids
1. Structure	Consists of a nucleic acid core (DNA or RNA) enclosed by a protein coat (capsid)	Composed of a short, circular RNA molecule (250-400 nucleotides)
2. Living or Non-Living	Classified as non-living; lack cellular structures and independent metabolic processes	Considered non-living; devoid of protein coats and protein-encoding capability
3. Replication	Depend on host cells for replication, utilizing host machinery	Replicate within host cells employing cellular enzymes
4. Genetic Material	Contains either DNA or RNA	Contains RNA
5. Protein Synthesis	Cannot synthesize proteins independently; rely on host cells for protein production	Lack the ability to encode proteins
6. Pathogenicity	Infect various organisms including animals, plants, and others	Infect plants and induce plant diseases
7. Examples	Influenza virus, HIV, SARS-CoV-2	Potato spindle tuber viroid, Coconut cadang-cadang viroid



Conclusion

The discovery of obelisks raises questions about their genome replication, transmission, pathogenicity, evolution, and potential influences on human health and disease. Comprehensive investigations are needed to solve the mysteries surrounding obelisks, offering insights into their ecological significance and implications for human well-being.

6. Rhodamine B: A Coloring Agent

1. In March, 2024 Himachal Pradesh has imposed a 1-year ban on the production, sale and storage of cotton candy (buddhia-ke-baal) or candy floss after the presence of potentially hazardous coloring agents (**Rhodamine B**) was confirmed in the samples.
2. States like **Karnataka, Tamil Nadu and Goa**, which have also implemented similar restrictions on harmful colouring agents.
 - While banning cotton candy in Tamil Nadu, the **Health Minister** said in a statement- that using Rhodamine-B in the “packaging, import, sale of food or serving food containing it at weddings and other public events would be punishable under the Food Safety and Standards Act, 2006”.
3. **Puducherry had also banned** sale of cotton candy recently.
4. Europe and California have made its **use as a food dye illegal**.
 - a. **Dyeing** is the process of adding color to textiles or materials using dyes or pigments. It involves immersing the fabric in a dye solution or applying the dye in a pattern. Dyeing creates a variety of colors and patterns in textiles for clothing, home furnishings, and industrial uses.

FSSAI has approved certain food colours and flavors as safe for consumption. These include: Caramel, Riboflavin (Lactoflavin), Saffron, Annatto, Curcumin (Turmeric), Carotene and carotenoids, including Beta-carotene, red colour from Ponceau 4R, Carmoisine, and Erythrosine, yellow colour (Tartrazine and Sunset Yellow FCF), blue colour (Indigo Carmine and Brilliant Blue FCF) and green colour (Fast Green FCF).

Rhodamine B

1. The pollutant that is extensively used for dyeing purpose is **Rhodamine B (RhB)**. The recent analysis of several samples found the presence of Rhodamine-B, an industrial dye, that was added in the candy as an artificial colouring agent.
2. While it appears **green in powder form**, it turns **vivid fluorescent pink** when it **comes in contact with water**. The textile dye imparts a vibrant, fluorescent-tinted pink-to-red hue.
3. Rhodamine B is a **water-soluble fluorescent xanthene dye** widely utilized in various industries. Owing to its vibrant colours and excellent colour fastness properties, it is widely employed across diverse industries including textile dyeing, biological staining, and fluorescence microscopy. It is used in leather colouring as well as paper printing, inks and cosmetics.
4. While its use is restricted in several parts of the world, Rhodamine-B is also used as the colorant in food items such as **chili powder and chili oil**.

Chemical Structure:

Rhodamine B, a **water-soluble fluorescent xanthine dye**, has a **unique chemical structure consisting of a xanthine ring system with an attached amino group**, making it highly soluble in water and suitable for a variety of applications.

Source:

1. Rhodamine B is synthesized through chemical processes in industrial settings.
2. It is not naturally occurring and is produced synthetically.
3. The synthesis involves the reaction of phthalic anhydride with aniline in the presence of specific catalysts.
4. The production process is carried out in chemical manufacturing facilities under controlled conditions.

Applications and Industrial Significance

1. **Textile Coloring:** Rhodamine B is used to dye fabrics and materials, giving them vibrant colors and ensuring long-lasting hues in the textile industry.



2. **Fluorescence Microscopy:** In laboratories, Rhodamine B serves as a valuable tool in fluorescence microscopy and biological staining, enabling precise visualization of cellular structures and molecular interactions (helps scientists see tiny structures within cells and tissues clearly under microscopes).
3. **Industrial Applications:** Highlighting its versatility across various industrial processes, it is added to inks, ink formulations, cosmetics, and food coloring agents, to give products bright and appealing colors.
4. **Water Tracing:** Researchers use Rhodamine B to track how water moves in rivers and study how pollution spreads in waterways.
5. **Medical Research:** Rhodamine B assists researchers in studying diseases and cells, making them easier to see and understand.
6. **Fluorescent Detection:** It acts as a tool to detect specific molecules in labs and helps scientists understand chemical reactions better.
7. **Water Treatment and Analysis:** It aids in studying and treating water pollution, helping experts keep our water clean and safe for everyone.

Implications on Environment, Plants and Health

a) Implications on Environment:

1. Rhodamine B poses environmental risks due to its toxic properties and potential for **bioaccumulation** in ecosystems.
 - **Bioaccumulation** refers to how pollutants enter a food chain and relates to the accumulation of contaminants, in biological tissues by aquatic organisms, from sources such as water, food, and particles of suspended sediment.
2. Discharge of Rhodamine B-contaminated effluents into water bodies can lead to **water pollution, disrupting aquatic ecosystems and endangering aquatic life.**
3. The persistence of Rhodamine B in the environment can have **long-term impacts on soil quality and groundwater contamination.**
4. Rhodamine B may also leach into soil and **affect soil microorganisms, potentially disrupting nutrient cycling and soil health.**

b) Implications on Plants:

1. **Toxicity:** Rhodamine B can negatively **impact plant growth** and development due to its toxic properties.
2. **Absorption:** Plants can absorb **Rhodamine B from contaminated soil** or water sources, leading to physiological stress and reduced vitality.
3. **Bioaccumulation:** Rhodamine B may accumulate in plant tissues over time, posing risks to higher trophic levels that consume contaminated plants.

c) Implications on human:

1. According to data shared on the US government-run National Library of Medicine website, **Rhodamine B** ingestion can lead to “**oxidative stress, injury, increase in cell apoptosis and brainstem**”.
2. Regular consumption of food containing Rhodamine B can damage the **cerebellum tissue** in the **brain and the brainstem**, resulting in functional abnormalities.
3. Rhodamine B ingestion can **cause liver dysfunction and increase the risk of cancer.**
4. **Immediate consumption** of **Rhodamine B** contaminated food can cause symptoms such as **stomach fullness, itching, and breathing problems.**

Role of Government and Regulatory Bodies

1. Governments and regulatory agencies play a crucial role in monitoring Rhodamine B usage and enforcing safety standards to protect public health and the environment.
2. In India, government and regulatory bodies, including the **Food Safety and Standards Authority of India (FSSAI)** and the **Central Pollution Control Board (CPCB)**, oversee Rhodamine B and other hazardous substances under following Acts:
 - a. **Food Safety and Standards Act (FSSA), 2006:** FSSAI regulates the use of Rhodamine B in food products, ensuring compliance with safety standards and guidelines.
 - b. **Environment (Protection) Act, 1986:** The CPCB monitors Rhodamine B usage in industrial processes to prevent environmental pollution and protect ecosystems.

Conclusion

Rhodamine B embodies both potential and risk, demonstrating its industrial utility along with risks to human health and the environment. Despite its importance in industry and science, rhodamine B presents considerable challenges due to health risks and environmental contamination. Tackling these issues requires collaborative efforts to innovate treatment methods, enhance regulatory frameworks, and promote sustainable practices. Addressing the multifaceted challenges of Rhodamine B requires action on multiple fronts, including technological innovation, regulatory compliance, public awareness, and stakeholder collaboration. Through these collective efforts, we can pave the way for a sustainable future marked by responsible management of natural resources and the well-being of society as a whole.

7. Quantum Communication

In a significant milestone, the Centre for Development of Telematics (C-DOT) and Physical Research Laboratory (PRL) achieved the integration of C-DOT's homegrown Fibre-based **Quantum Key Distribution (QKD)** system with PRL's Free Space QKD.

What is Quantum Communication?

1. Quantum communications is a vital component of **Quantum Technology**, alongside Quantum Computing, Quantum Sensors, and Quantum Materials.
2. It harnesses the principles of **Quantum mechanics** like superimposition and entanglement.
3. Its **applications include** communication, computing, cryptography, and more.
4. Quantum communication is a method of **transmitting information** using quantum states of particles, such as photons.
5. It harnesses **quantum properties** like entanglement for secure data transfer.
6. Quantum communication enables **ultra-secure data transmission** and holds promise for applications like quantum internet and advanced computing.

What is QKD?

1. QKD is a **method of quantum communications** that ensures very secure networks by using principles from **quantum physics**.
2. It lets **two parties create a secret key together**, which they can use to **encode and decode messages**.
3. If someone tries to **interfere** with the communication, it's **easily detected**, and the key exchange can be stopped.
4. QKD can **work through various mediums** like optical fibre, free space, or even satellites to set up secure communication channels.

Government Initiatives

1. National Mission on Quantum Technologies and Applications (NM-QTA)
2. Quantum-Enables Science and Technology (QuEST)
3. Quantum Frontier Mission of Prime Minister Science, Technology & Innovation Advisory Council (PM-STIAC)
4. National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS)

8. Space Facilities of ISRO

The Prime Minister **inaugurated three significant facilities** for India's space program: the **PSLV Integration Facility** in Sriharikota, the **Semi-cryogenic Integrated Engine & Stage Test facility** in Mahendra Giri, and the **Trisonic Wind Tunnel** in Thiruvananthapuram.

About PSLV Integration Facility

1. The goal is to increase the launching capacity of the **Polar Satellite Launch Vehicle (PSLV)** from 6 times a year to 15 times.
2. They're also setting up the facilities so they can launch other **small rockets** more easily.
3. It will even help **private space agencies** to launch small satellite launch vehicles (SSLV).

Semi-cryogenics Integrated Engine and Stage Test Facility

1. This place in IPRC (**ISRO Propulsion Complex**) Mahendragiri will help make semi-cryogenic engines and stages, which will make our rockets able to **carry more stuff into space**.



- They have systems to test engines with up to **200 tons of force** using liquid oxygen and kerosene.

Trisonic Wind Tunnel

- A Trisonic Wind Tunnel (TWT) is like a big fan that helps **test rockets and planes** at different speeds - slow, medium, and super fast.
- It's important to check **how well they fly** through the air during different parts of their journey.
- This helps **make sure** they work well before they're sent into space.

9. Space-Borne Assistant and Knowledge Hub for Crew Interaction (SAKHI) App

- The Vikram Sarabhai Space Centre, based in Thumba, Thiruvananthapuram, created this system to **assist astronauts during the Gaganyaan mission**.
- The Gaganyaan project aims to demonstrate India's ability to send a crew of three members into space, orbiting at 400 km above Earth.
- This system **monitors the health of astronauts**, tracking vital signs like blood pressure and heart rate.
- It also ensures **seamless communication**, keeping the crew connected to onboard computers and ground-based stations.
- Additionally, it helps **maintain mission logs** in various formats, including voice recordings, text, and images.

10. Homosep Atom

- The Homosep Atom, developed by a startup at **IIT Madras**.
- It is a cost-effective solution for **cleaning septic tanks**.
- It breaks down hard sludge into a slurry and **removes solid waste**, improving worker safety by eliminating the need for human entry.
- It **employs AI** for the inspection and management of confined spaces and has been deployed in 16 cities.

11. GPS-Based Toll Collection System

The Government of India is set to pilot-test a **Global Navigation Satellite System (GNSS)-based Electronic Toll Collection (ETC)** system on national highways.



About GNSS-based toll collection

- The GNSS-based Electronic Toll Collection (ETC) system works by using satellite-based imaging to **track the vehicle's position** and collect tolls based on the distance travelled.
- Its main components include the **Online Board Unit (OBU)** installed in vehicles and **Automatic Number Plate Reader (ANPR)** cameras on highways.
- The **ANPR cameras** recognize vehicle number plates to **deduct tolls**.
- This system **reduces** the need for **roadside tolling infrastructure**, decreases congestion, and improves toll collection efficiency.
- However, **challenges** such as signal interference, **privacy concerns**, and equipping older vehicles with GNSS technology need to be addressed.
- Similar systems are already in place in countries like **Germany and Singapore**.
- India has its satellite navigation systems, **GAGAN and NavIC**, which support this technology.

Difference Between FASTags and GNSS-based Toll Collection

Differences	FASTags	GNSS-based Toll Collection
Technology	'Radio Frequency Identification' (RFID)	Satellite-based imaging and Automatic number plate reader (ANPR) cameras
Equipment needed for vehicle	FASTag (RFID Tag) affixed on the windscreen	OBU with GNSS connectivity



Calculation	Fixed rates	Based on real-time vehicle movement data
Equipment needed for toll plazas	Physical toll booths are required for scanning FASTag	Not required

12. Cervical Cancer

The **Global Cervical Cancer Elimination Forum** took place in Cartagena de Indias, Colombia from March 5-7, 2024.

About Cervical Cancer

1. Cervical cancer is a type of cancer that begins in the cervix, the **lower part of the uterus**.
2. It's caused by the **human papillomavirus (HPV)** and is more common in women over 30.
3. Globally, it's the **fourth most common cancer in women** and the **second most common in India**.

About HPV

1. HPV, a **sexually transmitted infection**, can affect the skin, genital area, and throat.
2. While the immune system typically clears the virus, persistent infection with high-risk HPV strains can lead to **abnormal cell growth** and potentially cancer.
3. Unfortunately, there's **currently no treatment** for HPV infection itself.

HPV Vaccination

1. There are **6 HPV vaccines** globally, all guarding against high-risk strains like HPV 16 and 18, major culprits behind cervical cancer.
2. **Girls aged 9–14** should receive the HPV vaccine (1 or 2 doses).
3. **Screening every 5-10 years** from age 30 (or 25 for HIV-positive women) can detect cervical issues, preventing cancer.
4. Early detection, followed by **quality treatment**, is crucial.
5. While there's **no cure for HPV**, treatments exist for associated health problems like cervical cancer.

'90-70-90' Initiative

1. An initiative by the **World Health Organization (WHO)** targets for each country by 2030:

- a. **Vaccination:** Aim for **90% of girls** fully vaccinated with the HPV vaccine by age 15.
- b. **Screening:** Target **70% of women** screened by age 35 and again by age 45.
- c. **Treatment:** Ensure **90% of women** with pre-cancer are treated and 90% of those with invasive cancer are managed effectively.

13. Asbestos

1. The USA's Environmental Protection Agency has banned all forms of the **deadly carcinogen asbestos**.
2. Asbestos is a group of **naturally occurring fibrous minerals** known for their strength, heat resistance, and chemical resistance.
3. The main forms of asbestos are **chrysotile** (white asbestos) and **crocidolite** (blue asbestos).
4. It's used in **various applications** such as building materials, insulation, and automobile parts.
5. However, all types of asbestos are carcinogenic, **causing diseases like lung cancer**, mesothelioma, and asbestosis.
6. It's important to note that **India has not banned** the use of any type of asbestos.

14. Large Language Models (LLMs)

Recent studies highlighted that the LLMs have changed the **integration of computers and humans**.

What are LLMs?

1. LLMs, are smart computer programs that **understand and create text**.
2. They can do things like **answer questions**, summarize documents, and even write stories or poems.
3. They learn by **studying** lots of examples of **human language**.
4. These models work a bit like our brains, using **complex systems** to process information and come up with responses.
5. They're **used in different areas** like finance or entertainment, and examples include ChatGPT and Google's Gemini.
6. **Deep learning** is like the **brainpower** behind LLMs.
7. It's a method where computer systems called **neural networks** learn from examples, much like how our brains learn from experiences.
8. Once these models are trained, they can **make smart guesses** about what words or sentences should come next based on the information they've learned.



Applications of LLM

1. LLMs are behind **chatbots** and **virtual assistants** that chat with people, answer questions, and get things done.
2. They can also **translate text** between languages more accurately and smoothly than before.
3. They help with searching for **information** and retrieving it quickly.

Limitations of LLM

1. LLMs can carry biases from their **training data**, which may lead to **unfair treatment**.
2. They can be **hard to understand**, making it tricky to know how they reached certain conclusions.
3. Using them raises **ethical questions**, like job loss, privacy invasion, and potential misuse.

15. Pine Needles-Based Fuel-Making Technology

An agreement was made between **CSIR-Indian Institute of Petroleum** and UCOST to use pine needles to make fuel as part of the Adarsh Champawat mission.

CSIR is a big research organization in India, and UCOST is the **Uttarakhand State Council for Science & Technology**.

About Pine Trees

1. Pine trees are common **evergreen trees** found all around the world.
2. They're known for their **needle-like leaves** and **cone-shaped appearance**.
3. These trees grow tall, **up to 260 feet** in some cases, and are found in many places, including North America, Europe, Asia, and parts of Africa.
4. They're able to **survive in different climates**, from cold winters to dry summers.

About this Technology

1. The process involves Briquettin (**compacting or densifying** pine needles) or turning them into a fuel source.
2. A special machine has been developed for this purpose because **pine needles pose a threat to the environment**, biodiversity, and economy in the Himalayan region, particularly due to **forest fires**.
 - a. Pine needles can easily catch fire because they're **dry and have a lot of resin**.

- b. In the summer, they **fall off trees** and form a **thick layer** on the ground.
 - c. This layer **stops new plants from growing**, and the dry needles can quickly start a fire during the hot, dry weather.
 - d. Their dryness and **oily nature** make them light up fast, causing big damage to the environment, local economy, and forests.
3. This machine can produce up to **50 kilograms of briquettes per hour** using pine needles as the raw material.
 4. The cookstove that uses Pine Needle briquettes is **35% energy efficient** and **cuts household pollution** by 70%.
 5. Pine Needle briquettes can **replace coal**, which is better for the environment.
 6. These briquettes can be used for cooking at home and as fuel in brick kilns and **power plants**.

16. Uncover Program

1. Researchers participating in the **James Webb Space Telescope (JWST) UNCOVER** program have **uncovered a clue** about the end of the **'dark ages'** in the early universe.
2. During the dark ages, light sources were obscured by a dense fog of neutral hydrogen gas.
3. This period was followed by the **'epoch of reionization'**, initiated by the emergence of the first stars and galaxies.
 - a. The Epoch of Reionization is a period in the history of the universe that occurred **after the Big Bang**.
 - b. It is the second of two major phase transitions of gas in the universe.
 - c. The Epoch of Reionization likely occurred due to the **arrival of the first stars and galaxies**.
 - d. Before this, the universe was dark and filled with a dense fog of primordial gas.
4. The UNCOVER program, which stands for **Ultra-deep NIRCam and NIRSpec Observations Before the Epoch of Reionization**, focuses on two main JWST science goals: identifying first-light galaxies during the dark ages and studying the ultra-low luminosity galaxies responsible for the reionization process.



F. GEOGRAPHY & ENVIRONMENT

1. Earth Hour

Earth Hour is observed every year on March 23 from 8:30 pm to 9:30 pm.

About Earth Hour

1. Earth Hour began with a **lights-out event in Sydney, Australia, in 2007** and has since become a global phenomenon.
2. Held annually on the last Saturday of March, it's organized by the **World Wildlife Fund (WWF)** as a symbolic gesture to raise awareness about climate change and encourage energy conservation.
3. More than just an hour of darkness, Earth Hour inspires people to take ongoing action for a **sustainable future**.

2. Gangetic Dolphin

India has opened its first-ever **National Dolphin Research Centre (NDRC)** in Patna, Bihar. This center aims to protect the **endangered** Gangetic River dolphin.

About NDRC

1. The center **helps scientists and researchers** learn more about dolphins.
2. It also **teaches fishermen** how to protect dolphins better.

About Ganga River Dolphin

1. The Ganga River Dolphin (***Plantanista gangetica***), also called **Susu**, is found only in the **Indian subcontinent**.
2. It's often called the **Tiger of the Ganga** due to its significance.
3. Susu has a **long snout**, round belly, stout body, and big flippers.
4. They have a **slit on their head**, acting like a nostril.
5. **Female dolphins are larger** and give birth every two to three years.
6. Calves are born with **chocolate brown skin**, while adults have **grey-brown skin**.

7. They use **ultrasonic waves** for hunting and navigation in freshwater.
8. Their **special swimming style** helps them find food, and they make the 'Susu' sound when coming up to breathe.
9. The Ganges River Dolphin **faces threats** like accidental killing, overfishing, and habitat destruction.
10. Their **habitats are affected** by water projects, pollution, and dams.
11. Vikramshila Gangetic Dolphin Wildlife Sanctuary in Bihar is **their only sanctuary**.
12. **Project Dolphin**, like Project Tiger, aims to protect these dolphins and other related species.
13. The Ganges River Dolphin was declared India's **national aquatic animal** in 2009.

Distribution map



3. Dam Safety

The **National Dam Safety Authority (NDSA)** has formed an **expert committee** to assess the dam safety of the Kaleshwaram Lift Irrigation Project (KLIP).

About Dams

1. A dam is a **man-made structure** built across rivers or streams to store water for various purposes like drinking, irrigation, and power generation.
2. While dams provide essential benefits, their construction can lead to **displacement** of communities,



- loss of wildlife habitats, and even interstate conflicts over water.
- Some **major dam failures** in history, like the Banqiao dam failure in China in 1975, have resulted in significant loss of life and property, highlighting the importance of proper dam safety measures.

Dams in India

- India ranks as the **third-largest** dam-owning nation globally, with approximately 5,700 large dams.
- A significant portion of these dams, about 80%, are over **25 years old**, and surprisingly, 227 of them have been functioning for over a century.
- Such old dam infrastructure highlights the importance of **robust dam safety** measures to prevent potential risks associated with ageing infrastructure.
- Large dams in India are frequently **constructed** in regions prone to **seismic activity**, rendering them susceptible to earthquakes.
 - An illustrative instance occurred during the **Bhuj earthquake** in Gujarat in 2001 when cracks in the foundation of the **Chang Dam** were observed.
- In October 2023, **Chungthang Dam**, the highest dam in Sikkim, was washed away during **flash floods** triggered by a glacial lake outburst from South Lhonak Lake.
- Abrasive sediments** pose a threat to hydroelectric turbines and other dam components, while also diminishing the storage capacity of dams.
 - It's estimated that around 3,700 dams in India could lose 26% of their total storage capacity by 2050 due to **sediment accumulation**.
- A **poor financial situation** often results in irregular maintenance and upkeep of other components of the power plant.

What could be done?

- Dam decommissioning** of ageing dams involves either completely removing the dam and its associated structures or partially reducing or lowering the dam's height.
 - It requires **careful planning** to minimize risks to downstream communities.

- Design methods for decommissioning should adhere to the **latest technology** for dam safety.
- Factors like **severe weather conditions** should be considered when formulating safety standards.
 - Countries like **Japan** have adopted **sub-surface dams** as an alternative to surface dams, which could be explored in India too.

4. Urban Water Crisis

Bengaluru has been struggling with one of its most severe **water shortages** in recent times, due to poor rainfall.

About Urban Water Crisis

- A water crisis arises when there's **insufficient access to clean water** due to pollution, overuse, and mismanagement.
- It's exacerbated by factors like drought and climate change, leading to situations termed as '**Day Zero**'.
 - This term signifies critically **low water levels** in dams supplying a city, rather than a complete absence of water.
 - Instances like Cape Town in 2018 and Chennai in 2019 have faced such crises.
 - Addressing water scarcity is important for achieving Sustainable Development Goals, particularly **SDG6**, aiming for clean water and sanitation by 2030.
 - In Bengaluru, the number of lakes has decreased from 262 to 81.

Reasons for Urban Water Crisis

- The **loss of green areas, overrunning of water bodies**, and **excessive use of natural resources** have increased pressure on water availability in the city.
- In **highly populated cities**, groundwater levels have significantly dropped over the past twenty years, worsening the water crisis.
- Urban areas often face inadequate **water supply infrastructure**, including distribution networks, treatment plants, and storage facilities.
- Uneven monsoons** and increased instances of floods and droughts pose challenges to water accessibility and availability.

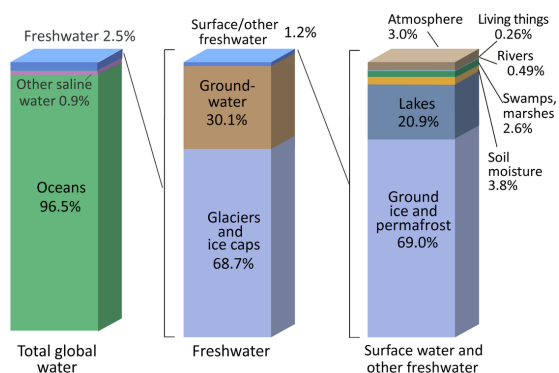
5. In South India, groundwater reserves may not tolerate **prolonged dry periods**, highlighting vulnerability to water scarcity.

Major Government Initiatives

1. National Water Mission (NWM)
2. Jal Shakti Abhiyan
3. Atal Bhujal Yojana
4. Mission Sahbhagita
5. Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

- a. WASH: launched by WHO, **Water, Sanitation, and Hygiene**. The WASH program aims to improve access to safe water, sanitation, and hygiene to reduce illness and save lives.
3. Industries should aim to decouple water from productivity, **promoting water reuse** and zero discharge.
4. **Transboundary water management** should be fostered through fair agreements and joint operational bodies for river basins.
5. Moving beyond volumetric water sharing, equitable benefit **sharing of water resources** should focus on sharing the outcomes of the resource.

Where is Earth's Water?



Credit: U.S. Geological Survey, Water Science School. <https://www.usgs.gov/special-topic/water-science-school>
 Data source: Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), 1993, Water in Crisis: A Guide to the World's Fresh Water Resources. (Numbers are rounded).

5. World Water Day

The UN World Water Development Report: **Water for Prosperity and Peace** was released on World Water Day (22nd March) by UNESCO.

About World Water Day

1. World Water Day has been observed annually on **March 22nd since 1993**.
2. Following a consensus reached at the **UN Conference on Environment and Development** held in Rio de Janeiro in 1992.

Highlights of the Report

1. States should prioritize **responsible governance of water**, ensuring equitable access to water resources for all regardless of their location.
2. Leveraging **WASH services** can serve as a politically neutral platform for collaboration between citizens and governments.

6. Zero Carbon Buildings

Nagpur has taken a pioneering step by launching **India's first City-Specific Zero Carbon Buildings Action Plan (ZCBAP)**.

What are Zero Carbon Buildings?

1. Zero-carbon buildings are structures designed to enhance their overall **environmental performance** throughout their lifecycle.
2. They achieve this by implementing measures that **minimize greenhouse gas (GHG) emissions** at every stage, including construction, operation, and eventual disposal.
3. This is achieved while ensuring that occupants experience **satisfactory visual** and **thermal comfort**.

About ZCBAP in Nagpur

1. Nagpur wants all its buildings to produce **zero carbon emissions by 2050**. This means they won't add harmful gases to the air.
2. The plan is part of a global project called ZCBA, led by the **World Resources Institute (WRI)**.
3. Nagpur is **one of six cities** worldwide working on this project to make buildings greener and healthier for everyone.
4. **Nagpur's ZCBAP builds upon:**
 - a. India's Nationally Determined Contributions
 - b. India's Long-Term Low-Carbon Development Strategy



- c. Energy Conservation Building Code, 2017
- d. Green Building Rating Systems
- e. Eco-Niwas Samhita 2018

Need for ZCBAP

1. India's buildings are emitting **more greenhouse gases** (GHGs) than before, especially from industries like steel and cement.
2. In the next few decades, emissions from these industries could increase significantly.
3. **Brick kilns** also release harmful gases like carbon monoxide and sulfur dioxide into the air, adding to the pollution.

7. Zero Budget Natural Farming (ZBNF)

The **National Bank for Agriculture and Rural Development (NABARD)** and the **Indian Council for Research on International Economic Relations (ICRIER)** have alerted regarding 'a **complete switch**' to natural farming in India.

About ZBNF

1. **Masanobu Fukuoka**, a Japanese farmer, and philosopher first practised this method.
2. **Subhash Palekar** introduced natural farming in India based on **four elements**: Beejamrit, Jeevamrit, Acchadana, and Waaphasa.
3. Natural farming methods include:
 - a. **Intercropping** monocot and dicot crops in the same field.
 - b. Implementing **contours and bunds** to conserve rainwater.
 - c. Promoting the resurgence of **local earthworm** species by increasing organic matter (no use of chemicals and no use of credit or spending money).
 - d. **Utilizing dung** from indigenous cows, which contains high levels of beneficial microorganisms.
4. The method was renamed **Bhartiya Prakritik Krishi Padhati (BPKP)** and integrated into the **Paramparagat Krishi Vikas Yojana (PKVY)**, focusing on **enhancing soil health** and promoting organic farming.

Why India should be cautioned about ZBNF?

1. ZBNF is a **labour-intensive** farming method with debates about its "Zero cost" concept, as inputs like rainwater and family labor have **opportunity costs**.
2. **Yield variations** are common, and determined by natural factors.
3. It relies on **indigenous cow breeds**, which are **costly to maintain** with low milk yield. Independent studies to validate ZBNF's higher yield claims are lacking.

There is a need for **nationwide scientific studies** to assess the effectiveness of ZBNF across different landscapes. Additionally, promoting indigenous cow breeds like **Punganur Cow** and **Red Sindhi** through government and cooperative initiatives can help increase their numbers.

8. Green Credit Program

The Ministry of Environment, Forests and Climate Change (MoEFCC) has issued the methodology for calculating Green Credits (GC) for **Tree Plantation Activity** under the Green Credit Program (GCP) 2023 rules.

What is Green Credit (GC)?

1. A GC is a unit of **incentive** offered for a specific activity that has a **positive** environmental impact.
2. These credits are **tradable** on a specialized exchange, akin to the trading of carbon credits (CC).

Difference Between GC and CC

1. GC operates under **The Environment (Protection) Act, of 1986**, while **Carbon Credit** operates under **The Energy Conservation Act, of 2001**.
2. GC is advantageous to **individuals** and communities, whereas CC benefits **industries** and corporations.

What is the Green Credit Program (GCP)?

1. GCP incentivizes **environment-positive actions** by various stakeholders voluntarily.
2. Aligned with the '**LiFE**' initiative, it promotes sustainable living and eco-friendly development.
3. Established under "The Environment (Protection) Act, 1986," with MoEFCC as the nodal agency, it is governed by an **inter-ministerial Steering Committee**.

4. Administered by ICFRE, it employs a **user-friendly digital platform** for project registration and issuance of Green Credits.
5. **Focus areas** of GCP:
 - a. tree plantation, water, sustainable agriculture, waste management, air pollution reduction, mangrove conservation and restoration, ecomark, sustainable building and infrastructure.

9. Nature Restoration Law (NRL)

1. The **European Parliament** adopted the Nature Restoration Law (NRL) to restore 20% of the EU’s land and sea.
2. This law aims to **restore degraded ecosystems** in all member states, supporting climate and biodiversity goals while enhancing food security.
3. As part of the EU Biodiversity Strategy, it mandates **binding targets** for ecosystem restoration.
4. The objective is to enable **long-term recovery** of a diverse and resilient nature.
5. EU countries must submit **National Restoration Plans** to the Commission within 2 years of the Regulation coming into force for implementation.

10. Ethanol 100

The Ministry of Petroleum and Natural Gas launched Ethanol 100 fuel.

About Ethanol 100

1. An eco-friendly substitute for gasoline, **ethanol-blended fuel consists of**
 - a. 92 to 94 per cent ethanol,
 - b. 4 to 5 per cent motor spirit for colour, and
 - c. 1.5 per cent higher saturated alcohol.
2. It results in **lower greenhouse gas emissions**, around 63% less from well to wheel.
3. Its high-octane rating enhances **engine efficiency and power**, making it suitable for high-performance engines.
4. Additionally, it contributes to **substantial savings** in foreign exchange.

11. Battery Waste Management (Amendment) Rules, 2024

The Ministry of Environment, Forest, and Climate Change (MoEFCC) has revised the Battery Waste Management Rules, 2022.

Battery Waste Management in India

1. These Rules have been notified to ensure environmentally sound management of waste batteries under the **Environment (Protection) Act 1986**.
2. The 2022 Rules replaced the **Batteries (Management and Handling) Rules, 2001** and were amended in 2023 & 2024.

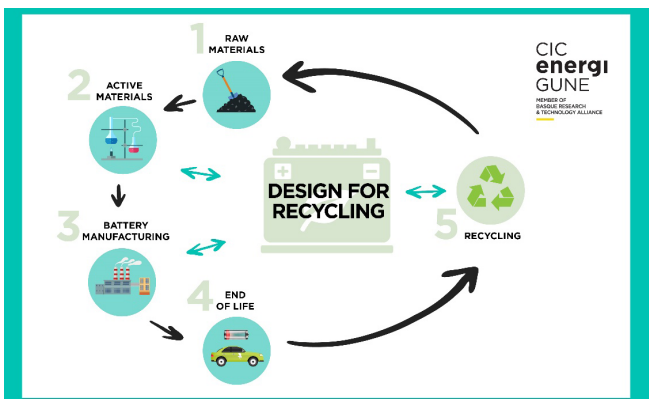
Battery Waste Management Rules, 2022	Battery Waste Management (Amendment) Rules, 2024
<ol style="list-style-type: none"> 1. Under the 2022 rules, Extended Producer Responsibility (EPR) certificates will be issued by the Central Pollution Control Board (CPCB) via a centralized online portal, reflecting recycled or refurbished quantities and assigned to recyclers or refurbishers. 2. Recyclers or refurbishers have the option to sell the assigned EPR certificates to producers in exchange for waste batteries. 	<ol style="list-style-type: none"> 1. The CPCB will establish the highest and lowest prices for EPR certificates, set at 100% and 30% respectively of the environmental compensation applicable to obligated entities for failing to meet EPR obligations. 2. Registered entities can exchange EPR certificates through the portal at prices ranging between the highest and lowest prices.



<p>3. The CPCB, will develop and propose guidelines for imposing and collecting Environmental Compensation from producers and entities engaged in recycling waste batteries for non-compliance with the rules.</p> <p>4. These guidelines will be submitted to the MoEFCC.</p>	<p>3. The CPCB will draft and propose these guidelines, with the option to seek input from the Committee for Implementation.</p> <p>4. Once finalized, the CPCB will submit the recommended guidelines to the Ministry for review and approval.</p>
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- a. The **rules apply to all** waste generators, local bodies, gram panchayats, manufacturers, importers, producers, and brand owners.
- b. Starting from September 30, 2021, the **minimum thickness** of plastic carry bags was increased from 50 to 75 microns, and it will further increase to 120 microns by December 31, 2022.
- c. The regulations **prohibit using identified Single Use Plastic (SUP)** items, which have low utility and contribute significantly to littering.
- d. An **‘Extended Producer Responsibility (EPR)’** system has been introduced to hold producers responsible for managing the disposal and recycling of their products.

Plastic Waste Management (Amendment) Rules, 2024



1. **Local bodies** must assess plastic waste generation annually and estimate future waste for five years.
2. Manufacturers of compostable or biodegradable products must report to the **Central Pollution Control Board (CPCB)**.
3. Rules establish an **online portal** for registration, with default registration if there is no response within 30 days.
4. Local bodies must **prevent prohibited plastic items** and submit annual reports.
5. For better implementation of the **EPR framework**:
 - a. Producers, Importers, and Brand Owners must now collect the **plastic packaging** they introduce to the market.
 - b. This responsibility also extends to manufacturers of **compostable or biodegradable** plastics.
 - c. The new rules **remove specific requirements** for stakeholders to develop waste collection systems.
 - d. **Local bodies** are now responsible for developing and setting up **infrastructure** for plastic waste management, excluding producers.
 - e. They must assess and report on this infrastructure annually to the **State Pollution Control Board**

12. Plastic Waste Management

A report titled **‘Population Caused by Plastic’** has been presented in Parliament by the Public Accounts Committee (PAC). Considering this, the government has notified the **Plastic Waste Management (Amendment) Rules, 2024**.

Plastic Waste Management in India

1. India produces approximately **4.2 million tonnes of plastic waste** annually.
2. Over the past five years, Per capita plastic waste generation has **doubled**.
3. The government has notified **Plastic Waste Management Rules, 2016** (later amended in 2024):

- (SPCB) and **Pollution Control Committee (PCC)**.
- The PAC noted **incomplete data from ULBs** to MoEFCC.
 - New rules mandate **online reporting to SPCB and PCC** by manufacturers, importers (quarterly), recyclers, processors, and sellers of plastic materials (annually).
 - Institutional mechanisms** are established for better monitoring and accountability.

13. United Nations Environment Assembly (UNEA)

The **Sixth session** of the UNEA-6 recently concluded at the UN Environment Programme (UNEP) headquarters in Nairobi, Kenya.

The **theme** for UNEA-6 was “Effective, inclusive and sustainable multilateral actions to tackle climate change, biodiversity loss and pollution”.

The **UNAE-7** is scheduled to be held in December 2025 in Nairobi.

About UNEA

- Established in 2012 at the **United Nations Conference on Sustainable Development**.
- It is the world’s **highest-level decision-making body** on the environment.
- It sets the **global environmental agenda**, provides policy guidance, and addresses emerging environmental challenges.
- The UNEA consists of a President, 8 Vice Presidents forming the UNEA Bureau, and all 193 Members of the United Nations.

Highlights of UNEA-6

- The recent UNEA-6 session reaffirmed its commitment to tackle the **triple planetary crisis** through the adopted Ministerial Declaration.
 - Triple planetary crisis refers to three interlinked issues that threaten humanity; **climate change, pollution & biodiversity loss**.

- Additionally, the **first Multilateral Environmental Agreements Day**, dedicated to international agreements on major environmental issues, was observed on **28th Feb 2024**.
- Furthermore, **draft resolutions** on combating sand and dust storms, management of chemicals and waste, cooperation on air pollution, promotion of sustainable lifestyle, etc., were passed during the session.
- Reports released & awards announced:**
 - Global Resource Outlook 2024**
 - Global Waste Management Outlook 2024**
 - Used Heavy-Duty Vehicles and the Environment Report**
 - Young Champions of the Earth Award**

14. Tayler Prize

Johan Rockstrom will receive the 2024 Tyler Prize for Environmental Achievement for his work on the **Planetary Boundaries framework**.

About Planetary Boundaries Framework

- The Planetary Boundaries framework, **introduced in 2009**, encompasses **nine key systems** crucial for the planet’s health.
- These include** Climate Change, Biosphere Integrity, Land-System Change, Freshwater Use, Biogeochemical Flows, Novel Entities, Stratospheric Ozone Depletion, Atmospheric Aerosol Loading, and Ocean Acidification.
- These boundaries are vital for **supporting life on Earth**, but human activity has pushed us beyond safe limits in the first six of these areas.

About Tayler Prize

- The Tyler Prize for **Environmental Achievement** is an annual award that recognizes environmental science, environmental health, and energy.
- It’s considered the “**Nobel for the environment**”.
- The **University of Southern California (USC)** administers the award, which was established in 1973 by **John and Alice Tyler**.



4. Last year, **two fisheries experts**, Daniel Pauly and Rashid Sumaila, won the prize.
5. In 2020, it was awarded to **Pavan Sukhdev**, an Indian economist who formulated the Green Economy and Gretchen C Daily, a conservation biologist.

15. International Big Cat Alliance (IBCA)

The Government of India (GoI) has approved the establishment of the **IBCA headquarters in India**.

What is IBCA?

1. **The Big Cat Initiative** is a coalition involving **96 Big Cat range** countries, conservation partners, scientific organizations, and business groups.
2. It focuses on conserving **seven big cat species**: Lion, Tiger, Snow Leopard, Leopard, Cheetah, Jaguar, and Puma.
3. The initiative emphasizes **integrating biodiversity**

policies with Sustainable Development Goals (SDGs) to achieve holistic and inclusive conservation outcomes.

4. In 2019, the Indian Prime Minister emphasized **India's leadership** in big cat conservation and proposed an Alliance of Global Leaders.
5. Then, in 2023, marking the **50th anniversary of Project Tiger (India)**, the International Big Cat Alliance (IBCA) was officially launched.
6. **Sixteen countries**, such as Brazil, Nepal, Bangladesh, and Malaysia, have formally become members of the IBCA led by India.
7. **Nine global organizations**, including the International Union for Conservation of Nature (IUCN) and the World Wildlife Fund (WWF) International, have agreed to join the alliance.
8. The structure of the alliance is **inspired by** the International Solar Alliance (ISA).



G. SOCIETY AND CULTURE

1. India's Declining Fertility Rate and Its Implications

1. According to the United Nations Population Division, **India's population is projected to reach 1.7 billion by 2065.**
2. Concurrently, a report by The **Lancet projects India's total fertility rate (TFR) to decline to 1.29 by 2051.**

Understanding Total Fertility Rate (TFR):

1. **TFR reflects the average number of children born to a woman in her lifetime**, based on current age-specific fertility rates and reproductive life expectancy.
2. By 2023, the TFR will vary widely around the world, ranging from **0.72 in South Korea to 6.73 in Niger.**

Recent Reports and Projections:

1. The United Nations estimates that **India's population will reach 1.7 billion by 2065**, but the discussion ignores demographic aspects beyond population size, such as age structure and quality.
2. The Lancet estimates **India's TFR to decline to 1.29 by 2051**, with a range of 0.97 to 1.6.
3. However, the **government's estimate is higher than the Lancet's findings**, which suggest India is likely to stabilize below 1.7 billion before 2065.

Factors Driving India's Demographic Transition:

1. **Rapid Economic Development:** Economic growth, particularly **since the early 21st century, has been instrumental in driving India's demographic transition.**
2. **Reduced Mortality Rates:** Lower infant and child mortality rates have **reduced** the need for larger families.
3. **Women's Empowerment:** Increasing **educational attainment and workforce participation** among women has contributed to the decline in fertility rates.

4. **Improved Living Conditions:** **Better housing and old age security** systems have made the transition more convenient.

Immediate and Long-Term Impacts:

1. **Immediate Effects:** A rapid decline in the **TFR leads to a lower dependency ratio** and a higher proportion of working-age adults, thereby promoting economic growth and inter-generational transfers.
2. **Long-Term Challenges:** However, this decline has also resulted in a larger elderly dependent population, as seen in other countries such as **China and Japan.**
3. **Projected Dependency Ratio:** India's dependency ratio, for both young and old dependents, relative to the working-age population, is expected to **increase from 13.8 in 2011 to 23 in 2036.**

Regional Disparities and Transition Dynamics:

1. **Uneven Transition:** The change in **replacement level fertility varies across states**, with larger states such as Uttar Pradesh and Bihar expected to take longer to achieve stabilization.
2. **Inter-District Variations:** Significant variations exist within states, with **some districts experiencing faster change than others**, highlighting the complexity of demographic change.

Economic Implications and Labor Dynamics:

1. **Positive Economic Impact:** Demographic change is expected to increase **labor productivity in many states through increases in per capita capital resources**, reallocation of resources to education and skills, and changes in the age distribution of the labor force.
2. **Women's Workforce Participation:** Women's participation in the **labor force is likely to increase in the coming decades** due to reduced child care responsibilities due to declining fertility rates.
3. **Sectoral Redistribution:** The workforce is shifting from agriculture to industries and services, leading to a more balanced regional distribution.



Implications for Education:

1. **Impact of Declining TFR:** Low TFR leads to fewer children enrolling in schools, potentially improving educational outcomes without additional state resources.
2. **Shift in Focus:** Emphasis needs to **shift towards addressing high drop-out rates** in middle and higher education to fully leverage demographic changes.
3. **Resource Allocation:** Adequate resources should be allocated to technical and vocational education before the demographic window closes.

Spatial Redistribution of Labor:

1. **North-South Movement:** The movement of workers from northern to southern states creates spatial equilibrium in the labor market.
2. **Impact on Working Conditions:** Modern sectors in southern states attract cheaper labor from northern states, potentially improving working conditions.

Policy Considerations:

1. Policy makers need to focus on skill development, **especially for women and marginalized groups, to harness the potential of demographic change.**
2. A decline in TFR may lead to lower enrollment in schools, making it necessary to focus on higher education and technical skill development.

2. Live-in Relationships in India and Legal Considerations

The Uttarakhand Uniform Civil Code (UCC) Bill mandates compulsory registration of all live-in relationships in the state, irrespective of residency. It also provides for maintenance to women and jail terms for not producing a “certificate” of the relationship. This bill raises concerns about the privacy and personal liberty of consenting adults.

Legal Status of Live-in Relationships in India:

In India, live-in relationships are not clearly governed by law or custom. However, through judicial decisions, the Supreme Court has expanded the recognition of live-in partnerships and established guidelines to handle such relationships.

Key Supreme Court Judgements:

1. **Badri Prasad v. Dy. Director of Consolidation (1978):** Live-in relationships are legal if they meet the requirements of marriage, such as legal age, consent, and mental capacity.
2. **Lalita Toppo vs. The State of Jharkhand (2018):** Live-in partners are entitled to more relief under the Domestic Violence Act, 2005 (PWDVA 2005) than under the Code of Criminal Procedure, 1973.
3. **Bharatha Matha vs. R Vijay Renganathan & Ors (2010):** Children born through live-in relations will be considered legitimate and will be allowed to share in the ancestral undivided property.
4. **Indra Sarma v. VKV Sarma (2013):** If both partners are unmarried then living in a live-in relationship is not illegal and it is not a crime.

Factors Influencing the Rise of Live-in Relationships:

1. Due to **social change, globalization, urbanization** and cosmopolitan values, the younger generation is increasingly accepting pre-marital sexual relations and **Live-in Relationships.**
2. **Individual autonomy and freedom of choice** have led to a desire for **live-in relationships**, especially in contrast to historically prevalent arranged marriages and societal expectations.
3. Evolving views on **commitment emphasize emotional connection, communication, and compatibility, reducing** the sanctity of marriage as the ultimate symbol of commitment.
4. **Live-in relationships provide a way to test domestic compatibility before marriage**, addressing concerns about a restrictive or burdensome marriage process.

Socio-Legal Impact:

While live-in relationships have gained legal recognition, their social acceptance challenges traditional family structures and sparks debate on legal reforms. They can create generational conflict and social tension, especially in conservative communities.

Conclusion:

To address the conflicting opinions associated with live-in relationships, it is necessary to enact separate laws specifically addressing such relationships. This will provide clarity, security and rights to individuals involved in live-in arrangements.

3. 'Social Media And Child Sexual Exploitation And Abuse' Report: Unicef

UNICEF (United Nations International Children's Emergency Fund) has intensified its efforts to tackle child sexual exploitation and abuse, particularly those facilitated by technology, in response to the COVID-19 pandemic. And, the report is in response to these efforts.

- The report intends to provide a headline overview of the current situation across target countries to draw out promising practices and lessons learned to inform future policy and practice.

About the Report

- The report evaluates the adoption of the Model National Response (MNR) in various countries, spotlighting effective strategies and insights gained.
 - The MNR, conceived by the We Protect initiative (a UK government project with INTERPOL, UN entities, and NGOs), offers a strategic framework for combating child sexual exploitation and abuse nationally.
- Data for the analysis were gathered from surveys completed by UNICEF offices in 29 low- and middle-income countries (LMICs), covering all global regions.

Key Highlights of the Report

1. Progress in LMICs:

- Many low- and middle-income countries have made significant progress in addressing online child sexual exploitation and abuse.

2. Advances in Tackling Child Sexual Exploitation and Abuse

- Policy and Governance Frameworks:** Strengthening of legal and administrative structures to combat abuse.

- Law Enforcement Capacity:** Enhanced training and resources for police, judiciary, and prosecution to manage cases effectively.
- Support and Reporting Mechanisms:** Increased availability of hotlines and helplines for victim support and case reporting.
- Educational Initiatives:** Expansion of awareness programs addressing both online and offline exploitation risks.

Challenges across the different domains

1. Policy and Governance

- Governance Structures:** 69% of countries have national bodies to address online child sexual abuse and exploitation.
- Policies and Strategies:** Over half (59%) possess a specific national policy or strategy against child sexual abuse.
- Research and Awareness:** 79% conducted research on child sexual exploitation, including online aspects.
- Legislative Gaps:** 90% face significant legislative challenges in fully addressing child exploitation.
- Challenges:** Despite some progress, issues like ineffective governance, inadequate data collection, and poor enforcement of legislation persist.

2. Criminal Justice

- Law Enforcement Specialization:** Every surveyed country has law enforcement with specific duties to tackle both offline and online child sexual exploitation and abuse.
- Cybercrime Units:** 72% of these countries have their capabilities within cybercrime units, sometimes working alongside child or women crime units, with noted challenges in inter-unit collaboration.
- Judicial and Prosecution Knowledge:** 75% of the judiciary and 79% of prosecution services possess some level of expertise to support victims, but comprehensive understanding is rare.



- d. **Offender Management:** Over half (57%) lack a process for managing offenders.
- e. **International Collaboration:** About 48% have access to INTERPOL's International Child Sexual Exploitation database, indicating some level of international cooperation.
3. **Victim**
- a. **Case Management Framework:** 69% of countries have established protocols or legislation for case management to support child sexual exploitation and abuse victims.
- b. **Implementation Challenges:** Many countries face difficulties in effectively applying these plans and protocols.
- c. **Workforce Training:** Only one country reported having a fully trained social service workforce in numbers adequate to meet the demand.
- d. **Comprehensive Remedies:** Just one country has extensive remedies available for victims.
- e. **Child Helplines:** 93% offer child helplines, but they often struggle with resource limitations and provide effective referral system linkages.
4. **Societal**
- a. **Reporting Mechanisms:** 90% (26 countries) have active hotlines or portals for reporting illegal online content, including child sexual abuse material.
- b. **Challenges with Hotlines:** Limited public awareness, distrust in the system, and fear of victim-blaming hinder their effective use.
- c. **Education Programs:** 72% of countries run national programs to increase awareness of child sexual exploitation online and offline.
- d. **Youth Participation:** 64% of countries involve children and adolescents in shaping policies and practices related to child sexual exploitation and abuse.
- e. **Offender Support Systems:** A significant gap exists, with 74% of countries lacking specific support for offenders, and no country offers preemptive support for individuals with a sexual interest in children to prevent child harm
5. **Industry**
- a. **Prevalence:** 93% of surveyed countries have procedures for removing child sexual abuse material.
- b. **Regulatory and Enforcement Gaps:** Not all procedures are legally regulated or consistently enforced.
- c. **Challenges:** Limited technical and human resources hinder enforcement, and there's low awareness among tech industries and law enforcement about these procedures.
6. **Communication and media**
- a. **Government Support:** Only Nearly half (48%) of the countries surveyed report significant government support for ethical and balanced media reporting on child sexual exploitation and abuse, which includes guidance, training, regulations, and monitoring.
- b. **Universal Terminology:** 68% of countries engage in discussions or adopt universally agreed terminology related to child sexual exploitation and abuse.
- c. **Challenges:** There is a need to translate, contextualize, and apply the Terminology Guidelines to enhance the protection of children from sexual exploitation and abuse.
- Recommended way forward**
1. **Comprehensive Approach:**
- a. Addressing technology-facilitated child sexual exploitation requires a broad strategy that encompasses both digital and underlying risk factors, acknowledging its unique dynamics for targeted interventions.
2. **Strengthening the governing system:**
- a. Instead of temporary project-based efforts, focus on enhancing statutory bodies and integrating educational programs into national curricula and professional training for sustainable impact.
3. **Evidence-Based Policy:**
- a. Advocate for and invest in building national systems for data generation on child sexual exploitation to inform contextualized and comprehensive policies.



4. Effective Policy Development:

- a. Emphasize the creation of robust policies and frameworks to combat child sexual exploitation and abuse comprehensively.

5. Multisectoral Collaboration:

- a. Encourage cooperation among various sectors including health, education, justice, and technology to address child sexual exploitation effectively through structured dialogue and mutual understanding.

6. Cross-Border Cooperation:

- a. Highlight the importance of regional and international collaboration to tackle the cross-border nature of child sexual exploitation, drawing on examples like ASEAN's regional declaration and action plan.

7. Digital Literacy for Children:

- a. Stress on enhancing children's digital skills, including online safety, to empower them in navigating the internet securely.

8. Integrate Digital Safety in Education:

- a. Digital safety should be incorporated into existing educational programs that address offline issues like bullying and sexual abuse, reflecting the growing integration of technology in children's lives.

9. Child Participation in Safety Solutions:

- a. Amplify children's involvement in creating online safety solutions and consider their perspectives in matters affecting them, including policy-making and child protection mechanisms.

What is Online child sexual abuse and exploitation?

Online child sexual abuse and exploitation refer to the **use of the internet and other digital technologies to harm or exploit children sexually**. This includes producing, distributing, or accessing child sexual abuse materials, as well as manipulating or coercing children into sexual activities through cyber means.

As per National Human Rights Commission, Child Sexual Abuse Material (CSAM) has increased by approximately 250 percent on social media in India.

Year	2021	2022	2023
Data (Number of Cases)	163633	204056	447168

Impact of Online Child Sexual Abuse and Exploitation

1. **Inappropriate Content Exposure:** Risk of encountering violent, pornographic, or hate speech content online.
2. **Online Predators and Grooming:** Threat of online predators using social media and gaming platforms for grooming.
3. **Cyberbullying:** Vulnerability to harassment, intimidation, or humiliation through digital technology.
4. **Privacy Concerns:** Potential inadvertent disclosure of personal information due to unawareness of privacy settings.
5. **Addictive Behavior:** Possibility of developing addictive behaviors from excessive screen time, affecting mental health, academic performance, and social interactions.

Major Initiatives in India for Preventing Child Sexual Abuse in India:

1. POCSO Act, 2012
2. Integrated Child Protection Scheme
3. Child Abuse Prevention and Investigation Unit
4. Beti Bachao, Beti Padhao
5. Juvenile Justice Act/Care and Protection Act, 2000
6. Child Marriage Prohibition Act (2006)
7. Child Labour Prohibition and Regulation Act, 2016
8. Operation Smile

4. Social Security

The Government of India (GoI) has assessed **India's social security programs**: progress and challenges.

What is Social Security?

1. Social security is like a **safety net** provided by governments to help people when they face tough times.



- It includes things like healthcare, financial support, and **assistance** for different **life situations** such as old age, illness, disability, or losing a job.
- The goal is to make sure everyone has **access to basic needs** and financial help when they need it most.

Social Security in India

- India's social protection coverage is **quite low** compared to other countries, with over **76%** of the population having **no social safety net**.
- Spending** on social protection in India is also **below the world average**, at just 8.6% of GDP.
- Additionally, a significant portion of India's workforce, about **53% of salaried workers**, **lack social security** benefits.
- Even among the poorest 20% of workers, only about 2% have access to social security benefits.
- These figures highlight the **need for significant improvement** in India's social security system to ensure better support for its citizens during times of need.

International Experience

- Brazil's social security system** covers a large portion of its population, providing income support in situations of partial or complete loss of income.
 - It includes unemployment insurance and healthcare.
- Germany's system** is based on contributions from both workers and employers, offering pensions, healthcare, and other benefits.
- Singapore** encourages personal savings through a provident fund for retirement, housing, healthcare, and education.
- India** could learn from these models to improve its social security system, whether by expanding coverage, adopting social insurance principles, or promoting personal savings.

5. Universal Health Coverage in India

Expanding Universal Health Coverage is tricky, but using **data and digital tech** can make it smoother.

What is Universal Health Coverage (UHC)?

- UHC means everyone can get good healthcare **without money problems**.
- It's about giving everyone the **right to quality healthcare**, not just a few.

Provisions in India

- India's Constitution (Articles 39E, 42, 47) says the government must take care of **workers' health** and improve living conditions.
- December 12th is **International Universal Health Coverage Day**, declared by the United Nations in 2017.
- Sustainable Development Goal 3.8** wants everyone to have access to healthcare.
- India's plan for Universal Health Coverage includes expanding the **Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**, its main health insurance scheme.

Issues in Implementing UHC in India

- Only about 36% of the poorest households have **health insurance**, according to NFHS-5.
- India spends about **3.2% of its GDP on healthcare**, which is lower than the average for similar countries.
- Even with programs like Janani Shishu Suraksha Karyakram, many people still have **high out-of-pocket expenditures**, especially in cities.
- Government programs** sometimes make mistakes, like including people who shouldn't be in the program and leaving out people who should.
- Most hospitals in the PMJAY program are public, which means there's **unequal access to services**.
- Many people don't know enough about staying healthy (poor health education), which leads to more illnesses that could have been prevented.

Use of Technology in Health

- Telemedicine**: It lets people talk to doctors and get diagnosed without going to the hospital. India's national telemedicine service, eSanjeevani, had 80 million online consultations in 2022.
- Electronic Health Records (EHR)**: This keeps track of a person's health information in one place, making it easier for doctors to give the right treatment. The Ayushman Bharat Digital Mission is working on this.



- 3. **Mobile Health (mHealth):** This uses phones to help with healthcare, like scheduling appointments and reminding people to take their medicine.
- 4. **Artificial Intelligence (AI):** It looks at a lot of health data to find trends and help with new treatments. This can make it easier for doctors to diagnose and treat people.
- 5. **IoT:** The Internet of Things connects medical devices to give doctors a better understanding of a patient's health.

6. Swachhata Green Leaf Rating initiative

In a joint effort, the **Department of Drinking Water & Sanitation (DDWS) of the Ministry of Jal Shakti and the Ministry of Tourism have recently introduced the Swachhata Green Leaf Rating (SGLR) program.**



Aspect	Details
What is it?	Swachhata Green Leaf Rating Initiative is a government initiative to ensure world-class hygiene and sanitation in the hospitality sector.
Objectives	The primary goal is to prevent pollution in water bodies and maintain a clean environment.
Launched by	The ranking scheme was launched in November 2023 by the Union Tourism Ministry in collaboration with the Department of Drinking Water and Sanitation

About Swachhata Green Leaf Rating

- 1. The rating system launched by the **government for the hospitality sector, which aims to ensure world-class cleanliness and hygiene in hotels, resorts and homestays**, has proved to be a non-starter and **no state has opted for it so far.**
- 2. **Target Group:** The target group consists of hotels, lodges, homestays, ‘Dharamshalas’ and camps which have portable toilets. The rating will be based on compliance with safe hygiene practices mentioned in the guidelines.
- 3. As part of the initiative, state teams of **Swachh Bharat Mission-Gramin (Rural) and Tourism Department will conduct workshops** on the concept, process and desired outcomes for stakeholders.
- 4. **Implementation:** A **3-tier committee system has been proposed for implementation, starting with a verification sub-committee constituted by the Sub-Divisional Magistrate (SDM)** for verification at the grassroots level, followed by a **District Committee headed by the District Collector** There will be a committee. Have a committee. it. And then a state level committee headed by the Chief Secretary of the state.

7. Road Accident Victims

- 1. The Government of India is starting a trial program to provide **cashless treatment** to victims of road accidents, aiming to reduce fatalities.
- 2. It's developed by the Ministry of Road Transport & Highways to ensure timely **medical care**, especially during the critical first hour after an accident.
- 3. The **National Health Authority** will oversee its implementation with support from police, hospitals, and State Health Agencies.
- 4. Victims can receive up to Rs. 1.5 lakhs for **medical expenses** for a maximum of 7 days from the accident date, applicable to all road accidents.
- 5. **Hospital claims** will be reimbursed from the **Motor Vehicle Accident Fund.**
- 6. The program will use **AB PM-JAY packages** for trauma cases and will be managed through an IT platform combining MoRTH's eDAR application and NHA's Transaction Management System (TMS).



8. India registers 16% decline in TB incidence: Annual India TB report

India has achieved a **significant 16% decline** in **tuberculosis (TB) incidence** from **2015 to 2022**, surpassing the **global decline of 9%**. The **National TB Elimination Programme, India TB Report 2024**, reveals that **25.55 lakh cases** of TB were notified last year, representing the **highest number of cases** since the launch of the **National Tuberculosis Elimination Programme (NTEP) in the 1960s**.

State-wise Notifications:

1. **Uttar Pradesh** recorded the **highest number of TB case notifications** compared to the previous year.
2. **Bihar** was the **second-highest state** in terms of TB case notifications.
3. Over **8.4 lakh cases** were from the **private sector**.
4. There was a **1.17% increase** in TB case notifications from the **private sector compared to 2022**.

Treatment Coverage and Mortality:

1. India's treatment coverage **improved to 80%** of the estimated TB cases.
2. This represents a **19% increase** over the previous year.
3. TB mortality was **23 per lakh population**.
4. This is an **18% decline compared to 2015**, when it was **28 per lakh population**.

Achievements and Milestones:

1. India achieved a rate of approximately **179 cases per lakh population in 2023**.
2. The programme diagnosed **63,939 cases of multidrug-resistant TB (MDR-TB)**, highlighting its commitment to addressing drug resistance.
3. In 2023, **more than 20.5 crore individuals were screened for signs** and symptoms suggestive of TB as part of **active case-finding efforts**.
4. Out of the total TB cases notified in 2023, **60.7% were men, 39.2% women, and 0.04% transgender**.

About TB:

1. **Tuberculosis (TB)** is an infectious disease caused by the **bacteria Mycobacterium tuberculosis**. It mainly

affects the lungs but can affect other parts of the body as well.

2. TB spreads through the air when an infected person coughs, sneezes or speaks.
3. Common symptoms include a **persistent cough, fever, night sweats, and weight loss**.
4. Diagnosis includes **chest X-ray, sputum test, and skin test**.
5. Treatment usually involves a combination of **antibiotics taken for several months**.
6. TB remains a major global health problem, especially in developing countries.

Types of TB

There are two main types of tuberculosis (TB)

Latent TB:	Active TB:
<ol style="list-style-type: none"> 1. Occurs when a person is infected with the TB bacteria but does not show symptoms. 2. The immune system contains the bacteria, preventing them from spreading and causing illness. 3. Not contagious, but can develop into active TB if left untreated 	<ol style="list-style-type: none"> 1. Occurs when the TB bacteria multiply and cause symptoms 2. Can affect the lungs (pulmonary TB) or other parts of the body (extrapulmonary TB) 3. Contagious and can spread to others through airborne droplets

Additionally, there are other forms of TB:

Miliary TB:

1. A rare form of active TB that occurs when the bacteria spread through the bloodstream
2. Affects multiple organs at once.

Drug-resistant TB:

1. This occurs when **TB bacteria** become **resistant to one or more** of the standard antibiotics used for treatment.
2. It can be classified as **multidrug-resistant TB (MDR-TB)** or **extensively drug-resistant TB (XDR-TB)**.



TB-HIV Co-infection:

1. Globally, **especially in India**, TB and HIV are **two major public health problems**.
2. People living with HIV have a **20 times higher risk of developing active TB** than people without HIV infection.
3. In 2023, the total number of **TB-HIV co-infected cases was 34,476**.

National TB Elimination Programme:

The National TB Elimination Program (NTEP), previously known as the **Revised National Tuberculosis Control Program (RNTCP)**, was **launched in 1997** and has since made **significant progress** in reducing the burden of TB in India. Its main features are:

1. **DOTS Strategy:** The **Directly Observed Treatment, Short-course strategy** is the core of the program, ensuring proper diagnosis, treatment, and monitoring of TB patients.
2. **Free Diagnosis and Treatment:** The program provides **free diagnostic services** and **anti-TB drugs** to all patients seeking treatment in the public health system.
3. **Public-Private Partnerships:** The program collaborates with private healthcare providers to expand access to TB care and enhance case notification.
4. **Active Case Finding:** The program conducts **door-to-door screening** in **high-risk areas** to identify and **treat TB cases early**.
5. **Nikshay:** A **web-based platform** for case-based monitoring and management of TB patients.
6. **National Strategic Plan (NSP) for TB Elimination 2017-2025:** The NSP outlines the interventions and strategies to achieve the **goal of ending TB in India by 2025**. This is **five years ahead of the global target**.

1. The **Ni-kshay Mitra** scheme, also known as the **Pradhan Mantri TB Mukht Bharat Abhiyan (PMTBMBA)**, enables **individuals, NGOs, and other organizations** to support TB patients.

2. Support provided includes diagnostic, nutritional, and vocational support.
3. A **Ni-kshay Mitra** can **adopt at least one patient for at least six months** and provide any support they want.
4. The support can include adopting health facilities, urban wards.

The 2023 Global Tuberculosis (TB) report from the World Health Organization (WHO) has several highlights, including:

1. **India:**
 - a. India has seen a **16% reduction in TB incidence since 2015**, and TB mortality has decreased by 18%.
 - b. India has also seen a 19% increase in TB treatment coverage, and **is one of only four countries among the 30 highest-burden countries** in the world that has achieved more than **80% treatment coverage**.
 - c. India has also set a target of eliminating TB in the country by 2025.
2. **Global TB incidence:** The **TB incidence rate (new cases per 100,000 population per year)** rose by 3.9% between 2020 and 2022, reversing declines of about 2% per year for most of the past two decades.
3. **TB diagnosis and treatment:** The report shows that there has been a significant recovery in the scale-up of TB diagnosis and treatment services in 2022.
4. **TB mortality:** The **mortality of TB has also reduced by 18%** during the same period in India and globally. The WHO has made a downward revision of the TB mortality rates from 4.94 lakhs in 2021 to 3.31 lakhs in 2022, a reduction of over 34%.
5. The report also notes that **TB is the world's second leading cause of death from a single infectious agent, following Covid-19**.
6. **More than 10 million people continue to fall ill with TB every year**, and globally, over 3,500 people lose their lives to TB each day.



9. India Jumps 14 Ranks on UNDP Gender Inequality Index

According to the United Nations Development Programme (UNDP), India ranked 108 out of 193 countries in the 2022 Gender Inequality Index (GII) with a score of 0.437, which is a 14 rank improvement from 2021. The UNDP released the GII 2022 in their 2023-2024 Human Development Report on March 13, 2024.

- India ranked **108th** out of 193 countries in GII 2022 with a **score of 0.437**.
- This represents a significant progress compared to the **2021 ranking, where India was ranked 122nd among 191 countries with a score of 0.490**.
- Over the past decade, India's ranking in the GII has **steadily improved**, indicating a steady trajectory towards achieving gender equality.

The Gender Inequality Index

The Gender Inequality Index (GII) is a composite measure that evaluates gender inequality across three dimensions:

- Reproductive health**
- Empowerment**
- Labor market participation**

- It takes into account indicators such as **maternal mortality ratio, adolescent birth rate, percentage of parliamentary seats held by women, population with secondary education by gender and labor force participation by gender**.
- Lower GII values indicate less inequality between women and men.**
- The 2023-2024 HDR builds on the findings of the 2021-2022 Human Development Report, which showed – **for the first time** – a **decline in the global HDI value for 2 consecutive years**.
- While **rich countries are showing signs of strong recovery**, the poorest are struggling.
- All member countries of the Organization for Economic Co-operation and Development (OECD) **have surpassed their 2019 HDI levels**.

Top-Ranked Countries in the GII 2022 are:

- Norway
- Switzerland
- Sweden
- Netherlands

India's Progress on Gender Inequality Index

Year	Rank	Score
2022	108	0.437
2021	122	0.490
2020	123	0.493
2019	122	0.501
2018	127	0.501

India's commitment to accelerating economic growth and improving the quality of life for its citizens is reflected in its steady progress on the Gender Inequality Index and other human development indicators.

Human Development Index (HDI)

- India's Human Development Index (HDI) value increased to 0.644 in 2022, ranking the country **134th out of 193 countries** and territories.
- This improvement comes after a **decline in the HDI value in 2021** and a flat trend in recent years.
- Since 1990, India has made significant progress in human development**, with increases in:
 - Life expectancy
 - Expected years of schooling
 - Mean years of schooling
 - Per-capita gross national income (GNI)

10. The Introduction of the Holistic Progress Card (HPC)

The National Council of Educational Research and Training (NCERT) is implementing a paradigm shift in student assessment with the introduction of **Holistic Progress Cards (HPC)**.

- This innovative approach aims to **provide a comprehensive view of the holistic development of students, including feedback from parents, classmates and even self-assessment by students**.

Features and Evaluation Process of HPC:

- Comprehensive Evaluation:**
 - The HPC marks a paradigm shift by **moving away from marks and grades, relying instead on a 360-degree evaluation**.
 - It **considers students' academic performance, cognitive abilities, socio-emotional skills, and creativity**.



2. Class Activities and Assessment:

- Students are **actively engaged in class activities, applying diverse skills and competencies.**
- Teachers observe and **record strengths, such as collaboration, creativity, and empathy,** as well as areas for improvement.

3. Student Self-Evaluation and Peer Evaluation

- Students **evaluate their own performance and provide feedback to their classmates.**
- This **self-reflection and peer assessment promotes a sense of ownership** and accountability.

4. Goal Setting and Ambition Cards:

- Beginning in middle school (**Classes 6 to 8**), students set academic and personal goals.
- Ambition cards allow students to outline their aspirations,** areas for improvement, and necessary skills.

Benefits of the Holistic Progress Card

1. Comprehensive Evaluation:

- The HPC provides a **descriptive and analytical evaluation,** focusing on students' academic achievements and critical skill development.

2. Shift from Summative to Formative Assessment:

- It promotes a shift from summative to formative assessment, emphasizing **competency-based assessment** and holistic development.

3. Collaborative Support for Students:

- It aims to provide teachers and parents with insight to support the individual learning needs of each student.

11. World Poverty Clock: Key findings

According to **World Poverty Watch, India has made impressive progress in reducing extreme poverty,** with **less than 3% of its population now living below the poverty line.** This achievement is in line with the **United Nations Sustainable Development Goal (SDG) 1.1,** which aims to eliminate extreme poverty by 2030.

What are the key findings of the World Poverty Clock?

- The clock considers a daily income limit of **\$2.15 to showcase its results.**
- As a result, the **number of persons living in extreme poverty in India is expected to reduce from 4.69 crore in 2022 to about 3.44 crore in 2024,** which is 2.4% of the total population.

- Note that the **\$2.15 per day poverty line, also called the extreme poverty line,** mirrors the national poverty line in many of the poorest countries. It serves as a **measure of progress toward the World Bank's goal of reducing extreme poverty to below 3% by 2030.**

Growth in poverty control

	Total population	Number of people living in extreme poverty	%
	(in crore)		
2016	132.37	7.59	5.7
2018	135.29	6.26	4.6
2020	138.21	6.73	4.9
2022	140.85	4.69	3.3
2024	143.48	3.44	2.4

Niti Aayog recent paper on poverty

- NITI Aayog's recent paper, titled "**Multidimensional Poverty in India since 2005-06**", reports a significant reduction in **multidimensional poverty from 29.17% in 2013-14 to 11.28% in 2022-23.** As a result, 24.82 crore individuals were able to escape multidimensional poverty over the **9-year period.**
- This paper examines the prevalence of multidimensional poverty in India **from 2005-06 to 2022-23.**

The World Poverty Clock:

- The World Poverty Clock is an **initiative that provides real-time poverty forecasts up until 2030 for nearly every country worldwide.**

Funding Source:

- The International Fund for Agricultural Development (IFAD) and Germany's Federal Ministry for Economic Cooperation and Development support the World Poverty Monitor.

Working Mechanism:

- The Clock provides a **global count of people living in extreme poverty,** breaking them down by age, gender, and rural or urban location.
- It **dynamically tracks fluctuations in poverty levels by continuously updating its estimates every second,** which reflect individuals moving out of poverty and others falling into poverty.





H. ETHICS

1. Case Study: IAS officer who has a solution to water crisis

The Case

Water shortage was a common problem in Alipurduar district. Located in the foothills of the Eastern Himalayas, Alipurduar district of North Bengal has several wildlife sanctuaries and national parks. However, the decline in ground water level over the years has created a crisis in many parts of the district. Lack of resources and getting support from the local people was a big challenge for the district administration and DM Surendra Kumar Meena. Can good governance revive water bodies, provide a solution to the water crisis and breathe new life into this district of Bengal?

The Problem

People of India are facing water crisis. Newspaper headlines on the water crisis in Bengaluru should be a warning to both cities and villages of the country. Studies, including NITI Aayog's Comprehensive Water Management Index (CWMI), have also indicated such warnings. "If mitigation measures are not implemented, India will face a 6 percent loss in its gross domestic product (GDP) by 2050," Like Bengaluru, most Indian urban centers continue to neglect water management.

About 3,000 kilometers away from water stressed Bengaluru, IAS Surendra Kumar Meena and Alipurduar district administration have an effective solution to water scarcity.

The Solution:

- Project Launch:** In 2021, the district administration launched a **project to address the water crisis** by reviving 235 abandoned water bodies and digging new ponds.
- Jaladharini Doors Initiative:**
 - Name:** Jaladharini Doors, literally meaning 'water withholding'.

- Objective:** To increase water conservation capacity in abandoned water bodies throughout the year.
 - Implementation:**
 - Discussion with concerned departments, farmer groups, fisher-folk cooperatives and experts to identify potential locations.
 - Rejuvenation of 12 water bodies in Phase 1, 221 water bodies (including 50 regenerated) in Phase 2 and digging of 151 new ponds in Phase 3.
- Employment Generation:**
 - Digging of ponds brought income to local people and generated employment of more than 6 lakh men through the MGNREGA scheme.

Challenges Faced:

- Land Identification:**
 - Identifying lands needed for the project was a challenge, but the land department officers helped to overcome this.
- Local Support:**
 - Gaining support from locals was initially a challenge, but once the project started, they understood its importance.

Success Story: Biswakarma Jhora:

- Biswakarma Jhora, a rejuvenated water body, was transformed into a biodiversity park.
- It now features a fish sanctuary, medicinal plant garden, butterfly garden, ornamental fish pond, beekeeping farm, and boating facilities.

Lessons Learned:

- Effective Governance:**
 - Good governance implies a meaningful, effective, and sustainable response in the face of a crisis.
 - Civil servants addressing water crises can be more effective by maintaining a clear view of the problem and acting accordingly.**



2. **Multiple Benefits:**

- a. The excavated ponds revived agriculture, horticulture and fisheries, besides serving as playgrounds for elephants.

3. **Sustainable Water Conservation:**

- a. The water bodies created for agricultural needs also benefited the wildlife.
- b. Elephants from the nearby Jaldapara forest visited the ponds for drinking and bathing.

4. **Economic Improvement:**

- a. The project improved the economic status of the people by creating both community and individual ponds.

Recognition:

IAS Surendra Kumar Meena received Excellence in Governance Award in the Water category for this sustainable water conservation project.

Conclusion:

The case study of IAS officer Surendra Kumar Meena and the Alipurduar district administration demonstrates how effective governance can address water crises and improve the lives of people and the environment. The initiative serves as a **role model for other water-stressed regions** and emphasizes the importance of **collaboration, innovation and community participation in sustainable water management.**

2. Ethical Implications of Judge Resigning For Politics

In March 2024, **Justice Abhijit Gangopadhyay**, left his position as a judge in the Calcutta High Court and joined the Bharatiya Janata Party (BJP).

- a. His move from the judiciary to politics **raises significant ethical concerns** regarding judicial propriety (decorum/decency), impartiality, and integrity.
- b. Mr. Gangopadhyay gained attention for various controversial actions:
 - He criticized the West Bengal government and discussed the school bribery case in a TV interview.
 - He had disagreements with lawyers and fellow judges.

- c. Regarding Mr. Gangopadhyay’s behavior, a bench led by CJI D.Y. Chandrachud and Justice P.S. Narasimha rightly stated that judges shouldn’t give TV interviews on pending matters.

Judges in Politics

1. **In 1967**, the former Chief Justice of India (CJI) Koka Subba Rao quit 3 months early to run for the Presidential elections.
2. **In 1983**, Former Supreme Court Justice Baharul Islam resigned, 6 weeks before retirement, to contest Lok Sabha elections.
3. **In 2020**, Retired Chief Justice of India, Ranjan Gogoi, was nominated to the Rajya Sabha, just 4 months after retirement.
4. **In 2004**, a former Chief Election Commissioner (CEC) became a Rajya Sabha member and Minister 3 years post-retirement.
5. Retired Comptroller and Auditor General (CAG) and judges have also become Governors of States on occasions.

Constitutional Debate on Judges Conduct and Joining Politics:

Against Joining Politics	In Favor of Joining Politics
<ol style="list-style-type: none"> 1. K.T. Shah, a member of the Constituent Assembly (CA), proposed a ban on judges of constitutional courts holding executive positions. 2. The CA did not support this idea. 	<ol style="list-style-type: none"> 1. The Constituent Assembly (CA) opposed implementing external rules to regulate judges’ behaviour, as it goes against judicial independence. 2. India has never passed laws governing the conduct of judges of constitutional courts.

Constitutional Provisions on Judges’ Powers and Privileges

- a. **Judicial privilege** is necessary to keep judicial decision-making confidential.
- b. The **constitutional basis** for this comes from the separation of powers and maintaining the independence of the judiciary.



- c. **Removal of Judges:** Judges can be removed through **impeachment** by Parliament according to **Article 217** and **Article 124(4)** of the Indian Constitution.
- d. **Contempt Power:** **Article 215** states that **High Courts** have contempt power as courts of record, which judges can enforce.

Ethical Concerns Regarding a Judge's Resignation for Politics

1. Judicial Impartiality:

- a. Judges should **stay neutral** and base decisions solely on facts and law, **without personal biases or external pressures**.
- b. When a sitting judge joins a political party after controversies, it raises **doubts about impartiality** in cases involving politics.
- c. This damages public trust in the judiciary's fairness.
- d. Judges are required by **Article 124** of the Indian Constitution to perform their duties without **fear, favor, affection, or ill-will**.

2. Judicial Independence:

- a. Judicial independence is vital for upholding the **rule of law and democracy**.
- b. Judges must be free from outside influence, including politics.
- c. If a judge aligns with a political party post-resignation, it questions the independence of past decisions and raises concerns about political influence on the judiciary.

3. Conflict of Interest:

- a. Judges should avoid conflicts of interest and maintain judicial integrity.
- b. Involvement in politics after controversial rulings suggests potential conflicts of interest.

4. Erosion of Public Trust:

- a. The **judiciary** relies on **public trust** and **confidence** to fulfil its role in society.
- b. When judges get involved in **political activities**, it undermines the perception of **judicial integrity** and **impartiality**, leading to erosion of public trust in the entire judicial system.
- c. In **C. Ravichandran Iyer vs Justice A.M. Bhattacharjee, 1995**, the SC stressed about judges possessing '**sterling (excellent) character, impeccable (perfect) integrity, and upright behaviour**' to maintain the purity of justice.

- d. In **All India Judges' Association vs Union of India, 1991**, the Supreme Court highlighted society's expectations from judicial officers, which are compromised when judges engage in political activities.

5. Against the Principle of Checks & Balances:

- a. The Constitution emphasizes **checks and balances** among its branches.
- b. An independent judiciary oversees the actions of the executive and legislature.

6. Violation of Bangalore Principles of Judicial Conduct, 2002:

- a. The **Bangalore Principles** stress maintaining public and professional confidence in judges' impartiality.
- b. Political involvement, especially after making controversial statements during service, may violate these principles.
- c. Judges entering politics, especially after controversial rulings, raise concerns about **conflicts of interest**.
- d. Judges are expected to avoid such conflicts and uphold their **integrity**.

7. Issue of Post-Retirement Appointments:

- a. Some retired judges have taken up government positions after retirement, blurring the line between the judiciary and the executive.
- b. The Indian Constitution doesn't expressly stop judges from accepting post-retirement assignments, but there are suggestions for implementing a **cooling-off period** to reduce potential conflicts of interest.
- c. **Concerns Raised:** Late Arun Jaitley, a former Union Minister, suggested that judgments made before retirement may be influenced by post-retirement opportunities.
- d. **Historical Perspective:** The **14th Law Commission Report in 1958** highlighted concerns and recommended a system to ensure judges' financial security without compromising their independence.
- e. **Proposals for Cooling-Off Period:** Former Chief Justice of India (CJI) **R. M. Lodha** recommended a cooling-off period of at least 2 years.
 - Officials retiring from sensitive positions should be prohibited from accepting any other appointment for a certain period, typically two years.



- f. **Rationale Behind Cooling-Off Periods:** These periods aim to break the link between previous roles and new appointments by introducing a significant time gap.
- g. **International Practices:** In the USA, Supreme Court justices hold lifetime positions to prevent conflicts of interest.
- In the UK, although there's no law preventing judges from taking post-retirement jobs, no judge has done so, indicating a different approach to the issue of post-retirement roles.
- Top of Form

[Q] With reference to the Indian judiciary, consider the following statements: (Prelims 2021)

- Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with the prior permission of the President of India.
- A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

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

[ANS] C

[SOLN]

Key Facts

- Article 137 of the Constitution of India, 1950, provides that subject to provisions of any law and rules made under Article 145, the Supreme Court has the power to review any judgment pronounced or order made by it.
- According to Article 128 of the Indian Constitution, the chief justice of India may at any time request a retired judge of the Supreme Court or a retired judge of a high court (who is duly qualified for appointment as a judge of the Supreme Court) to act as a judge of the Supreme Court for a temporary period. He can do so only with the previous consent of the president and also of the person to be so appointed. **Hence, Statement 1 is correct.**
- As a Court of Record, High Court can review its judgments under Article 226 Of the Constitution. As per Article 215, every High Court shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself.
- Being a Court of Record, the High Court can review its own judgments under Article 226 of the Constitution of India.

- Under Article 137, the Supreme Court shall have the power to review any judgment pronounced or order made by it.
- The Kerala High Court has iterated the legal proposition that High Courts as Courts of Record could review their orders.
- A Division Bench of Chief Justice S Manikumar and Shaji P Chaly were confronted with an appeal against a review petition. **Hence, statement 2 is correct.**

3. Trust: The Concept

The compass of trust is everywhere. But how much do we trust people and why must good governance build trust between people and government?

Relevance: The topic is a part of UPSC CSE **General Studies Paper-IV Ethics syllabus**. Aspirants will also find the article useful for their Essay paper and situation-based questions in personality tests.

What is trust?

Trust is our **firm belief towards an idea, a person or, even a thing**. In its simplest form, it is the beliefs **rather than expectations that root the trust**. In childhood, we trust our parents as we stumble when they teach us to walk, a family trusts each other, neighbors trust each other when they turn off their lights. **When trust is lost, things begin to fall apart.**

What is public trust?

Public trust is the **expectation that individuals have from government agencies and public servants to do good for them**. It is essential to a democratic government because it is the foundation of value-based relationships between the people and between the government and the citizens. Trust is like the glue that holds a society together and a nation depends on trustworthy institutions and leaders. The result can be either belief or disbelief.

What kind of trust relationship do we witness nowadays?

(a) Trusting the brands

In today's world **we trust different brands and products without any hesitation**. Trust is prevalent in our daily lives, from food delivery services like Zomato to health accessories like Apple watches and fitness apps. We rely on these products and services to provide comfort, happiness and convenience. We also trust the brands we are associated with, like **Raymond and Amul**. **The middle class in India has shown blind faith in products**



and the people associated with them. We are confident that the food we order from restaurants is safe and healthy, regardless of who prepares it. This trust is based on the reputation of the brand and the expectation of a certain level of quality.

(b) Trusting the virtual world

This lesson discusses the changes in **people's human trust on virtual platforms such as social media and brands.** In the digital age, individuals rely on blue ticks, virtual interactions, and emojis for verification and identification. This trust in **virtual entities has reduced trust in real-world connections and interactions.** Problems arise when trust focuses only on products, services, and purchased things rather than people. This reliance on virtual platforms and brands has led to a **decline in interpersonal trust,** leaving room for manipulation and resentment.

How much do we trust people?

The concept of trust has evolved from trusting products and processes to trust individuals with influential profiles and positions. However, **trust often ignores the struggles and feelings of the underprivileged,** who may not have equal access to virtual platforms or physical assets. **In the context of the COVID-19 pandemic, migrants relied on their inner feelings and families in their villages rather than cities and their urban employers.** This example challenges the traditional notion of trust moving up the hierarchical ladder and suggests that **trust can be found even in the most unexpected places.**

- a. The COVID-19 pandemic has clearly exposed the weakness of public trust. Migrant workers, frustrated with the lack of support and security in urban centers, decided to return to their villages. They relied on family ties and their ancestral roots rather than their employers or the urban social fabric. **This highlights the need to rebuild basic belief structures at all levels of society.**

Why must good governance build trust between people and government?

In low-trust societies, **moral values are not shared, leading to a decline in socio-political trust.** Good governance can create trust by creating an environment of happiness and defining politics as a service to the citizens. **Common citizens expect civil servants to perform their duties and see them as agents of change in the society.** Trust should be a principle of life for civil servants and

should be promoted in the public sector. A high-trust society can develop through a journey of building public trust and developing civil servants.

Rebuilding Trust: The Ethical Imperative of Good Governance

1. **Transparency and accountability:** Institutions and leaders must develop a culture of transparency, share information openly, accept scrutiny and take responsibility for their actions. It promotes a sense of legitimacy and earns public trust.
2. **Prioritizing the public good:** Decisions and actions must clearly serve the best interests of the people, not personal gain or vested interests. Trust grows only when there is genuine belief that the government works for the people.
3. **Ethical leadership:** Elected officials and civil servants set the tone. They should adopt the values of honesty, integrity and service. Their personal conduct greatly influences the public's perception of their credibility.
4. **Building inclusive and equitable institutions:** Trust is stronger when everyone feels represented. Addressing systemic inequalities and promoting inclusivity goes a long way in building a high-trust society.

The Civil Servant as Agent of Trust

Bureaucrats are uniquely positioned to embody the values needed to rebuild public trust. they should:

1. **Uphold the Highest Ethical Standards:** Personal integrity, fairness, and a commitment to public service must be unwavering.
2. **Champion Social Justice:** A civil servant must be a champion of the marginalized and vulnerable, ensuring that everyone has a voice and their needs are met.
3. **Foster Community Engagement:** Building bridges with the community, understanding their concerns, and involving them in decision-making processes restores trust.

Conclusion

Trust is not a given; It has to be earned. Good governance plays an important role in building a harmonious and functional society where trust can flourish among people. As guardians of the public interest, ethical civil servants have a special responsibility to act as agents of trust.





I. ESSAY

The Only Good Is Knowledge And The Only Evil Is Ignorance

“Are you excited?” asked the mother of a jubilant boy, who was about to embark on his very first day of school. He was the only one amongst his friends who was going to school. This innocent boy was unaware of the reality; All he knows is that children wear the same uniform and experience the same fun, education, and learning in school.

On the very first day, however, he was forced to sit apart from the others. He wasn't even allowed to touch the tap of water, being told that his mere touch could pollute the water. Disheartened, the little boy narrated the whole story to his mother. The mother advised him to ignore such things, explaining that it is a convention of society and they needed to respect the norms set by the upper caste people, as they came from a deprived section of society.

But that day, the boy didn't believe in **ignorance**. Instead, he resolved to work hard continuously to acquire **knowledge**, aiming to combat such injustices in society. He understood that ignorance was not the answer, but rather knowledge. That boy grew up to be none other than the father of the Indian Constitution, **Dr. Bhim Rao Ambedkar**. He wielded **knowledge as his weapon** to fight **against the evils** present in society, firmly standing against evils **rather than ignoring** them.

In this essay, **we will analyze why knowledge is inherently good and ignorance is evil. We'll explore the consequences of ignorance and examine whether knowledge always ensures positive outcomes.**

Knowledge is important in personal as well as societal development. It helps individuals to decide and evaluate the aftereffects, the right and wrong. Empowering individuals, knowledge enables them to make informed decisions, solve problems, and engage critically with the world around them. It helps one to introspect the truth. As **Socrates said**, “**An unexamined life is not worthy of living.**” It broadens perspective and fosters empathy and understanding. It helps to avoid failure and undesired outcomes, moral dissonance, and, at the same time, uplifts the vulnerable from evil situations.

In agriculture, knowledgeable farmers reap significant benefits. They know the best time to sow, the right amount of fertilizers to use, and the ideal time to harvest, resulting in successful production. Conversely, ignorance in farming practices often leads to disastrous outcomes like crop failure and poverty, sometimes even driving farmers to suicide.

Similarly, in society, individuals armed with knowledge have been pivotal in addressing social injustices. Take, for instance, the inspiring story of Nobel laureate **Kailash Satyarthi**, who rescued and educated thousands of children to combat widespread **child labor**. Similarly, in the 19th century, **Raja Ram Mohan Roy's** knowledge and courage helped him stand against the morally abhorrent practice of **Sati**, despite widespread acceptance fueled by fear of communal tensions.

The **Bhopal gas tragedy** stands as a stark reminder of the catastrophic consequences of ignorance and negligence. Thousands lost their lives and suffered organ damage due to the reckless actions of a few. On the other hand, individuals like **Greta Thunberg** demonstrate the power of knowledge in effecting positive change. Through her activism and informed advocacy, she has become a beacon of hope in the fight against environmental degradation.

While knowledge is undoubtedly valuable, it's essential to recognize that its impact depends on how it is wielded. As the saying goes, “**Knowledge is a treasure, but practice is the key to unlocking it**” (ज्ञान एक खजाना है, लेकिन अभ्यास इसे खोलने की कुंजी है). Unfortunately, we have witnessed instances where knowledge has been misused for evil purposes, such as the development and use of nuclear weapons or unethical genetic manipulation. Additionally, the manipulation of information for political gain or radicalization exemplifies how knowledge can be distorted to perpetuate harm instead of fostering progress.

If knowledge is not always good? Thought should also be given to the fact that, Is Ignorance always evil? Ignorance, the lack of knowledge, can sometimes inadvertently lead to positive outcomes. In certain



situations, being unaware of preexisting prejudices and stereotypes can enable individuals to avoid engaging in harmful behaviors. For instance, remaining ignorant of **patriarchal biases** helps individuals distance themselves from the evils of women's exploitation.

Moreover, ignorance can also lead to innovation. Consider the case of **Mahendra Singh Dhoni**, who, unaware of conventional batting styles, invented the "**Helicopter shot**," which eventually became a widely recognized cricketing technique. This innovation was discovered from Dhoni's ignorance of traditional methods, ultimately contributing to the sport's knowledge base and developing positive developments.

Understanding why people remain ignorant is important, considering the deep consequences and benefits associated with knowledge. Various factors have contributed to ignorance, including circumstances and situations. For example, among tribal communities and forest dwellers, lack of access to education and information often forces them to resort to practices like **Jhum cultivation** as a means of survival.

Similarly, new challenges can arise for which society lacks adequate knowledge. One notable example is the occurrence of black swan events such as the **COVID-19 pandemic**. Initially unaware of the virus and its transmission mechanisms, people were ignorant of essential preventive measures like hand washing, mask wearing, and social distancing, leading to widespread transmission and its dire consequences.

And sometimes, it's not a matter of choice but rather compulsion that leads us to remain ignorant, even when we're aware of the consequences. For instance, consider an ambulance driver who, fully cognizant of the potential risks, decides to break a traffic signal to save a human life.

To address the consequences of ignorance, it's essential to explore measures that individuals, societies, nations, and the global community can adopt to avoid ignorance.

At the individual level, fostering introspection, questioning, and cultivating feelings of tolerance and compassion are crucial steps. By becoming more introspective and questioning our own beliefs and actions, individuals can develop a heightened awareness of their surroundings and actively confront the evils of ignorance.

On a societal level, promoting value education and fostering social harmony are effective tools for combating ignorance and its associated evils. By instilling values of empathy, respect, and understanding in society, we can create an environment that discourages ignorance and encourages mutual respect and cooperation.

Nationally and globally, multilateral agreements and the sharing of best practices play a crucial role in addressing ignorance and its consequences. For instance, initiatives like vaccine diplomacy, such as the COVAX program, facilitate the equitable distribution of vaccines globally, helping to combat the spread of diseases like COVID-19 and mitigate its impact on vulnerable populations.

By embracing these measures at all levels, from individual introspection to global cooperation, we can collectively work towards overcoming the evils of ignorance and fostering a more enlightened and compassionate world.

In conclusion, our journey through the exploration of knowledge and ignorance has shown us the immense impact they have on individuals and society. Reflecting on the story of the excited boy starting school, we're reminded of how important it is to seek knowledge and avoid ignorance. Just like **Dr. Bhim Rao Ambedkar**, who fought against ignorance to create India's constitution, we're inspired to follow his example and strive for enlightenment and fairness.

Looking ahead, we need to encourage everyone to keep learning and asking questions. As **Mahatma Gandhi** wisely said, "**Live as if you were to die tomorrow. Learn as if you were to live forever**" (जी भर के जीयें। इस तरह से सीखिए जैसे कि आपको यहां हमेशा रहना है). By thinking about our beliefs and understanding different perspectives, we can fight ignorance and make the world a better place. We also need to focus on educating people and bringing communities together. For instance, **Kailash Satyarthi's** work to end child labor shows us the power of education and standing up for what's right. And when we work together globally, like with programs such as COVAX, we can tackle big challenges and make sure everyone has access to knowledge and resources.

As we move forward, let's remember the lessons we've learned and strive to make the world a better, more equal place for everyone.



J. SCHEME

1. 'Jal Shakti Abhiyan: Catch The Rain-2024'

1. In March, 2024 The Union Minister for Jal Shakti launched the 5th edition of "Jal Shakti Abhiyan: Catch the Rain" (JSA:CTR) campaign.
2. This edition focuses on the theme "Nari Shakti se Jal Shakti" to recognize the significant role women play in water management, conservation, and sustainability.
 - a. The Ministry also launched 2 books namely, "Jal Shakti Abhiyan: 2019 to 2023" and "101 Water Champions of Jal Jeevan Mission".
 - b. Also include featuring of a movie "Jal Shakti Abhiyan 2019 to 2023 – A public led movement marching towards Water Security"; and short-talk/experience sharing by Women Water Warriors.

Background and Achievements:

1. The Jal Shakti Abhiyan was launched in 2019 as a national call to action to involve millions of people in water conservation and recharge.
2. Since 2019, around 1.29 crore water-related works have been undertaken across the country.
3. 661 Jal Shakti Kendras have been set up, and 527 districts have prepared District Water Conservation Plans.

Campaign Duration and Scope:

1. The campaign will run from March 9, 2024, to November 30, 2024, covering both pre-monsoon and monsoon periods in all districts of the country, including urban and rural areas.
 - Since the launch of "Jal Shakti Abhiyan: Catch The Rain" Campaign in 2021, it has been implemented every year, covering all the blocks of all districts (rural as well as urban areas) across the country.

Key Interventions:

1. Water conservation and rainwater harvesting.
2. Enumeration, geo-tagging, and inventory of all water bodies with the preparation of scientific water conservation plans.
3. Establishment of Jal Shakti Kendras in all districts.
4. Intensive afforestation.
5. Awareness generation among the masses.

Additional Focus Areas:

1. Removing silt and cleaning of water bodies.
2. Revitalization of abandoned/defunct borewells for groundwater recharge.
3. Geo-tagging of water bodies with mapping and regular updates in state revenue records.
4. Intensified afforestation in catchment areas of water bodies.
5. Snow harvesting in hilly areas like stupas in Ladakh for water conservation.
6. Rejuvenation of small rivers across the nation.

Theme for 2023 Campaign:

1. The theme for the Jal Shakti Abhiyan: Catch the Rain – 2023 campaign was "Source Sustainability for Drinking Water."
2. It focused on sustaining piped water supply schemes, especially those dependent on groundwater and spring sources, to ensure functional household tap connections.

Conclusion:

Catch the Rain-2024 campaign highlights the government's commitment towards water conservation and sustainable development, with a focus on empowering women as water champions. By integrating diverse strategies and focusing on key aspects, the initiative aims to bring about substantial change in the way we understand, use and protect precious water resources.



2. National Action for Mechanized Sanitation Ecosystem (NAMASTE) Scheme

The **National Action for Mechanized Sanitation Ecosystem or the NAMASTE Scheme** aims to eliminate hazardous manual sewer and septic tank cleaning operations, ensuring the safety and dignity of sanitation workers. Jointly initiated by the **Ministry of Social Justice and Empowerment** and the **Ministry of Housing and Urban Affairs**.

a. Implementing Agencies: National Safai Karamcharis Finance and Development Corporation (NSKFDC)

Background:

1. The Swachh Bharat Mission led to the **construction of over 18 crore toilets across India, creating a huge demand for skilled sanitation workers.**
2. Sanitation workers are still marginalized irrespective of their selfless contributions.
3. Sanitation workers maintain the health and hygiene of communities.

Scheme Duration and Budget:

1. 3 years (FY 2023-24 to FY 2025-26)
2. Budget allocation: ₹349.73 crores

Entitlements for Sewer and Septic Tank Workers (SSWs):

1. Digital profiling
2. Provision of PPE kits
3. Access to safety devices
4. Occupational safety training
5. Health insurance coverage
6. Livelihood opportunities in the sanitation sector

Scheme Components:

1. **Profiling of SSWs in Urban Local Bodies (ULBs) through digital tools (1 lakh SSWs to be identified)**
2. Health Insurance of SSWs under PM-JAY
3. Occupational safety training of SSWs and Sanitation Response Units (SRUs)
4. Capital Subsidy up to **₹5.00 lakh for procurement of sanitation-related vehicles/equipment**
5. Distribution of PPE to SSWs
6. Distribution of safety devices to Emergency Response

Sanitation Unit (ERSU)

Profiling of SSWs:

The first component of NAMASTE aims to create a national database of SSWs. **A unique NAMASTE ID will be given to all identified SSWs.**

Training Programs:

1. Online training on the profiling process and demonstration of the **NAMASTE Mobile Application has been conducted for 30 states/UTs.**
2. Training of Trainers programs were also held in 4 states.
3. The aim of the training is to ensure officers have a clear understanding of the app and scheme.

The intended outcomes of the NAMASTE scheme include:

1. **Zero deaths** in sanitation work
2. Formalization and skill development of sanitation workers
3. Elimination of direct contact with human fecal matter
4. Establishment, strengthening and capacity building of Emergency Response Sanitation Units (ERSUs)
5. Empowerment of sanitation workers through self-help groups and entrepreneurship
6. Access to alternative livelihood options
7. Occupational safety training to all sewer and septic tank workers (SSWs)

3. Sukanya Samridhi Yojana (SSY)

1. Recently, Finance Ministry increased **the interest rate for the Sukanya Samridhi Account Scheme from 8% to 8.2%** for January-March (2024) quarter.
2. SSY is a small deposit scheme **for a girl child.**

Key Points

1. **Ministry:** Ministry of Finance
2. **Launched:** In 2015 as a part of the Beti Bachao Beti Padhao campaign.
3. **Aim:** to provide a small investment for the girl, which is to be used to facilitate payment of education and marriage expenses
3. **Account Opening:** Account can be opened in **Post Offices and notified branches of Commercial Banks.**



4. **Account Name:** Opened in the name of a girl child and an account under this Scheme may be opened for a maximum of 2 girl children in one family.
5. **Account portability:** The account can be transferred anywhere in India from one post office/Bank to another.
6. **Maturity of scheme:** The account shall mature after 21 years from the date of opening or on marriage of the girl child under whose name the account is opened, whichever is earlier.
7. **Premature closure of account:** In the event of death of the account holder or where the Central Government is satisfied that continuation of the account is causing undue hardship to the account holder.
8. **Premature withdrawal:** Once the girl child is 18 years old, she can make an early withdrawal of up to 50% of the balance for higher education.

Other benefits of Sukanya Samridhi Account Scheme

- a. Even girl child can operate the account after she attains the age of 10 years.
- b. Payment on maturity to girl child.
- c. Interest payment even after maturity if account is not closed.
- d. Deposits may be made in the account till the completion of a period of 15 years from the date of opening of the account.

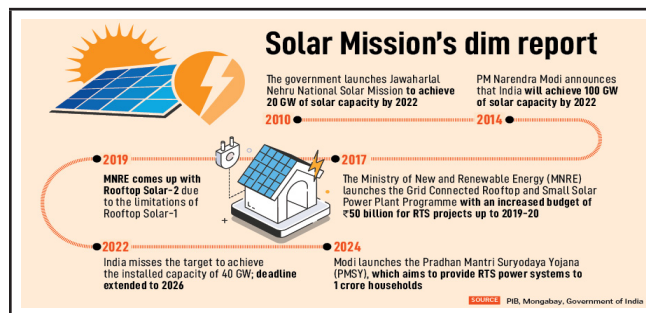
4. PM Surya Ghar Muft Bijlee Yojana

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has approved PM-Surya Ghar: Muft Bijli Yojana with an outlay of Rs.75,021 crore on February 29th.

- a. On February 1, Minister of Finance Nirmala Sitharaman said in her interim Budget speech that the 1 crore households can get up to 300 units of free solar electricity every month, and save up to Rs 18,000 annually, while selling the surplus to power distribution companies.

What is PM Surya Ghar Muft Bijlee Yojana?

1. PM Surya Ghar Muft Bijlee Yojana is a Central Scheme that aims to provide free electricity to one crore households in India, who opt to install roof top solar electricity units.
2. The households will be able to get 300 units of electricity free every month.



How does PM Surya Ghar Muft Bijlee Yojana work?

1. The scheme provides for a subsidy of 60% of the solar unit cost for systems up to 2 kW capacity and 40% of additional system cost for systems between 2 to 3 kW capacity.

Who is eligible to apply for the Scheme?

1. The applicant must be an Indian citizen.
2. Must own a house with a grid that is suitable for installing solar panels.
3. The household must have a valid electricity connection.
4. The household must not have availed of any other subsidy for solar panels

Other Features of the Scheme:

1. A Model Solar Village will be developed in each district of the country to act as a role model for adoption of rooftop solar in rural areas,
2. Urban Local Bodies and Panchayati Raj Institutions shall also benefit from incentives for promoting RTS installations in their areas.

Outcome and Impact:

1. The proposed scheme will reduce 720 million tonnes of CO₂ equivalent emissions over the 25-year lifetime of rooftop systems.
2. It is estimated that the scheme will create around 17 lakh direct jobs in manufacturing, logistics, supply chain, sales, installation and other services.

Conclusion:

PM Surya Ghar Muft Bijlee Yojana promises an assured saving of approximately Rs 15,000 in a year for a household consuming up to 300 units a month, by installing Rooftop Solar unit of 3 kW capacity.



5. Market Access Initiative (MAI) Scheme

Recently, ahead of the interim Budget 2024, exporters have urged the government to allocate funds worth \$3.88 billion for the Market Access Initiative (MAI) scheme.

About MAI Scheme:

Market Access Initiative (MAI) Scheme is an Export Promotion Scheme envisaged to act as a catalyst to promote India's exports on a sustained basis.

Aim:

To promote India's exports on a sustained basis and work with a 'focus product-focus country' approach through market studies and surveys.

Administered by:

The Ministry of Commerce and Industry, Government of India, through the Directorate General of Foreign Trade (DGFT).

Funding:

Each project will be on a cost-sharing basis, with the sharing pattern ranging from 65% to 50% at the minimum.

Eligible Activities:

1. Marketing Projects Abroad
2. Capacity Building
3. Support for Statutory Compliances
4. Studies
5. Project Development
6. Developing Foreign Trade Facilitation web Portal
7. To support Cottage and handicrafts units

Eligible Agencies:

1. Departments of Central Government and Organisation of Central/
2. State Governments including
3. Indian Missions abroad
4. Export Promotion Councils
5. Registered trade promotion Organisation
6. Commodity Boards
7. Apex Trade Bodies recognized under Foreign Trade Policy of Govt of India
8. Recognized Industrial & Artisan Clusters

9. Individual Exporters (only for statutory compliance etc.)
10. National Level Institutions (e.g. Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), National Institute of design (NIDs), NIFT etc.)/ Research Institutions/Universities/ Recognized laboratories, etc.
11. Further details of the scheme may be accessed on the department's website

6. Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA)

In February 2024, Uttar Pradesh secured ₹740 crore under the Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA) programme.

Launched:

1. **2013:** Launched as Rashtriya Uchchatar Shiksha Abhiyan (RUSA).
2. Now, in the light of the National Education Policy, RUSA has been renamed as PM-USHA in June 2023.

Nodal Ministry: Ministry of Education.

Type of scheme: Centrally Sponsored scheme

Beneficiaries: Rs 100-crore grant includes six universities in Uttar Pradesh, four in Maharashtra, three in Madhya Pradesh, two each in Gujarat and Karnataka, and one each in Rajasthan, Jharkhand, Telangana, Himachal Pradesh, Assam, Chhattisgarh and Andhra Pradesh.

Funding:

1. **90:10** ratio for certain states and **60:40** for others,
2. UTs without a Legislature receive **100% central funding.**

vision:

To attain higher levels of access, equity, and excellence in the State higher education system with greater efficiency, transparency, accountability, and responsiveness.

Objective:

To improve the overall quality of existing state higher educational institutions by ensuring their conformity to prescribed norms and standards and adoption of accreditation as a quality assurance framework.



Key Features:

1. Rs 100 crore support to each of 35 state universities for multidisciplinary education and research (MERU Transformation)
2. Establishment of Model Degree Colleges
3. Grants for strengthening universities
4. Focus on remote, LWE-affected, Aspirational, and low Gross Enrollment Ratio regions
5. Aid to state governments for gender inclusion, equity, and ICT-based employability skills.

Components of PM-USHA:

1. Multi-Disciplinary Education and Research Universities (MERU)
2. Grants to Strengthen Universities (Accredited & Unaccredited Universities)
3. Grants to Strengthen Colleges (Accredited & Unaccredited Colleges)
4. New Model Degree Colleges
5. Gender Inclusion and Equity Initiatives
6. MMER (Management Monitoring Evaluation and Research) Grants

Eligibility criteria to get PM-USHA funding:

1. The funds are eligible for colleges of any discipline under **Section 2(f) of the UGC Act**. At least 10 years of active administration is required.
2. The colleges must have a **grade A of NAAC accreditation or a good NBA score**.

Significance

1. To improve the quality of higher education.
2. Enhancing Employability through Multidisciplinary.
3. Promote the inclusion of women, minorities, SC/ST/OBCs, and special-abled persons in higher education.

7. Scheme of Sugar Subsidy for AAY Families under PDS

In February 2024, the Union Cabinet approved the extension of the scheme of sugar subsidy for **Antyodaya Anna Yojna (AAY) families** distributed through the Public Distribution Scheme (PDS) for two more years i.e. **31 March 2026**.

Objectives:

1. To the well-being of citizens of the country and
2. ensuring the sweetness of platter of the poorest of the poor in the country,
3. facilitates access of sugar to the poorest of the poor and adds energy to their diet so that their health improves.

Funding:

1. Under the Scheme, the Central Government gives subsidy of **Rs.18.50 per kg per month** of sugar to AAY families of participating States.

Eligibility:

1. Families covered under Antyodaya Anna Yojna (AAY) are eligible.

Entitlements:

1. Distribution of sugar to AAY families through PDS **at the rate of One kg per family per month**.
2. Expected to extend benefits of **more than Rs.1850 crore** during the period of the **15th Finance Commission (2020-21 to 2025-26)**.
3. The scheme is expected to **benefit about 1.89 crore AAY families** of the country.

Distribution:

1. **States** have the responsibility to procure and distribute sugar.

About Antyodaya Anna Yojana (AAY):

1. **Launched:** 25th December 2000.
2. **Nodal Ministry:** Ministry of Consumer Affairs, Food, and Public Distribution.
3. It is a **part of the National Food Security Act 2013**.
4. **Objective:** To provide highly **subsidized food grains** through the Targeted Public Distribution System (TPDS).
5. **Key Features:**
 - a. Wheat is provided at Rs.2 per kg, and rice at Rs.3 per kg, Rs.1 per kg for coarse grains
 - b. Eligible families are entitled to receive 35 kg of rice per month.
 - c. 1 kg of sugar at a subsidized rate of Rs.18.50 per kg through ration shops.




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