





“You are as strong as your Foundation”

# FOUNDATION COURSE GENERAL STUDIES PRELIMS CUM MAINS 2023

Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination

- Includes comprehensive coverage of all the topics for all the four papers of GS Mains, GS Prelims & Essay
- Access to LIVE as well as Recorded Classes on your personal student platform
- Includes All India GS Mains, GS Prelims, CSAT & Essay Test Series
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## NOTE:

Dear Students,

Memorisation and recollection of information in Current Affairs is as important as understanding the articles. In order to enhance the learning outcomes from the Monthly Current Affairs Magazine, we are introducing following additions:



A thematic based colors has been used in the document in the boxes, tables etc to enable easy identification and recollection of various concepts and topics.




Questions are an important tool to assess and retain information. To enable this we are adding a Smart Quiz at the end of each section in the document for practicing the questions.



A wide variety of infographics have been added to ensure smoother learning experience and enhanced retention of the information. This will also help in effective presentation of information in the answer writing as well.



Places and persons in news are being presented in an objective manner through Maps, Tables & Pictures. This will help in easier recollection of factual information.



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# 1. POLITY AND GOVERNANCE

## 1.1. BALANCE OF RIGHTS AND DUTY

### Why in News?

Recently, the Union Law Minister advocated the need to find a balance **between the fundamental rights and duties for the country's progress** during Constitution Day Celebration.

### About Rights and Duties

- Fundamental to any civilization, rights represent the **claims of an individual** which are essential to his or her **existence and development**.
  - This includes the **economic, social and cultural rights (ESC rights)** recognized by society or State through legal, social, or ethical principles of freedom or entitlement.
- Similarly, each person carries certain **duties towards other individuals, society, nation, or humanity** as part of society and its norms.
  - E.g., based on **Rita** (natural order or truth), Vedas gave the principles of **Dharma** (duty) and **Karma** (action).

### Rights and Duties in Present India

- The Constitution of India is the main document, defining rights and duties of people. E.g., **Part III** of the Indian constitution covers **Fundamental Rights** and **Part IVA** covers the **Fundamental Duties**, i.e., the core duties that every citizen is expected to perform.
  - Some rights are outside Part III as well. E.g., **Right to Property** (Article 300A) which is a constitutional right and not fundamental.
- Though both are indispensable, duties have taken backstage in present India in comparison to rights.
  - E.g., whether it is '**Right to Life**' or '**Freedom of Speech and Expression**', both remain in focus quite frequently. But in terms of duties, except few like "**corporate social responsibility**", others are talked about little.

### Benefits of Perceiving Rights and Duties Together

- **Complementing Nature:** Each right comes with a corresponding obligation to respect and protect the rights of others.
  - E.g., if the Media has the right to freedom of speech, it becomes their duty to respect others' privacy as well.
- **Immunize Individual Liberties:** Though Rule of Law is state responsibility, duties ensure that at least the majority of the population is inclined to uphold law without external enforcement.



PART IVA FUNDAMENTAL DUTIES	
(First 10 were introduced by the 42nd Amendment in 1976 and 11th through 86th Amendment in 2002)	
<b>51A. Fundamental duties-It shall be the duty of every citizen of India-</b>	
(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;	(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
(c) to uphold and protect the sovereignty, unity and integrity of India;	(d) to defend the country and render national service when called upon to do so;
(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;	(f) to value and preserve the rich heritage of our composite culture;
(g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;	(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;	(i) to safeguard public property and to abjure violence;
	(k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.



- **Ensure Peace and Harmony:** Duties taken together with rights help administration in constructive engagement with people. It helps in building mechanisms to promote a culture of peace and harmony while discouraging acts of violence and all forms of discrimination.
  - E.g. If one abides by the Constitution and respects its institutions earnestly (first fundamental duty), peace and harmony increases. Similarly, conscious decision to abjure violence helps in preserving the **vibrancy and pluralistic nature of society**.
- **Help State in Performing its Duty:** Without people's support State can't ensure all rights.
  - E.g., To meet the educational and nutritional needs of everyone, State needs the support of parents or individuals who work on field or help in resource availability by paying taxes.
- **Avoid Narrow Egoism:** Common humanity and genuine respect for others' right require people to overcome selfishness and to avoid human rights violations. As **Giuseppe Mazzini** in "The principle of Duty" said:
 

"With the theory of happiness as the primary aim of existence, we shall only produce egoistic men. We have therefore to find a principle ... which shall guide men toward their own improvement, teach them constancy and self-sacrifice, and unite them with their fellow men ... And this principle is Duty."

### Issues in Perceiving Rights and Duties Together

- **Difference of Nature:** Certain rights are acquired by every human being from the moment of birth, but duties need capable individuals to perform.
- **Rights are precursors to Duties:** Without basic dignity and fulfillment of rights, individuals can't perform their duties.
  - E.g. Without fulfillment of the Right to education, duties of respecting others rights, social justice, gender equality etc. are difficult to expect.
- **Different legal status:** Justiciability is a key feature of rights. Rights can be enforced through writ of the court or remedy can be sought. But duties are **non-enforceable**. They only guide or aid to interpret constitutional and legal issues (AIIMS Students Union v. AIIMS, 1983).
- **Provide a potential leeway to State from its responsibilities:** Protection of Rule of law and human rights is a state responsibility for which it enjoys special powers under laws. E.g., non-fulfillment of duties cannot be given as a reason for non-enforcement of rights.
- **Risks of subordination:** In a democracy, the fundamental unit of the constitution is an individual. Equal focus on duties carries risk of individual subordination to collective will.
- **Vague and Subjective Nature:** Another issue is the vague nature of duties and its clash with certain religious principles. E.g., the noble ideals of our freedom struggle cover a wide diversity and at times conflicting interpretations with other principles.

### Way Forward

To **preserve human rights and dignity**, a **minimum balance alongside independent application** should be maintained by-

- **State accepting its primary responsibility** for the promotion and protection of human rights irrespective of fulfillment of duties by citizens.
- **Meeting the minimum core rights of each citizen** such as the ESC right of individual to ensure an adequate standard of living before any duties.
  - **Independent Human Rights Institutions for monitoring State institutions** (police, judiciary or civil administration) on fulfillment of their obligations to protect human rights and prevent violations.
- **Deepening the roots of democracy** to address the fundamental issues of inequality, intolerance etc. based on caste, creed, religion, region etc. **minimizing risks of subordination of rights** and **maximizing the possibility of fulfillment of duties**.
- **Creating a basic charter for people** to cultivate **constitutional morality** and create **responsible citizens**. As **Article 29 (1)** of the **Universal Declaration of Human Rights** says, "Everyone has duties to the community in which alone the free and full development of his personality is possible".

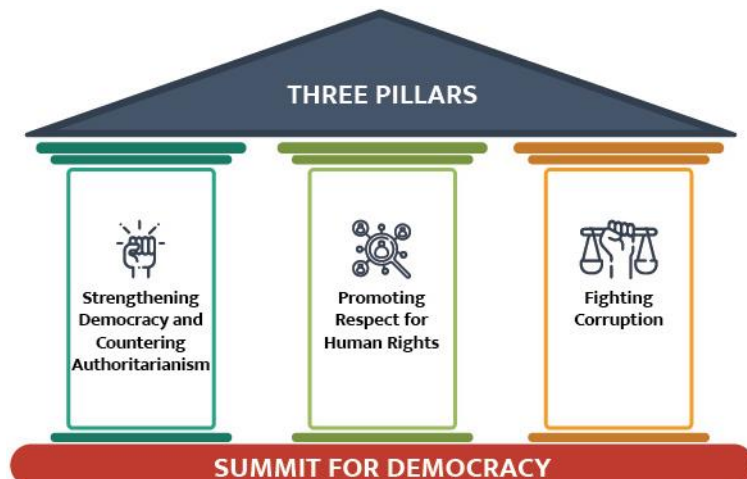
## 1.2. DEMOCRATIC PRINCIPLES IN GLOBAL GOVERNANCE

### Why in News?

Speaking at the first **Summit for Democracy**, the Prime Minister (PM) of India advocated for **democratic principles to guide global governance**.

### More about Summit for Democracy

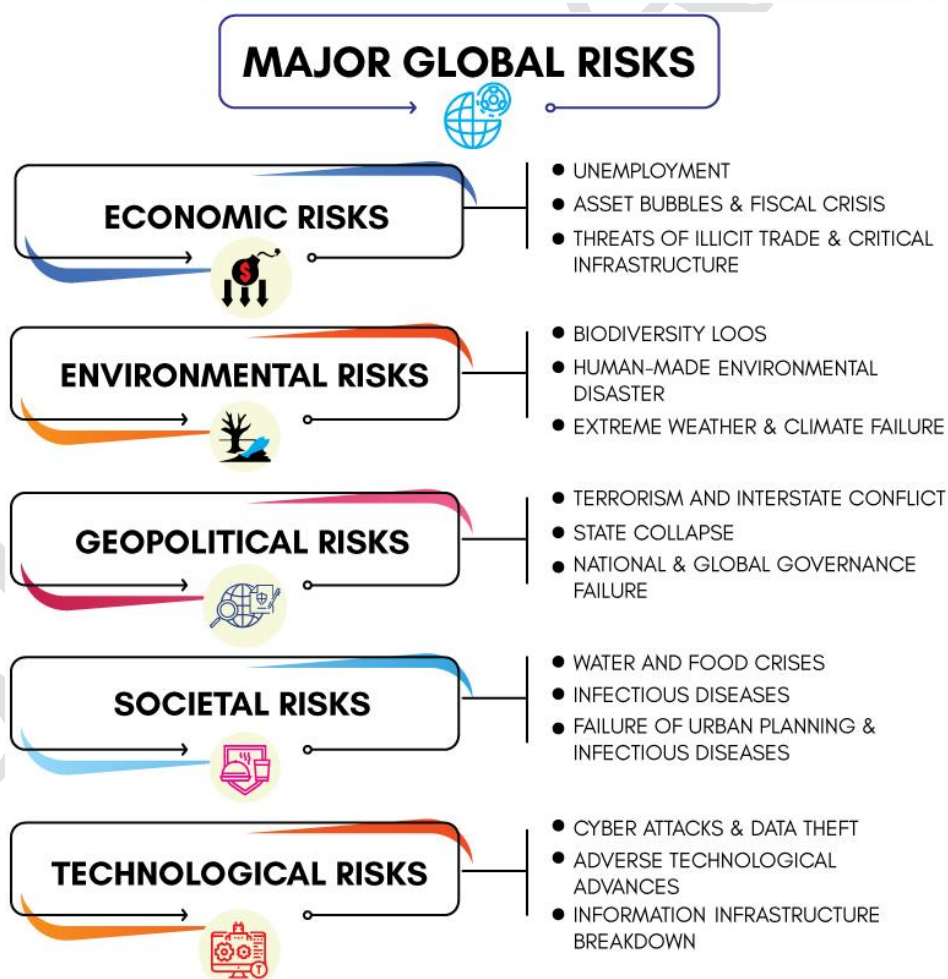
- It is a **two-stage flagship presidential initiative** from the USA to put democracy and human rights at the heart of U.S. foreign policy.
- It brought together **leaders from democratic governments, civil society, and private sector**.
- It aims to bolster democracy from local to global levels through its **three Pillars** of focus (as given in image).
- At the summit, the USA launched its **Presidential Initiative for Democracy Renewal** with \$424.4 million to bolster democracy from local to global levels.



### Global Governance and Global Risks

**Global Governance** is a means to manage issues that cut across national borders to create a fairer and just world.

- It involves a **complex of institutions, policies, norms, procedures, and initiatives** to coordinate collective action globally and address transnational challenges.
- These interventions include **providing public goods, developing unified standards, and ensuring equality and justice** among States and their citizens to bring more **predictability, stability, and order**.
- Amid **increasing global risks post COVID-19** with worsening economic and ecological crises, mounting geopolitical and social tensions etc., global risk-management has become the most crucial common good to protect the **idea of a fair world**.
- Democratic principles can help in this idea by creating a **far less conflicted** world and build **prosperous societies** while protecting **fundamental freedoms** of all without distinction.

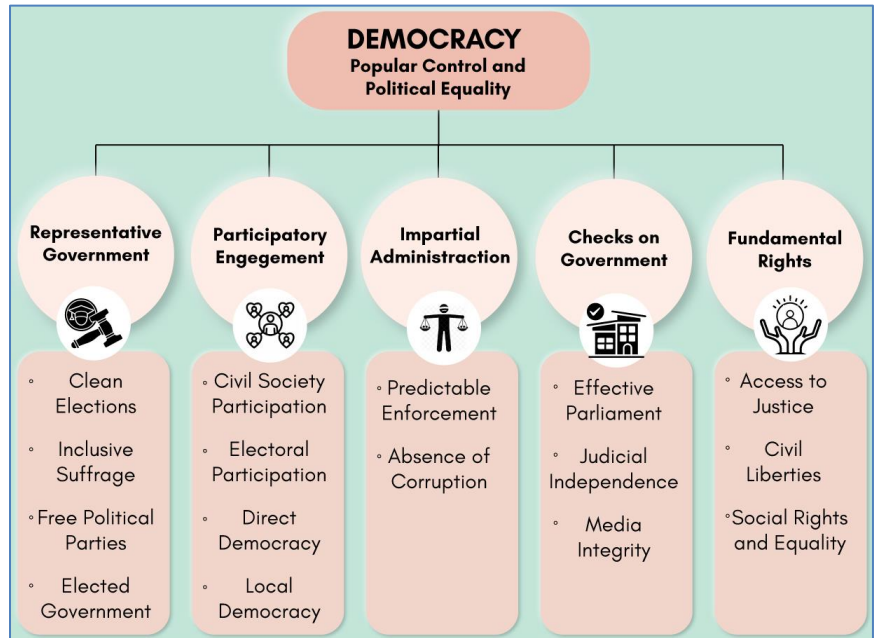


### Principles of Democracy and its Benefits in Global Governance

- The **Global State of Democracy Report, 2021** identified **five core principles or attributes** of democracy with different distinguishing features of democracy from other forms of governance as given in the **infographic**.



- Some of the major benefits of these democratic principles in global governance are:
  - **Help in networking** people, corporations, state and international institutions together to build partnerships for **common good**.
  - **Achieve global development goals** through universally accessible and citizen-centric public services.
  - **Protecting fundamental freedom** globally by strengthening UN and other global governance systems through rules-based regimes.
  - **Promoting contemporary human interaction** by including new age actors in governance and allowing increased segmentation and fragmentation of the overall governance system across different levels and functional spheres.
  - **Promote Common but differentiated responsibilities and respective capacities** in addressing global issues through its values of justice.
  - **Establishing an inclusive, accountable and responsible sovereign** across nations through control over abuse of power.
  - **Giving Legitimacy** to the government and its decisions. This is visible in little or no rule countries which seek legitimacy by calling themselves a democracy.



### Challenges faced by Democracies

- **Rising Authoritarianism:** As per **Global State of Democracy Report (2021)**, countries moving in an authoritarian direction in 2020 outnumbered those going in a democratic direction. Similarly, the **Freedom House** report marked 2020 as the 15<sup>th</sup> consecutive year of global freedom in retreat.
- **Questions on Electoral integrity:** Whether it was USA or other democracies, the electoral integrity is increasingly being questioned. Due to pandemic risks, allowing citizens to continue exercising their democratic rights has become challenging.
- **Corruption:** Corruption in public life has remained a major challenge across nations, compromising the health, education and overall welfare of people.
- **Disinformation:** In the last few years, disinformation has become a major tool for subversion of democracies through propaganda, misuse of technology etc. at local and global level.

### Way Forward

With **intergovernmental cooperation** at the heart of global governance, democratic principles are vital to address **fragmented and complex** global governance.

It can help in bringing international leaders together if we overcome the challenges to democratic principles through reforms like:

- **Strengthening democratic values and institutions** with enhanced ties between people, and new transnational actors from the private sector and civil society.
- **Ensure free and fair elections** through cooperation among democracies to ensure competitive elections in which opposition stands a realistic chance of accessing power.
- **Supporting free and independent media** to ensure freedom of press, fighting disinformation and prevent government institutions from using authoritarian means.

- **Fighting corruption** through novel approaches to harness big data, artificial intelligence, and digital technologies to detect and prevent fraud and corruption in governance.
- **Advancing technology for Democracy** through use of technology companies to preserve open and democratic societies, and shape global norms on emerging technologies like social media and crypto-currencies.
- **Addressing Democracy Deficits** by bolstering democratic reformers and addressing issues of weak institutions or poor governance.
- **Support transitional democracies** and **guide regional efforts** through partnerships with regional groupings acting as intermediary bodies. E.g. ASEAN, EU etc.
- **Bring reforms to global institutions** such as the UN Security Council and others to increase the voice of democracies and build partnerships to address global risks.

### 1.3. PUBLIC ACCOUNTS COMMITTEE

#### Why in News?

Centennial celebrations of Public Accounts Committee (PAC) were held recently.

#### About Public Accounts Committee (PAC)

- It is the **oldest Parliamentary Committee and was first constituted in 1921** under the provisions of the Government of India Act of 1919 (in the wake of the Montague-Chelmsford Reforms).
- Committee consists of **22 Members; 15 Members are elected from Lok Sabha and 7 Members from the Rajya Sabha** are associated with it.
- The **Speaker is empowered to appoint the Chairman** of the Committee from amongst its members.
  - **W M Hailey was its first president, and Bhupendra Nath Mitra its first Indian president.** The last president before Independence was Liaquat Ali Khan.
  - Until 1966 – 67, the chairman of the committee belonged to the ruling party. However, **since 1967 a convention has developed** whereby the **chairman of the committee is selected invariably from the Opposition.**
- It is **constituted by Parliament each year for examination of accounts** showing the **appropriation of sums granted by Parliament** for expenditure of Government of India, the **annual Finance Accounts of Government of India**, and such **other accounts laid before Parliament as the Committee may deem fit** such as accounts of autonomous and semi-autonomous bodies.
  - Accounts of those of Public Undertakings and Government Companies which come under the purview of the Committee on Public Undertakings are exempted.

#### Other Parliamentary Committees for oversight on public finances and Government's expenditure

##### Estimates Committee

- ▶ **Estimates Committee** (set up in 1950) to examine the estimates included in the budget and suggest 'economies' in public expenditure.
- ▶ Originally, it had 25 members but in **1956 its membership was raised to 30**. All the thirty members are from Lok Sabha only.
- ▶ The **chairman of the committee** is appointed by the Speaker from amongst its members and he is **invariably from the ruling party**.

##### Committee on Public Undertakings

- ▶ **Committee on Public Undertakings** (established in 1964 on the recommendation of the Krishna Menon Committee)
- ▶ In 1974, its **membership was raised to 22** (15 from the Lok Sabha and 7 from the Rajya Sabha) from 15 members.
- ▶ The **chairman of the committee** is appointed by the Speaker from **amongst its members who are drawn from the Lok Sabha only**.

##### CAG and PAC

- Article 148 provides for an independent office of CAG. He is the **head of the Indian Audit and Accounts Department**.
- **CAG submits three audit reports to the President:**
  - Audit report on appropriation accounts,
  - Audit report on finance accounts, and
  - Audit report on public undertakings.
- The **President lays these reports before both the Houses of Parliament**.
- After this, the **Public Accounts Committee examines them** and reports its findings to the Parliament.

#### Major Functions of PAC

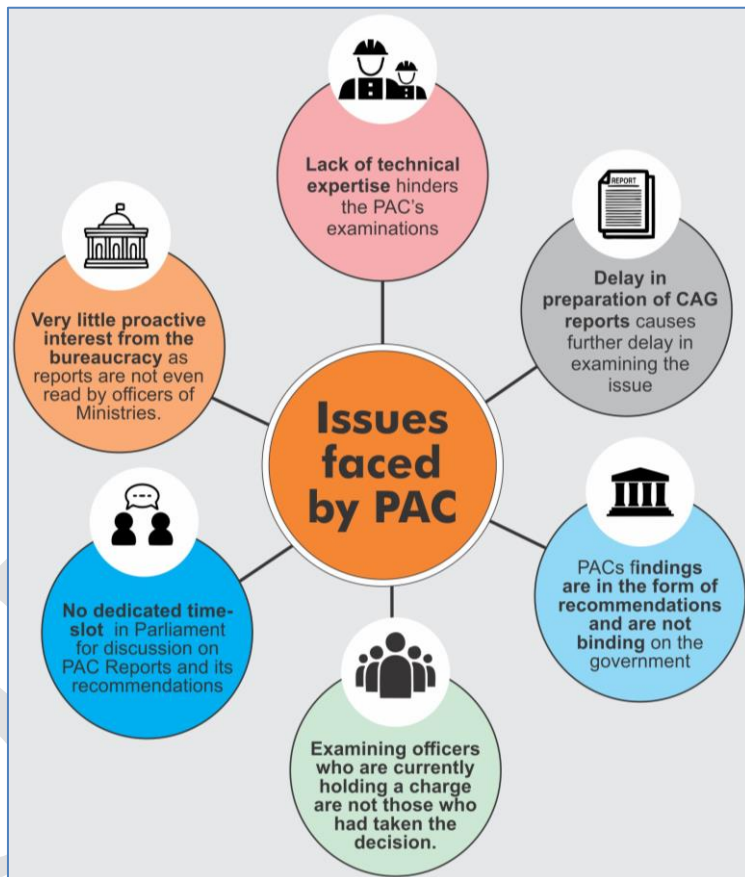
- **Scrutiny and Examinations of Accounts:** It scrutinizes the **Appropriation Accounts** of the Government of India and the **reports of the Comptroller and Auditor General (CAG)** of India.



- It examines the statement of accounts showing the **income and expenditure of State Corporations, trading and manufacturing schemes, projects and autonomous and semi-autonomous bodies.**
- **Regularisation of Expenditure by satisfying itself that**
  - The **amount shown in the accounts as having been disbursed was legally available for**, and applicable to, the service or purpose to which have been applied or charged.
  - **Expenditure conforms to the authority** which governs it.
  - **Every re-appropriation has been made** in accordance with the provisions made in this behalf **under rules framed by competent authority.**
- **Others**
  - **Consider the report of the C&AG** in cases where the President may have required him to conduct an audit of any receipts.
  - **Discuss points of financial discipline and principle**, without getting concerned with questions of policy in the broad sense.

### Importance of PAC

- **Maintain high standards of public morality in financial matters** by keeping a check on indiscretion in the implementation of policies and programmes approved by Parliament and also make recommendations to streamline the administration for efficient, speedy and economical implementation of policy.
- **Ensure expenditure is incurred in a prudent manner** by holding Executive accountable for its use of public money and also keeps a vigil on the spending and performance of the government, to bring to light inefficiencies, wasteful expenditure.
- **PAC reports provide valuable information and feedback** to the various stakeholders including the policy makers. Citizens can use this report to question their representatives and hold the public servants to account.



### Way forward for strengthening the functioning of PAC

Following recommendations were made at the All India Conference of the Chairpersons of the PAC of Parliament and State/ UTs Legislatures:

- **Better relationship w.r.t CAG:** PAC should be consulted before the appointment of CAG and CAG should be made accountable to the legislature.
  - **CAG reports should be more current**, and their **examination should also be quicker** so that the issues are dealt quickly.
- **Wider ambit:** PACs should take up suo-motu cognisance of public issues and government's flagship programmes and examine financial wrong-doings.
- **Discussion in Parliament:** In each Session, at least two-and-a-half hours, should be allocated for discussion and debate on PAC recommendations vis-à-vis action taken by the Ministries.
- **Public opinion:** PAC, before finalizing their reports, should provide an opportunity to the members of public to give their reactions on the recommendations. Also, PAC proceedings should be open to the press except in sensitive matters.
- **Binding recommendations:** PAC recommendations should be made binding on the government.
- **Help from external experts:** Services of experts should be availed by PAC on technical matters. Also, PAC should get the powers to examine the retired officials also.

## 1.4. ELECTION LAWS (AMENDMENT) BILL

### Why in news?

The Election Laws (Amendment) Bill, 2021 was passed by the Parliament.

### About the bill

- The Bill amends the **Representation of the People Act, 1950** (the RP Act, 1950) and

**the Representation of the People Act, 1951** (the RP Act, 1951) to implement certain electoral reforms.

- Changes introduced are given in below table:

Representation of People Act	
<p><b>RP Act, 1950, inter alia, provides for:</b></p> <ul style="list-style-type: none"> <li>Allocation of seats in and delimitation of constituencies for elections to, the House of the People and the Legislatures of States,</li> <li>Qualifications of voter at such elections and</li> <li>Preparation of electoral rolls, etc.</li> </ul>	
<p><b>RP Act, 1951, inter alia, provides for:</b></p> <ul style="list-style-type: none"> <li>Conduct of elections of the Houses of Parliament and to the House or Houses of the Legislatures of each State,</li> <li>Qualifications and disqualifications for membership of those Houses,</li> <li>Corrupt practices and other offences at or in connection with such elections, etc</li> </ul>	

Area	Existing provisions	Changes brought
<p><b>Linking electoral roll data with Aadhaar</b> (by amendment of <b>section 23</b> of the RP Act, 1950)</p>	<ul style="list-style-type: none"> <li>The 1950 Act provides that a <b>person may apply to the electoral registration officer</b> for inclusion of their name in the electoral roll of a constituency.</li> <li><b>After verification</b>, if the officer is satisfied that the applicant is entitled to registration, he will <b>direct the applicant's name to be included in the electoral roll</b>.</li> </ul>	<ul style="list-style-type: none"> <li>The electoral registration officer <b>may require a person to furnish their Aadhaar number</b> for establishing their identity.</li> <li>If their name is already in the electoral roll, then the Aadhaar number may be required <b>for authentication</b> of entries in the roll.</li> <li>Persons will <b>not be denied inclusion</b> in the electoral roll or have their names deleted from the roll, if they are <b>unable to furnish Aadhaar number</b> due to <b>sufficient cause</b> as prescribed. <ul style="list-style-type: none"> <li>Such persons <b>may be permitted</b> to furnish alternate documents <b>prescribed by the central government</b>.</li> </ul> </li> </ul>
<p><b>Qualifying date for enrolment in electoral roll</b> (by amendment of clause (b) of <b>section 14</b> of the RP Act, 1950)</p>	<ul style="list-style-type: none"> <li>Under the 1950 Act, the <b>qualifying date for enrolment</b> in the electoral roll is <b>January 1</b> of the year in which such roll is being prepared or revised.</li> <li>This implies a person who turns 18 (i.e., eligible to vote) <b>after January 1</b> can enrol in the electoral roll only when the <b>roll is prepared/ revised the next year</b>.</li> </ul>	<ul style="list-style-type: none"> <li>The Bill amends this to provide <b>four qualifying dates</b> in a calendar year, which will be <b>January 1, April 1, July 1, and October 1</b>.</li> </ul>
<p><b>Gender-neutral provisions</b> (by amendment of <b>section 20</b> of the RP Act, 1950 and <b>section 60</b> of the RP Act, 1951)</p>	<ul style="list-style-type: none"> <li>The 1950 Act permits certain persons who are <b>ordinarily resident</b> in a constituency to register in electoral rolls. Such persons include those holding a <b>service qualification</b>, such as members of the <b>armed forces or central government</b> employees posted outside India.</li> <li>The wives of such persons are also <b>deemed to be ordinarily residing</b> in the same constituency if they reside with them.</li> <li>The 1951 Act enables the wife of a person holding a service qualification to <b>vote either in person or by postal ballot</b>.</li> </ul>	<ul style="list-style-type: none"> <li>The Bill replaces the <b>term 'wife' with 'spouse'</b> in both the Acts.</li> </ul>
<p><b>Requisitioning of premises for election purposes</b></p>	<ul style="list-style-type: none"> <li>The 1951 Act permits the state government to requisition premises needed or likely to be needed</li> </ul>	<ul style="list-style-type: none"> <li>The Bill <b>expands the purposes</b> for which such premises can be requisitioned.</li> </ul>



(amendment of section 160 of the RP Act, 1951)	for being used as <b>polling stations, or for storing ballot boxes</b> after a poll has been conducted.	• These include using the premises for <b>counting, storage of voting machines and poll-related material</b> , and accommodation of security forces and polling personnel.
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### Significance of the Bill

- **To stop bogus voting:** Linking of electoral roll data **with the Aadhaar** ecosystem will help in **curbing the menace of multiple enrolments of the same person** in different places. The bill allows the electoral registration officers to **authenticate the persons** already included in the electoral roll to identify registration of same person in **more than one constituency or more than once in the same constituency**.
  - Thus, it will help in **cleaning the electoral roll** to a great extent and facilitate elector registration in the location at which **they are ‘ordinarily resident’**.
  - A Parliamentary Standing Committee report had **advocated linkage of unique Aadhaar ID Card number with voter I-card** which would streamline **alterations in Electoral photo ID card (EPIC)** during change of ordinary residence by the electors.
- **Improving the accessibility to voting:** Linking the two databases will allow the ECI to track **migrant workers** and improve their **election participation**.
- **Multiple cut-off dates:** The January 1 cut-off date **deprived several youth** from participating in the electoral exercise held in a particular year. Multiple cut-off dates will **allow more eligible people to be registered as voters**.
- **Gender neutral:** Under existing provisions, an Army man’s wife is entitled to be enrolled as a service voter, but a woman Army officer’s husband is not. The bill **seeks to redress discrimination against male spouses** of female armed services employees.

### Concerns associated with the Bill

- **Discretion with electoral officer:** Electoral officer has uncanalised discretion since the law **does not prescribe any guiding principles** to decide when an Aadhaar number may be “required”.
  - Moreover, the Central government has the **final say in prescribing “sufficient cause”** under which an individual will be permitted to enter or remain on the electoral rolls, in case of **inability to furnish Aadhaar**.
- **Burden of proof shifts:** Instead of the **Government proactively ensuring registration** on the electoral rolls (such as through house-to-house verification) to achieve universal adult franchise, the **burden now shifts to individuals** who may be **unable/unwilling to link their Aadhaar** to justify their retention on the rolls.
- **Risk of disenfranchisement:** Using Aadhaar to clean the electoral rolls is fraught with the risk of disenfranchisement, especially of the **marginalised communities**. The inclusion and exclusion errors of Aadhaar database would cascade to the electoral database.
  - A study in **Latin America** revealed that countries with a single form of ID were likely to have **fewer citizens participating in the electoral process** since they were unable to prove their identity.
  - In 2015, media reports highlighted that **lakhs of voters in Andhra Pradesh and Telangana were reportedly excluded** from the electoral process due to the **practice of linking Aadhaar** numbers with electoral ID.
- **Political profiling:** By linking electoral IDs with Aadhaar numbers, it is easier to **track which voter has accessed welfare subsidies and benefits** using their Aadhaar. This can be used by political parties to selectively **target their messages to specific voters**.
- **Passed in haste:** The bill has been passed without putting up the **legislative text for public consultations** beforehand, and **without any discussion**. This **undermines the fundamental premise of a parliamentary democracy** i.e. to allow elected representatives the opportunity to **voice the concerns of their constituents** over laws that affect them.
- **Other issues with usage of Aadhaar:** Aadhaar project is being used for purposes **far beyond the stated “welfare” purpose** that was upheld by the **Supreme Court of India in the Aadhaar judgment** as the basis for the introduction of the Aadhaar Act as a Money Bill in Parliament.
  - Further, Aadhaar was only meant to be an **identity proof**, not an address proof. In contrast, the Registration of Electors Rules, 1960 (formulated under RPA 1950) clearly stipulates **address to be a key index for electoral rolls**.
    - ✓ Also, Aadhaar is **not meant to be a citizenship proof**. Residence of 182 days can make even a non-citizen eligible for an Aadhaar ID and thus voting.

- The **enrolment processes** for voters' lists and Aadhaar are **completely different**. Whereas Aadhaar enrolment is based on **production of existing documents**, voter enrolments **involve physical verification and "house visits"** by a registration officer or representative.
- Maintenance of the voters' lists is a primary responsibility of the ECI, an independent constitutional body, whereas UIDAI is under government control. Since the **ECI has no control on either enrolment or deduplication** in Aadhaar, it appears a potential conflict of interest to use Aadhaar for electoral rolls.
- There are no **publicly available audit reports** either on the efficacy of Aadhaar deduplication or on the authenticity of the Aadhaar database.

## Conclusion

Keeping in mind the above-mentioned concerns, suitable **institutional and technological mechanisms** need to be developed before the move is implemented such as **steadfast implementation of Personal Data Protection Law**. Further, given the tricky and contentious nature of issues, need for **adequate debate and discussions cannot be over-emphasised**.

## 1.5. ANTI-CONVERSION LAWS

### Why in news?

The **Karnataka legislative Assembly passed** The Karnataka Right to Freedom of Religion Bill, 2021, commonly referred to as the **anti-conversion Bill**. The Bill will now go to the **Karnataka Legislative Council**.

### Key features of the bill

- **Prohibition:** It prohibits conversion from one religion to another by **misrepresentation, force, fraud, allurement, or marriage**. However, it exempts a person who **"reconverts to his immediate previous religion"** as the same shall not be **deemed to be a conversion** under this Act.
- **Nature of offence:** The offence of conversion has been deemed to be a **cognizable and non-bailable**.
- **Penalties:** Jail terms and fines have been proposed.

### States that have anti-conversion laws

Currently, there are **at least nine states** in the country where legislations on unlawful conversions are **in force**:

- Odisha,
- Madhya Pradesh,
- Arunachal Pradesh,
- Gujarat,
- Himachal Pradesh,
- Chhattisgarh,
- Jharkhand,
- Uttarakhand and
- Uttar Pradesh

## History of anti-conversion laws in India



### Pre-independence

- Introduced by Hindu Princely states during the 1930s and 1940s to preserve their religious identity from the influence of the Christian missionaries
- Example includes: Raigarh State Conversion Act 1936, the Patna Freedom of Religion Act of 1942, the Udaipur State Anti Conversion Act 1946 etc.



### Failed attempts at national level

- 1954: Indian Conversion (Regulation and Registration) Bill was introduced
- 1960: Backward Communities (Religious Protection) Bill was introduced
- 1979: freedom of religion bill
- However, they failed due to lack of parliamentary support.



### Current stand

- In 2015, the Law Ministry said that matter is "purely a state subject" and legislating such a law by Parliament would not be in accordance with the tenets of the Constitution.
- This means anti-conversion laws are completely in the domain of the states.



## Rationale behind anti-conversion laws:

- **Fear of change in demography:** Anti-conversion laws are considered a **remedial measure to the problem of conversion** which is considered as a way to **bring demographic change**.
- **Not blanket ban on prohibition:** The laws are **not brought to stop the conversion** but are intended to **prohibit conversions** that are effectuated by **force, inducement, or fraud**. Supporter of these laws argue that since present instances of such conversions are high, these laws are **designed to criminalise such activities**.
- **Strengthens religious freedom:** Since they provide stringent provisions for forced or induced conversion, they are considered as **necessary safeguards for the protection of religious freedom**, a right guaranteed both constitutionally and in international **human rights instruments**.
  - The freedom given in the **Article 25** of Indian Constitution is not absolute but subject to the restrictions as public order, health, **morality**, and other fundamental rights.
  - India's legal dispensation only recognizes the conversion which is **not done with inducement or threat**.
- **Constituent assembly debates:** During CA debates, Sardar Patel had expressed concern about forceful conversion which later became as the **moral base of anti-conversion laws in India**. Another member Ananthasayanam Ayyangar had proposed that conversion should be banned and **conversion only on oath before a judge should be permitted**.

## Issues with the anti-conversion laws

- **Burden of proof:** The burden of proof that the conversion was 'lawful' lies on the person who has '**caused**' the **conversion** and where such conversion has been **facilitated by any person**, on such other person.
  - Thus, laws reportedly focus **more on prosecuting the 'convertor'** and opinion of the person who has converted is considered less.
- **Lack of equitable treatment:** It is argued that the anti-conversion laws both by their **design and implementation** infringe, upon the individual's **right to convert and may favour one religion** over other.
- **Creates an atmosphere of fear:** Reports suggest that though there are **very rare instances of prosecution or arrest** under anti-conversion laws, but they create the **atmosphere of fear** amongst the couples willing to do inter-faith marriages.
  - There have been reports regarding incidents of arrest of **some minority leaders** under these anti-conversion laws.
- **Vague nature and wide scope:** The terms used in such laws like **force, fraud, allurements etc. are loosely defined**, leaving wide scope for misuse. The **misreading of laws** could result in instances of **physical attacks following accusations** of wrongful conversions. They are also believed to **deepen communal fault lines**.
- **Against freedom of religion:** Religion or spirituality is the **most integral part of human nature** and thus any undue ban on it can be a **gross violation of human rights**.

### Legal challenges to anti-conversion laws and pertinent verdicts on the subject

- **Rev. Stanislaus vs State of Madhya Pradesh & Ors (1977):** It examined the **earliest anti-conversion statutes in Madhya Pradesh and Orissa**. Court **upheld the constitutionality of both the Acts** on the ground that these efforts to restrain the conversion are for **securing freedom of conscience and public order**.
  - **Freedom to propagate** one's religion, as stipulated under Article 25 (1), **did not grant a fundamental right to convert another person**. The bench ruled that a **purposive conversion would impinge on the "freedom of conscience"** guaranteed to all citizens.
  - It also held that the Anti-Conversion Acts fall within the purview of **Entry I of List II of the Seventh Schedule** as they are meant to **avoid disturbances to the public order** by prohibiting conversion from one religion to another in a manner **reprehensible to the conscience of the community**.
- **Sarla Mudgal case (1995):** Supreme Court held that conversion to Islam was not valid if done only in order to be **able to practise polygamy**.
  - This position was reaffirmed by the apex court's judgment in the **Lilly Thomas case in 2000**, which clarified that **prosecution for bigamy was not a violation of the freedom of religion** under Article 25.
- **Lata Singh Vs State of UP:** The apex court highlighted the **need for stringent punishment** over acts of violence or threats in cases of inter-caste and inter-faith marriages.
- **M Chandra Vs M Thangamuthu & Another, 2010,** the Supreme Court laid down the test to prove conversion: First, there **has to be a conversion** and second, **acceptance into the community** to which the person converted. It also stated that the **need of a conversion** cannot be altogether done away with.
- **Ga Arife alias Arti Sharma Vs Gopal Dutt Sharma, 2010, and in Faheem Ahmed Vs Maviya, 2011:** The Delhi high court lamented that religious conversions are **increasingly used for anything but the primary reason for conversion** i.e., spiritual advancement.

- Several important international documents recognize the concept of freedom of religion like **Article 18 of the Universal declaration of human rights and Article 18 of the International Covenant on Civil and Political Rights (ICCPR)**.
- They are also **antithetical to the freedoms** granted by provisions in the **Special Marriage Act** under which persons belonging to two different religions get married.
- They also raise **concerns about the privacy of individuals** who wish to adopt other religions and the **liberty of an individual** to choose a partner from another religion.

## Conclusion

The **constitutional validity** of the anti-conversion laws in **at least four states** – Uttar Pradesh, Uttarakhand, Himachal Pradesh and Madhya Pradesh **is pending before the Supreme Court**. Court has agreed to test the validity of these laws but **has refused to put a stay** on them. Any challenge to these laws would require the Supreme Court to relook at its **Stainislaus judgment** while also taking the **right to privacy judgment** into account.

### 1.5.1. SACRILEGE

#### Why in news?

Punjab government has written to centre **for assent to state's bill that proposes life imprisonment for desecration of religious scriptures of four religions**.

#### More about news

- Request has been made in the **backdrop of a sacrilege incident at the Holy Sikh temple in Amritsar**.
- The Punjab Vidhan Sabha in 2018 had passed '**The Indian Penal Code (Punjab Amendment) Bill, 2018 and The Code of Criminal Procedure (Punjab Amendment) Bill 2018**' as states can amend parts of IPC and CrPC to suit local practices and circumstances.
  - Bills provide for **punishment up to life imprisonment for whoever causes injury, damage or sacrilege to Shri Guru Granth Sahib, Srimad Bhagwat Gita, Holy Quran and Holy Bible** with the intention to hurt the religious feelings of the people.

#### About Sacrilege

- **Also termed as Blasphemy**, it means treating a religious object or place without the respect that it deserves.
- Unlike other countries like Pakistan, India being a secular state **protects all the religions by blasphemy laws**.
- **Sections 295 and 295A, 296, 297, 298 of the Indian Penal Code (IPC)** presently deals with blasphemy incidents.
  - **Section 295** deals with punishment if any person **intentionally damages, destroys or defiles any religious object** deemed to be sacred by followers of any religion in India, including objects other than idols and books.
  - **Section 295A** deals with punishment if a person **maliciously by words spoken or written or signs or by visible representation insults or attempts to insult religious sentiments**.
- However, concerns have also been raised as blasphemy laws **may be used to hound individuals from religious minorities** and even fellow religious mates **for sectarian and personal motives**.

#### Need of Blasphemy laws in India

- **To protect religious sentiments** as guaranteed by the Indian constitution as India is a secular country. Also, the Fundamental rights assure religious freedom to all.
- **To maintain communal harmony** as incidents such as these sow seeds of distrust and an environment of stress in the community.
- **To prevent mobocracy** as most sacrilege incidents have resulted in mob lynching which is a grave danger to principles of democracy that are fundamental to the country.
- **To maintain law and order** in the state.

#### Way Forward

- Though **blasphemy laws limit an individual's right to the freedom of expression and speech**, but if its **objective is reasonable** then such laws may be drafted with suitable safeguards.
- Also, **the solution is as social as political and the key lies in making people educated**, sensitizing them around the true happenings and **sowing seeds of tolerance and respect for all religions in the society**.



## 1.6. JUDICIAL INFRASTRUCTURE IN INDIA

### Why in news?

Chief Justice of India has proposed creation of a **National Judicial Infrastructure Authority of India (NJIAI)**.

### About NJIAI

- The NJIAI's objective will be to **take control of the budgeting and infrastructure development of subordinate courts** in the country.
- **Key features of the proposed body**
  - It will be established on the **National Legal Services Authority (NALSA) model**, where by it would work as a **central agency with each State having its own State Judicial Infrastructure Authority**.
  - ✓ **NALSA provides free Legal Services to the weaker sections** of the society having overall national body along with similar entities at state and district levels.
  - The **Chief Justice of India would be the patron-in-chief of the NJIAI** and it would be **placed under Supreme Court of India**, unlike NALSA which is under Ministry of Law and Justice.
  - In the NJIAI **there would be a few High Court judges as members, and some Central Government officials**.

### Judicial Infrastructure in India

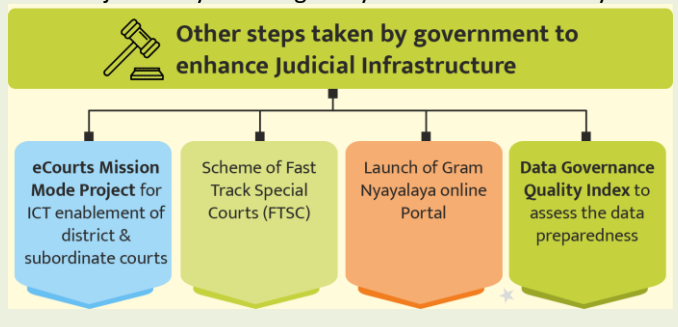
- Judicial infrastructure includes the **physical premises of courts, tribunals, lawyers' chambers** etc.
  - It also **involves the digital and human resources infrastructure**, including the availability of all the resources that are essential to ensure timely dispensation of justice.
- **Efficient "judicial infrastructure" means providing equal and free access to justice** which can be realised through a "barrier free and citizen friendly environment".
- At present, primary responsibility of development of **infrastructure facilities for judiciary rests with state governments**.
- Central Government **augments the resources of the State Governments** by releasing financial assistance under a **Centrally Sponsored Scheme for the Development of Judicial Infrastructure**.

### Need for such reforms in Judicial infrastructure

- **Poor state of judicial infrastructure in the country:** The total sanctioned strength of judicial officers in the country is 24,280, but the number of court halls available is just 20,143, including 620 rented halls.
  - 26% of court complexes **do not have separate ladies' toilets**.
  - Only 32% of the courtrooms have separate record rooms and only 51% of court complexes have a library.
- **Positive correlation between adequate judicial infrastructure and productivity in justice delivery:** Adequate and quality judicial infrastructure are the basic pre-requisite for judges, lawyers, and judicial officers to efficiently perform their responsibilities while dispensing justice
  - According to NMJDR, adequacy of judicial infrastructure is a **pre-condition for reducing delay and backlogs in cases**. (Present backlog: 3.3 crore cases)
- **Improve digitisation program of government:** In the backdrop of COVID 19 pandemic and the shift towards digital mode, it is all the more important to ensure modernization of judicial infrastructure in the country.
  - At present, **73% of court rooms have no video-conferencing facility**.

### CSS for Development of Infrastructure Facilities for Judiciary

- Its objective is to assist the state government in construction of court buildings and residential quarters for Judicial Officers (JO) in all the States / UTs.
- Union government has recently extended the scheme for the period from 2021 to 2026.
- Assistance granted under the scheme also includes funds for implementation of the Gram Nyayalayas Scheme as a part of the National Mission for Justice Delivery and Legal Reforms (NMJDLR).
  - Gram Nyayalayas or village courts are established under Gram Nyayalayas Act, 2008 for speedy and easy access to the justice system in the rural areas of India.
  - NMJDLR was setup in 2011 to increase access to justice by reducing delays and arrears in the system.



- **Lack of accountability:** In the absence of a dedicated special purpose vehicle or body for the purpose of enhancing judicial infrastructure, nobody is willing to take responsibility to execute infrastructure projects.
  - **Most district judges**, who head trial courts, also do not vigorously pursue development projects due to **short-term appointments and transferable jobs** among others.
- **Underutilisation of funds:** Some states transfer part of the funds for non-judicial purposes.
  - Of a total of ₹981.98 crore sanctioned in 2019-20 under CSS, **only ₹84.9 crore was utilised by a combined five States**, rendering the remaining 91.36% funds unused.
- **Implementation issue:** Improvement and maintenance of judicial infrastructure is still being carried out in an ad-hoc and unplanned manner owing to lack of a single dedicated agency for the purpose.

#### Other Reforms need to improve Judicial Infrastructure

- **Increasing budgetary allocation to judicial branch:** According to the recently released India Justice Report, between 2011-12 and 2015-2016, India's annual average spending on the judiciary was just 0.08% of the GDP.
- **Delegating Administrative Functions:** Presently, the respective registries of the courts are mostly tasked with carrying out the judiciary's administrative functions.
  - In countries like UK, US and Canada, the administrative functions of courts and tribunals including infrastructure and financial resources are supported by a **separate professional agency**.
- **Ensuring Barrier-Free Access:** Adequate provisioning of availability of ramps, tactile pavements and braille notices for those with visual impairment, and separate washrooms designated for persons with disabilities.
- **Improve shortage of staff in Judiciary:** By improving upon collegium system for higher judiciary and removing delay in recruitment made by state commission/high courts for lower judiciary.
- **Using Technology:** IT can be leveraged for video conferencing, streamlining procedures and for case management systems like e-library of cases. Also, artificial intelligence may be used for assisting judges and lawyers.
- **Decentralising high courts and establishment of more benches.**

#### Conclusion

Institutionalising the mechanism for augmenting and creating state-of-the-art judicial infrastructure will help in delivering quantitative and qualitative justice and ensure the bell of justice rings at the door of those deprived and underprivileged.

## 1.7. NEWS IN SHORTS

### 1.7.1. 75 YEARS OF THE HISTORIC FIRST SITTING OF CONSTITUENT ASSEMBLY (CA)

- **CA met for the first time in New Delhi on December 9, 1946 in the Central Hall of Parliament House.**
  - **Cabinet Mission Plan, 1946** (comprising of Frederick Pethick-Lawrence, Sir Stanford Cripps and A.V. Alexander) **created the CA of India.**
    - ✓ The Assembly was **recognized by Section 8 of the Indian Independence Act, 1947.**
- **Composition:** Members were **chosen by indirect election by the members of the Provincial Legislative Assemblies**, according to the **scheme recommended by the Cabinet Mission.**
  - The arrangement was
    - ✓ **292 members were elected through the Provincial Legislative Assemblies**
    - ✓ **93 members represented the Indian Princely States** and

✓ **4 members represented the Chief Commissioners' Provinces.** (Total membership of 389).

- However, **as a result of the partition under the Mountbatten Plan of 3 June, 1947**, a separate Constituent Assembly was set up for Pakistan and representatives of some Provinces ceased to be members of the Assembly. As a result, the **membership of the Assembly was reduced to 299.**
- **First sitting of the Assembly was presided over by Dr Sachchidananda Sinha.**
- **CA took two years, eleven months and seventeen days for drafting the Constitution for Independent India.**

### 1.7.2. SPECIAL ASSISTANCE MEASURE (SAM) EXTENDED TO ANDHRA PRADESH IN LIEU OF SPECIAL CATEGORY STATES (SCS) STATUS

- As per obligation emanating from the **Andhra Pradesh Reorganisation Act, 2014**, the recommendations of the **Finance Commissions, NITI Aayog report, the Special**



**Assistance Measure** to the Successor State of Andhra Pradesh was extended.

- **SAM** will be provided by way of repayment of loan and interest for the Externally Aided Projects (EAPs) **signed and disbursed during 2015-16 to 2019-20 by the State.**
- SCS, first introduced in 1969, is a classification given by Centre to assist in the development of those states that face **geographical and socio-economic disadvantages like hilly terrains, strategic international borders, economic and infrastructural backwardness, and non-viable state finances.**
  - The Fourteenth Finance Commission **restricted SCS only to the north-eastern and three hilly states.**
- Under SCS, **Central government bears 90% of the state expenditure on all centrally-sponsored schemes** and external aid while rest 10% is given as loan to state at zero percent rate of interest.
  - **Unspent money does not lapse** and is carried forward.
  - States with SCS are exempted from customs duty, corporate tax, income tax and other taxes to attract investment.

### 1.7.3. PURCHASE/TRANSFER OF IMMOVABLE PROPERTY BY OCI

- RBI has clarified that Overseas Citizens of India (OCIs) **do not require approval** for purchase or transfer of immovable property in India **other than in the case of agricultural land, farm house or plantation property.**
  - The clarification came as RBI had received **several queries based on reports on a Supreme Court judgement.**
  - The judgement was **related to provisions of FERA, 1973** which has been repealed under Section 49 of **FEMA, 1999**
- Purchase and acquisition of immovable properties in India, by OCIs:
  - **Governed by Foreign Exchange Management Act (FEMA), 1999.**
  - There is no restriction as to the **number of residential or commercial property** that can be purchased.
    - ✓ They are also allowed to acquire any residential or commercial property **by way of gift from any of his NRI, OCI or a resident relative.**
  - Though OCIs are **not allowed to buy** agricultural land farm, house or plantation property in India, they are **allowed to inherit the same** from any person resident in India.

### 1.7.4. DELIMITATION COMMISSION (DC) PROPOSES SIX ADDITIONAL SEATS FOR JAMMU, ONE FOR KASHMIR VALLEY

- **DC was set up under the J&K Reorganisation Act, 2019** after Centre abrogated Article 370 and revoked Jammu and Kashmir's (J&K) special status in August 2019.
  - **If the proposal is cleared, total Assembly constituencies in J&K to rise from 83 to 90**, with 43 in Jammu (earlier 37) and 47 in Kashmir (earlier 46).
  - An additional 24 seats are proposed to be reserved for Pakistan-occupied Kashmir (PoK).
- **Delimitation is the process of fixing boundaries of territorial constituencies** in a country or a state having legislative body.
- **It is assigned to a high-power body known as DC** or a Boundary Commission.
  - **Under Article 82**, Parliament enacts a **Delimitation Act** after every Census establishing a DC.
  - **Under Article 170**, States get divided into territorial constituencies.
- DC has been **constituted 4 times in 1952, 1963, 1973 and 2002.**
  - It is **appointed by the President** and its **orders have force of law and cannot be challenged** before any court.
- **Composition:** Three members:
  - **A serving or retired judge** of Supreme Court as chairperson,
  - **Chief Election Commissioner (CEC)** or Election Commissioner nominated by CEC.
  - **State Election Commissioner** of concerned state/UT.

### 1.7.5. GOOD GOVERNANCE INDEX (GGI) 2021 LAUNCHED ON GOOD GOVERNANCE DAY (25<sup>TH</sup> DECEMBER)

- **GGI assesses the State of Governance across States and UTs** which enables ranking of States/Districts and **provides a comparative picture** while developing competitive spirit for improvement.
  - **It is a bi-annual exercise** by Department of Administrative Reforms and Public Grievances.
- Objective is to create a tool that can be used uniformly across States/UTs **to assess the impact of various interventions taken up by the Central and State Governments.**
  - **Ten sectors were identified** (refer infographic) for the GGI 2020- 21.
  - **States have been categorised into four groups:** North-East and Hill States, UTs, Other States – Group A and Group B.

- **Key Highlights of the Index**
  - **Twenty states have improved their composite GGI scores** over the 2019 index scores.
  - **In Group A states, Gujarat has topped** the composite ranking while **Madhya Pradesh topped in Group B states.**
  - **Delhi topped the UT category** ranking.
  - In North-East and Hill States category, **Himachal Pradesh topped** the ranking.



### 1.7.7. MADHYA PRADESH (MP) ANNOUNCED THE IMPLEMENTATION OF A POLICE COMMISSIONERATE SYSTEM (PCS) IN BHOPAL AND INDORE

- PCS is proposed by **citing growing population and geographical expansion and accompanying administrative and law & order problems.**
  - Various committees constituted to suggest police reforms have also recommended PCS in cities which have a population of more than 10 lakhs.

Dual System	Command	Commissionerate System
<ul style="list-style-type: none"> <li>• District Magistrate (DM) and Superintendent of Police (SP) <b>share powers and responsibilities</b> in a district.</li> <li>• A 'dual system' of control exists, in which <b>SP has to work with DM for supervising police administration.</b> <ul style="list-style-type: none"> <li>○ DM is entrusted with issuing arrest warrants, licenses while SP has powers and responsibilities to investigate crime and make arrests.</li> </ul> </li> <li>• It is designed to <b>ensure a lower concentration of power and making the police more accountable to DM</b> at district level.</li> </ul>		<ul style="list-style-type: none"> <li>• Commissioner of Police (CP) is the <b>head of a unified police command structure</b>, is responsible for the force in the city, and is <b>accountable to the state government.</b></li> <li>• The <b>office also has magisterial powers</b>, including those related to regulation, control, and licensing. <ul style="list-style-type: none"> <li>○ CP is <b>drawn from the Deputy Inspector General rank or above</b>, and is assisted by Special/Joint/Additional/Deputy Commissioners.</li> </ul> </li> <li>• Such officers are provided with <b>powers of preventive arrest, imposing Section 144</b> and also initiating chapter proceedings. <ul style="list-style-type: none"> <li>○ Police also have <b>power to prevent people from entering and removing a person from their jurisdiction for a maximum of two years.</b></li> </ul> </li> <li>• It is supposed to <b>allow for faster decision-making</b> to solve complex urban-centric issues.</li> </ul>

### 1.7.6. ALL INDIA MAYORS' CONFERENCE

- As many as 120 mayors from various states are participating in the conference whose **theme is 'New Urban India'**.
- **Mayors/Chairpersons of Urban Local Bodies (ULBs) are the political and executive head of the municipal body.**
  - At present, mayors are **elected by city councillors** who themselves are directly elected by urban voters.
- **Issues with the office of Mayor**
  - **Short tenure:** The Annual Survey of India's City-Systems (ASICS) 2017 found **that a tenure of five years** for Mayors is available **only in a fifth** of the biggest cities.
    - ✓ **74th Constitutional Amendment** has **not prescribed the mode of election or tenure of mayors.**
  - **Lacks executive authority:** Mayors assume a largely titular position with the **government-appointed municipal commissioner holding executive power.**



### 1.7.8. DEFAULT BAIL

- National Investigation Agency has approached Supreme Court against a Bombay High Court order granting bail to activist Sudha Bharadwaj.
- Default or statutory bail is a right (regardless of the nature of crime) to bail that accrues when police fail

to complete investigation within a specified period in respect of a person in judicial custody.

- It is enshrined in Code of Criminal Procedure.
- For most offences, police have 60 days to complete the investigation and file a final report before the court.
  - However, for some offences there is a 90 days or 180 days limit also.



SMART QUIZ

You can scan this QR code to practice the Smart Quiz of Polity at our open test online platform for testing your understanding and recalling of the concepts.



# फाउंडेशन कोर्स सामान्य अध्ययन प्रारंभिक एवं मुख्य परीक्षा 2023

## इनोवेटिव क्लासरूम प्रोग्राम

- प्रारंभिक परीक्षा, मुख्य परीक्षा और निबंध के लिए महत्वपूर्ण सभी टॉपिक का विस्तृत कवरेज
- मौलिक अवधारणाओं की समझ के विकास एवं विश्लेषणात्मक क्षमता/निर्माण पर विशेष ध्यान
- एनीमेशन, पॉवर प्वाइंट, वीडियो जैसी तकनीकी सुविधाओं का प्रयोग
- अंतर - विषयक समझ विकसित करने का प्रयास
- योजनाबद्ध तैयारी हेतु करेंट और इंटेड अप्रोच
- नियमित क्लास टेस्ट एवं व्यक्तिगत मूल्यांकन
- सीसेट कक्षाएं
- PT 365 कक्षाएं
- MAINS 365 कक्षाएं
- PT टेस्ट सीरीज
- मुख्य परीक्षा टेस्ट सीरीज
- निबंध टेस्ट सीरीज
- सीसेट टेस्ट सीरीज
- निबंध लेखन - शैली की कक्षाएं
- करेंट अफेयर्स मैगजीन

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## 2. INTERNATIONAL RELATIONS

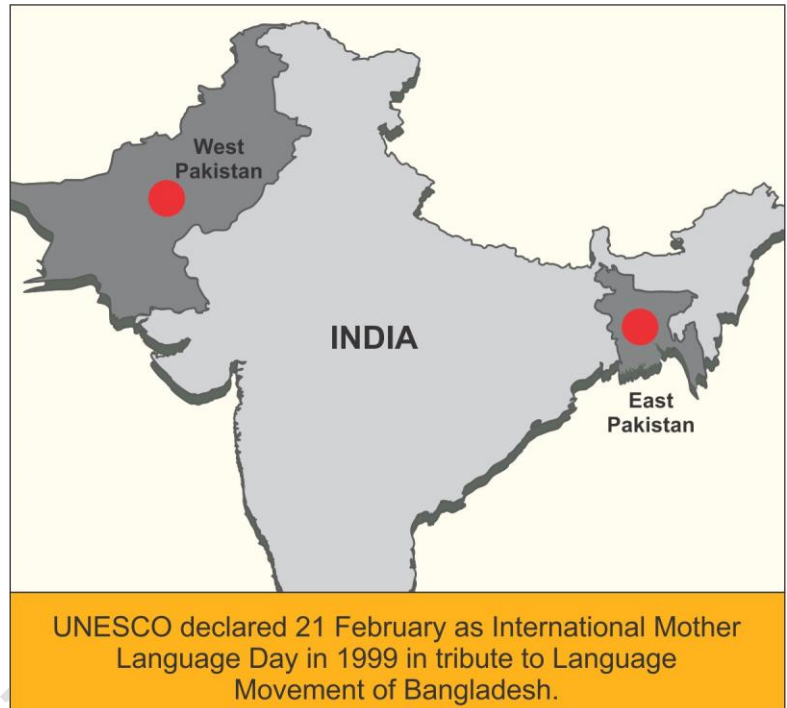
### 2.1. UNDERSTANDING THE IMPACT OF 1971 INDO-PAK WAR

#### Why in News?

Commemorating 50 years of India's victory in 1971 war, the nation paid tribute to the brave Indian soldiers for their sacrifice which ensured victory in the war.

#### What was the context behind the war?

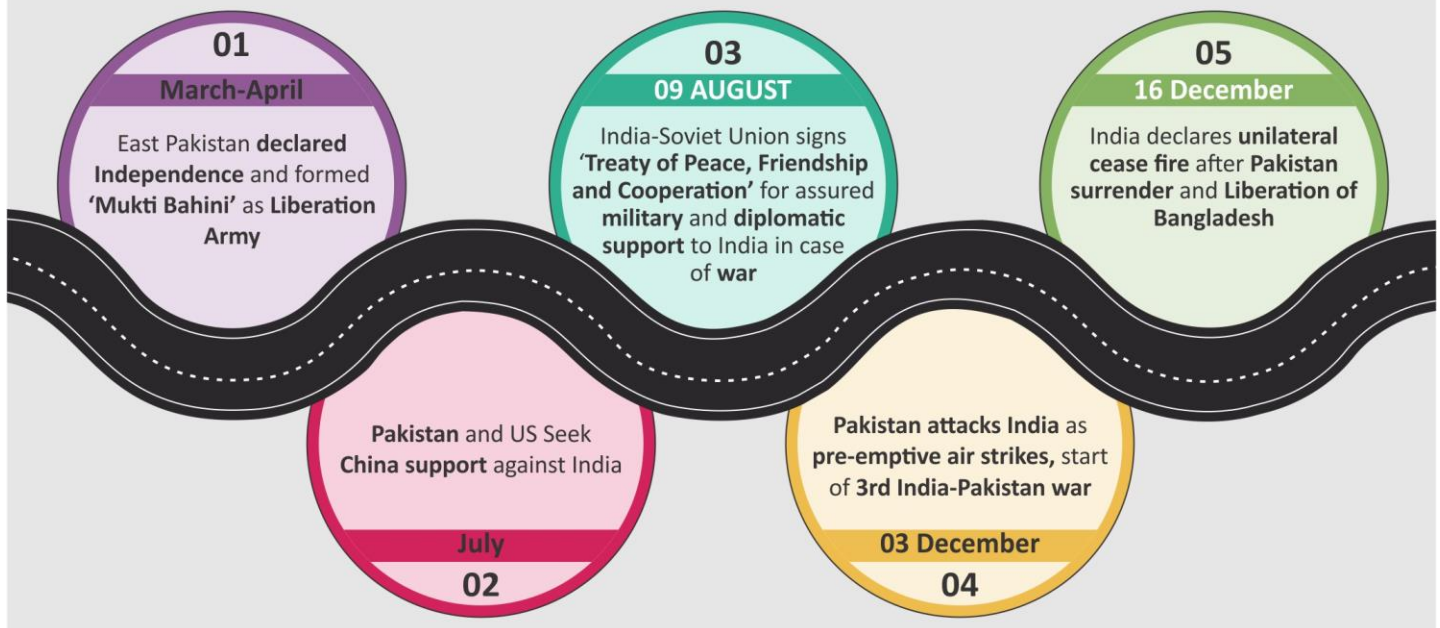
- The **Indian subcontinent** represents a **geographically unique** region with long shared **ethnic, linguistic, cultural, and historical ties**, especially with immediate neighbors.
  - E.g. Nepal with UP-Bihar, Bangladesh with West Bengal-Assam, present day Pakistan with bordering Indian states etc.
- Under the '**Partition of India**', the territory of Pakistan was divided into two distinct geographies, i.e. **West Pakistan** (now **Pakistan**) and **East Pakistan** (now **Bangladesh**).
- With West Pakistan's dominance over institutions such as Parliament, Judiciary etc., the people of East Pakistan soon started to face **injustice and suppression** on various fronts such as-
  - **At Social Level:** The Bengali ethnic identity and language didn't get due recognition. E.g. Urdu was declared as the national language despite **Bengali or Bangla** speaking majority (**58%** population- 1951 census) and people movement for it (recognized only as **State Language** later).
  - **At Economic Level:** Low representation of East Pakistan people in jobs, including Army and Civil Administration, with almost 400% gap in per capita income of two regions.
  - **At Political Level:** The nation was largely controlled by military leaders (Ayub Khan from 1958-69 and Yahya Khan from 1969-71). The West Pakistan further failed in-
    - ✓ **Meeting greater autonomy demands** of East Pakistan in 1966, and
    - ✓ **Democratic transfer of power** to Sheikh Mujibur Rahman after his party (**Awami League**) landslide victory in the **1970 election**.
- Soon, it turned into forceful suppression of **East Pakistan**, i.e. killing of **unarmed civilians, mass exodus and rape** under **Operation Searchlight** and in turn **Bangladesh Liberation War**.



#### Why did India enter into the war?

- **Threat to Humanity:** The atrocities on the people of then **East Pakistan** involved blatant misconduct and the injustice was a threat to others, as Martin Luther King Jr. said, '**Injustice anywhere is a threat to justice everywhere**'.
- **Mass Exodus of People:** By November 1971 nearly 10 million refugees entered into India because of atrocities, creating a huge socio-economic challenge for Border States.
- **Silence of the Western nations over atrocities:** Despite repeated Indian requests, UN and other nations like US failed to move towards a peaceful solution to prevent annihilation of a community.
- **Pakistan aggression against India:** Finally, the air-strikes on Indian territory from West Pakistan on 03 December 1971, under Operation '**Chengiz Khan**', dragged India into war in order to **uphold peace, justice and humanity**.

# KEY EVENTS IN BANGLADESH LIBERATION WAR



## What has been the impact of the War?

The **13-day war** of 1971 between **India-Pakistan** is a landmark geopolitical event in the history of the sub-continent. Besides the liberation of Bangladesh, it changed the **history** and **geography** of South Asia with its repercussions felt beyond the region. The major impact of war includes:

Nation/Institution	Major Impact
<b>India</b>	Domestically, it gave only a temporary relief from huge influx of refugees with rise of internal movements (e.g. Assam Movement) but at geopolitical and strategic level it helped India to: <ul style="list-style-type: none"> <li>• <b>Protection of vital Sea Lines of Communication</b> in Indian Ocean, especially the narrow passages in Bay of Bengal like the ten-degree Channel;</li> <li>• Protect '<b>Chicken-Neck</b>' or '<b>Siliguri Corridor</b>' through a more peaceful neighbor;</li> <li>• <b>Address the land and maritime border disputes</b> peacefully. E.g. the Land Boundary Agreement in 2015 between India and Bangladesh;</li> <li>• <b>Curb insurgency in Northeast</b> through cooperation with Bangladesh (often used by insurgents from Nagaland and Assam); and</li> <li>• <b>Diplomatic and Tactical gains</b> by India in terms of global relationship (e.g. BIMSTEC with Bangladesh as member of it) improved armed forces coordination and knowledge on special operations.</li> </ul>
<b>Pakistan</b>	Military gained more say in the governance of the nation by blaming <b>parliamentary system</b> and <b>government mismanagement</b> as reasons behind its loss with: <ul style="list-style-type: none"> <li>• <b>Start of Nuclear Program</b> in 1972, and</li> <li>• Adoption of <b>Indirect war strategy</b> against India. E.g. Terrorism.</li> </ul>
<b>Bangladesh</b>	Helped the people of Bangladesh to <b>protect their identity</b> and draw their <b>own destiny</b> through <b>peaceful co-existence</b> based on historical relationships. Independence also helped Bangladesh in: <ul style="list-style-type: none"> <li>• <b>Emerging as a major garment exporter</b> of the world.</li> <li>• <b>Build bilateral relationship</b> with India and other nations, and</li> <li>• Jointly <b>work with like-minded nations</b> for growth and prosperity.</li> </ul>
<b>USA</b>	Due to US's role in formation of <b>US-Pakistan-China</b> group and deployment of its <b>7<sup>th</sup> fleet (USS Enterprise)</b> in <b>Bay of Bengal</b> to deter India and prevent the liberation of Bangladesh, the: <ul style="list-style-type: none"> <li>• <b>India-US relationship deteriorated</b> at that point of time and remains as a point of distrust in the relationship;</li> <li>• Loss of face by going against protection of <b>human rights</b> and <b>democratic values</b>.</li> </ul>

<b>Soviet Union</b>	Recognition as a ' <b>Stabilizing Factor</b> ' and reduced influence of USA in the South Asian Region. This was due to events like- <ul style="list-style-type: none"> <li>• Signing of '<b>Treaty of Peace, Friendship and Cooperation</b>' with India for assured military and diplomatic support in the event of war,</li> <li>• Increased acceptance due to its recognition to the <b>policy of non-alignment</b>.</li> </ul>
<b>United Nation (UN)</b>	The muted UN response and UNSC attempt to have a ceasefire soon after Pakistan attack on India (04 December, Vetoed by Soviet Union) showed: <ul style="list-style-type: none"> <li>• The need for <b>reforms in the institution</b> in order to <b>protect democratic values</b> and <b>basic human rights</b>.</li> <li>• <b>The prevalent dominance of the Western Nations</b> (especially US) in the global institutions.</li> </ul>

## Conclusion

The 13-day war was not just a **blitzkrieg operation** to change the political structure of a nation. It was a war to protect the **moral and democratic traditions**. Thus, the **Swarnim Vijay Parv** is a celebration of the **political leadership** and **professionalism** of our armed forces, as well as of the country, considered as the **oldest living civilization** of the world.

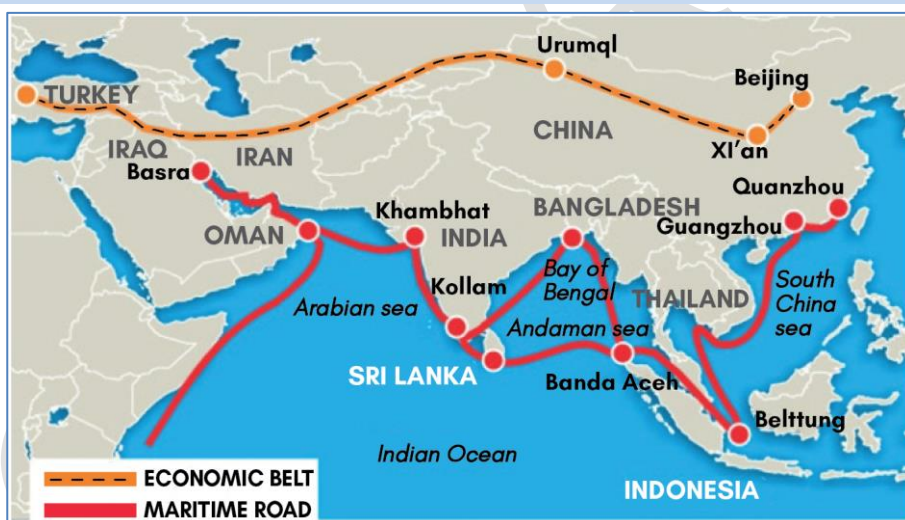
## 2.2. EMERGING BRI ALTERNATIVES: OPPORTUNITY FOR INDIA?

### Why in News?

Recently, the European Commission launched '**Global Gateway**', EU strategy on global infrastructure financing with the aim to mobilize up to **€300 billion** in investments between **2021-2027**.

### China's Belt and Road Initiative (BRI)

- Launched in **2013** as **One Belt One Road**, BRI is a Chinese infrastructure development project to fund the development of **land and sea routes to link Asia, Africa, and Europe**.
- Today, it is the largest and most ambitious global infrastructure financing and development initiative of the world.
- Estimates suggest that BRI has invested in **more than 2,600 projects in over 100 countries with an estimated cost of \$3.7 trillion**. This includes ports, railways, energy, digital networks etc.
- **Potential benefits of BRI:**
  - Boost regional connectivity and modernize facilities (port and airports);
  - Improve mobility to access new markets;
  - Harness new energy resources;
  - Improving overall efficiency and competitiveness of economy etc.



### What are the concerns associated with BRI?

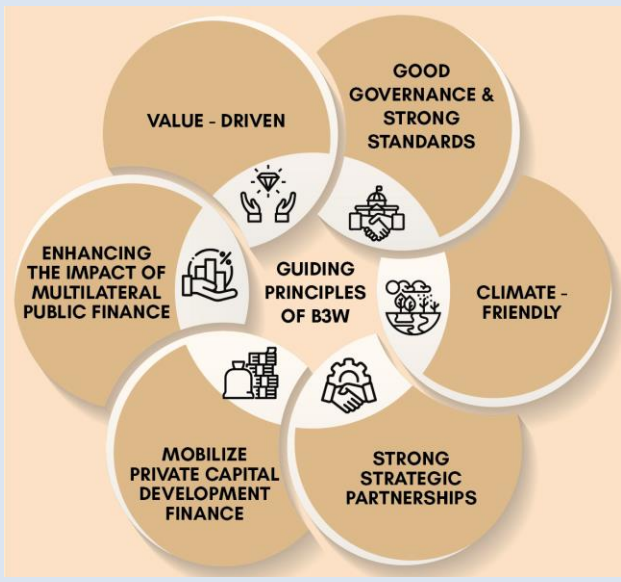

- **Lack of Transparency:** BRI lacks transparency on its strategy or purpose which has been highlighted by several African countries.
- **Debt-trap diplomacy:** Due to unsustainable debt burden, BRI has emerged as a tool to exert undue pressure and gain **political leverage** against a defaulting nation. E.g. China took the Hambantota port of Sri Lanka for 99 years over the issue of loan default.
- **Violation of Sovereignty and Territorial Integrity:** Through projects like China-Pakistan Economic Corridor (CPEC), BRI violates the principles of the sovereignty and territorial integrity of India. Similar approach may guide its future projects.
- **Expand Global Dominance:** With apprehensions on dual-use of ports and digital networks, BRI is seen as a state-backed campaign for Chinese global dominance.



- **Use of unethical business practices:** Almost 89% of all BRI contracts are executed by Chinese construction companies using Chinese labor. Similarly, issues of corruption, cost inflation, secret deals, ‘unreported and underreported debt’ are also prevalent.
- **Environmental and Social Risks:** Due to insufficient ecological feasibility studies and other risks, its compliance to the **environmental and labour standards** is poor.

### Emerging Alternatives to BRI

Developed countries have been funding infrastructure for a long time. E.g., Japan through ADB. But the growing regional concerns and assertiveness of China has led to launch of **big infrastructure projects\*** for a coherent response from them like:

Features	Build Back Better World (B3W) by G7	Global Gateway by EU
<b>About</b>	G7 approach to collectively catalyze funds for infrastructure development for low- and middle-income countries.	Europe’s strategy to connect people and countries in a smart, sustainable, and fair way.
<b>Guiding Principles</b>		
<b>Funding</b>	Mobilize bilateral, multilateral as well as private sector capital in line with <b>Addis Ababa Action Agenda</b> on Financing for Development.	<b>Funding by EU, its Member States, financial and development institutions</b> like European Investment Bank, European Bank for Reconstruction and Development and private funds.
<b>Key areas of Focus</b>	<b>Four areas of focus</b> as- <b>Climate; health and health security; digital technology; and gender equity and equality.</b>	<b>Five areas of focus</b> as- <b>Digital sector; climate and energy; transport; health; education and research sectors.</b>

\*- At **COP26**, the **UK** also launched a **Clean Green Initiative** with over **3 billion pound** of climate financing for **green growth** in **developing countries** over the next **five years**.

### Opportunities for India in Global Infrastructure

With an estimated **US\$ 15 trillion** gap between global infrastructure needs and actual investment by 2040 (from **Global Infrastructure Outlook**, a G20 initiative), Global Infrastructure always had opportunities from others. E.g., In 2017, India and Japan initiated **Asia-Africa Growth Corridor**.

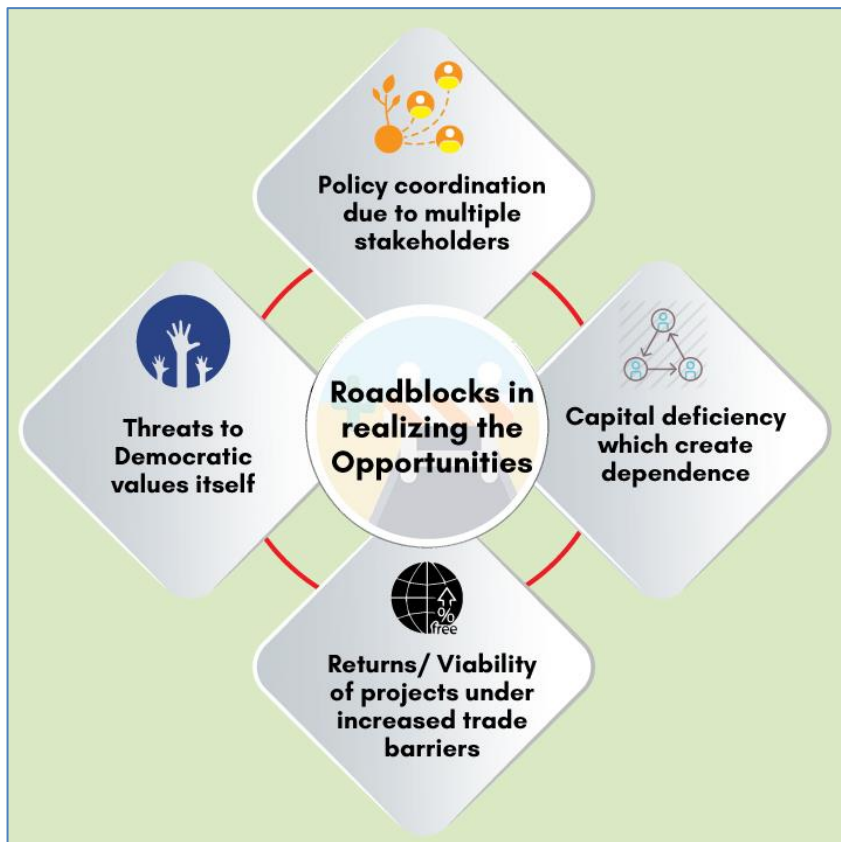
But the growing Chinese attempts to leverage BRI for **geo-economic, geo-political** and **strategic interests** have opened more opportunities for India in Global Infrastructure.

- **Partnership with EU:** Recently, **EU signed a Comprehensive Connectivity Partnership with India** to support 'resilient and sustainable connectivity projects' in Africa, Central Asia, and Indo-Pacific for **digital, energy, transport** and **people-to-people** connectivity.

- **Partnership with B3W:** India is likely to engage with **B3W initiative** as well because of its **principles** and the **space** offered to India.

- Emerging as a **counterweight** to the China dominated Asia,
- Affirm the shared values of **democracy, freedom, and respect for human rights,**
- Establish a **more viable, inclusive, transparent, and rules-based connectivity system.**
- Help other nations in **faster post Covid-19 recovery** and achieve sustainable development goals through projects of socio-economic importance.

- **Bilateral engagements:** The space created due to distrust over China and the ills of BRI lends can be filled by India especially in **development projects in African and South-east Asian countries** (where traditionally both China and India have been competing).



### Way Forward

- **Improving Policy Coordination:** Plan and support large scale, high impact infrastructural development projects by streamlining the bureaucratic web and creating single-point processes.
- **Enhancing Viability of Projects:** Promote economic cooperation by facilitating cross-border investments and deepen supply chain integration to address the damaging impact of Covid-19 on the global economy on developing economies.
- **Overcoming Capital deficiency:** By deepening the bilateral and multilateral **financial Integration** among like-minded nations with use of private sector-to-private sector financing model.
- **Promoting Democratic Values:** Promote people to people cultural exchange with visible performance improvements through projects to gain people trust and confidence.

Alongside these external initiatives, India should work on **building domestic capabilities** with a long-term perspective to offer more services from creating infrastructure to offering mobility and other solutions.

## 2.3. G20

### Why in news?

Recently, India joined the G20 'Troika' and is set to take over its presidency in 2022.

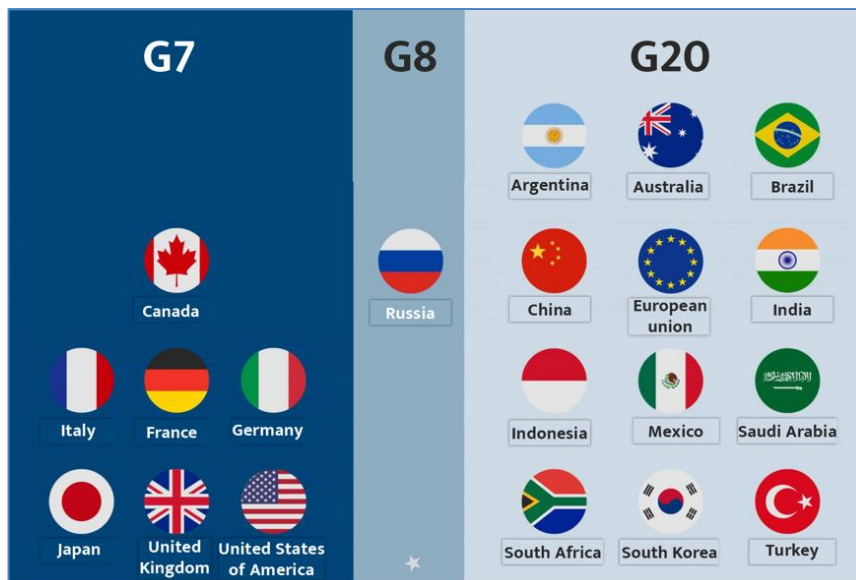
### More in News

- Troika refers to the top grouping within the G20 that consists of the current, previous and the incoming presidencies — Indonesia, Italy, and India.
  - India will assume the G20 presidency on 1st December 2022 from Indonesia and will convene the G20 Leaders' Summit for the first time in India in 2023.

- As a Troika member, **India will work closely with Indonesia and Italy to ensure consistency and continuity of the G20's agenda.**

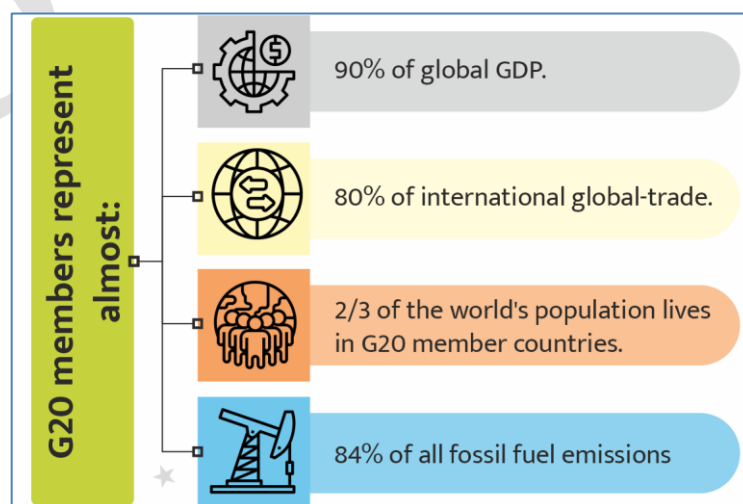
### About G20

- It is a **strategic multilateral platform connecting the world's major developed and emerging economies.**
  - The G20 was created in response to the financial crises that arose in several emerging economies in the 1990s and to a growing recognition that some of these countries were not adequately represented in global economic discussion and governance.
- It **started in 1999** as a meeting for the finance minister and central bank governors. G20 was raised to the Summit level in 2008 to address the global financial and economic crisis of 2008.
  - It holds a strategic role in **securing future global economic growth and prosperity.**
- The G20 has **no permanent secretariat.**
  - Agenda and the work coordination is completed by G20 leaders' personal representatives, known as **sherpas** together with finance ministers and central bank governors.
- The objectives of the G20 are:**
  - Policy coordination between its members** to achieve global economic stability, sustainable growth.
  - To **promote financial regulations** that reduce risks and prevent future financial crises; and
  - To **create a new international financial architecture.**
- India has been a founding member of G20 process and has played an active role in proposing new ideas and finding solutions.



### Importance of G20

- Global Economic Growth:** Because of its size and strategic importance, the G20 has a crucial role in setting the path for the future of global economic growth.
- To address global crisis:** Previous summits have addressed the 2008 financial crisis, the Iranian nuclear program, COVID-19 pandemic and climate change.
  - G20 nations committed to pump more than \$5 trillion into the global economy and contribute to the WHO-led COVID-19 solidarity response fund.
- Tax reforms:** International taxation has been a regular feature of G20 deliberation since the summit's start in 2008. It can help low income developing countries benefit from the ongoing and wide-ranging tax reforms to bring greater transparency to the international tax environment, through exchange of information, and address tax avoidance by large corporations through the OECD and BEPS (Base erosion and profit sharing) project.
  - At the Rome summit, G20, 2021, leaders endorsed an agreement among nearly 140 countries to overhaul the system of international corporate taxation.
  - The agreement—the culmination of a years-long process led by the G20 and the Organization for Economic Cooperation and Development (OECD)—includes a 15 percent minimum tax as well as new rules to redistribute some tax revenue from big multinational companies.





- **Recast bilateral ties:** Many experts stress the substantial effects of personal relationships among leaders on making foreign policy. By gathering so many leaders together, G20 summits offer rare opportunities to develop such relationships and recast bilateral ties.
  - Bilateral meetings on the summit's sidelines have occasionally led to major international agreements.
- **Human Resource Development and Employment:** In 2014, the G20 committed to reduce the gender gap in workforce participation by 25% by 2025. In support of this initiative the G20 also developed National Employment Plans which provide opportunities for inclusion.
  - In 2015, it also agreed to **reduce the share of young people who are most at risk of being left** permanently behind in the labour market **by 15% by 2025**.
  - The target group in this regard has been G20 and Low-Income Developing Countries Framework identified as low skilled or informally employed young people and the young people who are neither in employment nor in education or training (NEETs).

### Issues with G 20

- **Lack of effective power:** It has been argued that **G20 is not a legally binding institution** and needs to be given more teeth.
- **Transparency and Accountability:** The **absence of a formal charter** for the group and the fact that some of the most important G-20 meetings are held behind closed doors.
- **Protectionism:** Some of the **group's policy prescriptions have also been unpopular, especially with liberal groups**. Protests at the group's summits have accused the G-20 of **encouraging trade agreements that strengthen large corporations**.
- **Ineffective measures:** It is criticized for being delinquent in combating climate change, and in **failing to address social inequality and global threats to democracy**.
- **Under-representation:** Critics argue that the group is **overly restrictive, and its practice of adding guests, such as those from African countries, is little more than a token effort to make the G-20 reflective** of the world's economic diversity.

### Conclusion

The world is so interconnected and integrated now that countries have to work together to resolve all global issues. G20 must provide the vision to bind all the countries especially the emerging markets like Indonesia, India, Brazil and Mexico which are new actors in global governance to support coordinated actions on major global issues and promote global public goods.

## 2.4. NEWS IN SHORTS

### 2.4.1. WORLD TRADE ORGANISATION (WTO) DISPUTE PANEL RULES AGAINST INDIA'S SUGAR EXPORT SUBSIDIES

- Australia, Brazil and Guatemala had complained that **domestic support provided by India to sugarcane producers was in excess of the limit** allowed by WTO and India also **provides prohibited export subsidies to sugar mills**.
  - As a result, panel found that India was **acting inconsistently with its obligations under Agreement on Agriculture (AoA)**.
- AoA provides **specific commitments to reduce support and protection** in areas of domestic support, export subsidies and market access.
  - **Domestic support** to sugarcane producers is provided **through measures like Fair and**

**Remunerative Price (FRP), State-Advised Prices (SAPs), state level incentives etc.**

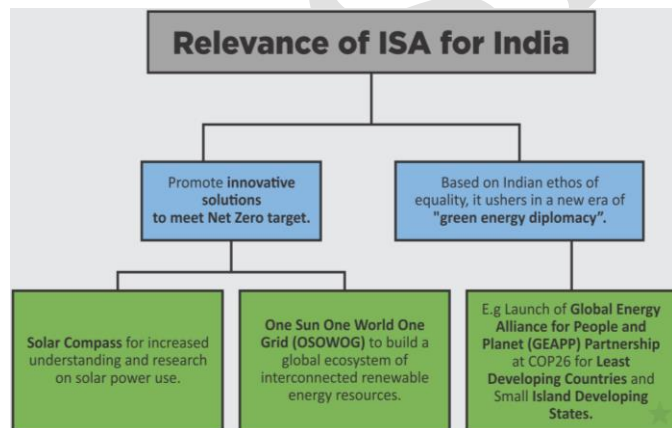
- ✓ FRP requires paying a **mandatory minimum price to the sugarcane producers**. While, SAPs are state specific mandatory minimum price to producers.
- **India's export subsidy** for sugarcane producers includes **Production Assistance Scheme, Buffer Stock Scheme and Marketing and Transportation Scheme**.
- In its response to WTO members, India said the **support given was largely to small and marginal farmers and was in accordance with its commitments** at WTO.

- AoA states that **Domestic Support shall not exceed De minimis level**.
  - De minimis levels are up to **5% of value of production for developed countries** and **10% for developing countries** like India.

- Also, under AoA and Agreement on Subsidies and Countervailing Measures, **export subsidies from WTO members are prohibited on a number of agricultural products.**

### 2.4.2. UN GENERAL ASSEMBLY (UNGA) CONFERS OBSERVER STATUS ON THE INTERNATIONAL SOLAR ALLIANCE (ISA)

- Granting of the status would help provide for a **well-defined cooperation between the Alliance and UN** that would benefit global energy growth and development.
  - It will also provide a **choice to ISA to have permanent office** in the UN HQ (New York).
- **About Observer status of UN**
  - It started in **1946** with the **Swiss Government as first permanent observer**, a number of regional and international organizations are given observer status by UNGA.
  - Other observers include non-member states (e.g. **Holy See**); Intergovernmental and other organizations (e.g. **ISA** by resolution 76/123); and Specialized Agencies (e.g. **FAO**).
- ISA is an **intergovernmental treaty-based international organisation (Secretariat: Gurugram)**, jointly launched by India and France at COP21 of the UNFCCC at Paris, 2015.
  - It works as a collaborative platform for **increased deployment of solar energy technologies.**
  - It aims to bring **energy access, ensure energy security, and drive energy transition** in its member countries.
  - It has **101 signatories** (US as last signatory) with **80 signatories** who have ratified the **ISA Framework Agreement.**



### 2.4.3. INDIAN OCEAN DIALOGUE

- Hosting the 8<sup>th</sup> edition of Indian Ocean Dialogue (IOD), **India highlighted region's importance and need to keep it safe and secure.**

- **IOD is a track 1.5 forum** (where government officials who participate in unofficial capacity and non-official actors work together) of **Indian Ocean Rim Association.**
- **Significance of IOR**
  - Half of the world's container ships and **two-thirds of the world's oil shipments pass through this.**
  - Has some of the **world's most important choke points-** Straits of Hormuz, Malacca, and the Bab el Mandeb (strategically important for global trade and energy flow).
  - Contains **roughly 1/3 of world's population, 25% of its landmass** and around 40% of world's oil and gas reserves.
- **India's initiatives towards IOR**
  - **Primary security provider** to most of its smaller neighbors like Maldives, Mauritius, Sri Lanka etc.
  - **Vision 'SAGAR'** (Security and Growth for All in the Region) that aims to pursue and promote India's geo-political, strategic and economic interests.
  - **Indo-Pacific Oceans' Initiative (IPOI)** with focus on maritime security, maritime ecology, disaster risk reduction etc.
  - **Other Initiatives:** Indian Ocean Naval Symposium (increase maritime cooperation), Asia Africa Growth Corridor etc.

### 2.4.4. 3RD INDIA-CENTRAL ASIA DIALOGUE BETWEEN FOREIGN MINISTERS HELD IN DELHI

- Dialogue was held between **India** and 5 Central Asian Countries: **Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan.**
- **Key highlights of joint statements**
  - **Afghanistan issue:** Agreed to uphold **UNSC Resolution 2593 (2021)**, which unequivocally demands that Afghan territory not be used for sheltering, training, planning or financing terrorist acts.
  - **India floated a 'four C' approach:** Focusing on commerce, capacity enhancement, connectivity, and contacts **to further expand the cooperation between the two sides.**
  - **Terrorism:** Called for **early adoption of the UN Comprehensive Convention on International Terrorism.**
  - **Connectivity:** Decided on **full utilization of Chabahar port in Iran** for regional connectivity.
- These 5 Central Asian countries are **also members of the Organisation of Islamic Cooperation**, and they skipped the meeting organized by Pakistan on the situation of Afghanistan to attend the dialogue in Delhi.

- **Importance of CAR for India:**
  - **Geostrategic importance** i.e. bridge between different regions of Asia and between Europe and Asia.
  - Security angle for **ensuring peace in the region.**
  - CAR has **abundant mineral resources** such as **petroleum, natural gas, gold, uranium** etc which are yet to be harnessed.
- **Challenges for India in CAR:** China-Pakistan axis, lack of direct connectivity, low India's bilateral trade.

- **Tightened surveillance:** Since 2009, the Sri Lankan navy has **tightened surveillance** of its northern maritime boundary to halt a **potential return of Tamil insurgents.**
- **Depletion of marine resources along the Tamil Nadu coast** (due to incessant bottom-trawling) has meant that the Indian fishermen are drawn to the relatively resource-rich Sri Lankan waters.
  - ✓ **Sri Lanka has banned bottom-trawling** in their waters in 2017.



#### 2.4.5. INDIA-SRI LANKA FISHERIES DISPUTE

- Recently **Sri Lankan authorities** have detained 68 Indian fishermen and 10 boats **on charges of alleged poaching and illegal fishing** in the island nation's waters.
  - India has taken up the issue of early release of the Indian fishermen and boats with the government of Sri Lanka.
- **Reasons behind India- Sri Lanka fisheries dispute:**
  - **Lack of defined maritime boundary:** Though India and Sri Lanka signed **four Maritime Boundary Agreements** between 1974-76, there is **no well-defined maritime boundary** between the two countries.
    - ✓ The 1974 agreement between the two nations **ceded the resource-rich Katchchativu islet to Sri Lanka**, which the Tamil fishermen had traditional fishing rights for centuries.

#### 2.4.6. NEW DEVELOPMENT BANK (NDB)

- Egypt is the **fourth new member admitted into NDB**, after Bangladesh, the United Arab Emirates (UAE) and Uruguay, further expanding the bank's global outreach.
- Headquartered in Shanghai, the **NDB was established in 2015** by the BRICS nation.
- NDB aims to mobilize resources **for infrastructure and sustainable development projects in BRICS countries and other emerging economies and developing countries** to complement the existing efforts of multilateral and regional financial institutions for global growth and development.

#### 2.4.7. OPERATION DEVI SHAKTI

- It is **rescue operation being conducted by Indian Government** to evacuate people from **Afghanistan** since the Taliban takeover.



You can scan this QR code to practice the Smart Quiz of International Relations at our open test online platform for testing your understanding and recalling of the concepts.





## 3. ECONOMY

### 3.1. PRIVATISATION OF PUBLIC SECTOR BANKS

#### Why in news?

Finance secretary recently said that the government will “eventually” **privatise most of the Public Sector Banks (PSBs)** and keep its **presence to a bare minimum**.

#### More about news

- Finance Minister in the **Union Budget 2021-22** announced that two PSBs would be privatised as part of the government's disinvestment target.
- The government had listed the Banking Laws (Amendment) Bill 2021 to be taken up during the Winter Session of Parliament.
- The bill intends to amend the **Banking Companies (Acquisition and Transfer of Undertakings) Acts of 1970 and 1980, and the Banking Regulation Act, 1949** to create **enabling legislation** for privatisation of public sector banks.
- Centre is yet to **shortlist the name** of two public sector banks (PSBs) that are likely to be **privatised** in FY22.

#### Need for Privatisation of PSBs

- **For better human resource management:** Privatisation will help in introducing a **high degree of professional management**. On account of huge human capital deficit, PSBs are **seriously handicapped vis-à-vis their competitors** in the market place. This is due to their employee compensation package, **skill sets, skewed age profile**, restrictive deployment and inefficient performance management system.
- **Autonomous decision making:** Control and interference by the government prevents PSBs **from staying competitive** in the current environment. They will, thus, continue to be hobbled by **outdated systems and practices**. High level of **autonomy will facilitate faster decision making**, paving way for innovation and expertise.
- **To develop Innovation and Achieve Expertise:** Private players will have will and capital to **innovate new products avenues** (new schemes, services, etc.) and make the industries to **achieve expertise in their respective fields** by offering quality service and guidance. This will help in bringing **cost effective services** and **higher customer satisfaction**.
- **For enhanced efficiency in debt coverage:** The **assets quality and efficiency of debt coverage** of private sector banks are better than that of public sector banks. A comparative study for the period of 2015 to 2019 has found that in comparison to private sector banks, **public sectors banks registered higher NPAs**.
  - The study had selected **top five banks** (as per total assets) from private and public sector. It found that while average Non-performing Asset (NPAs) of all the selected **private sectors banks was less than 5%**, it was more than 5% for all the selected Public sectors banks.
- **PSBs are losing market share:** Private Banks are operating in **creamy places**, cherry picking customers and PSBs are left with the **difficult markets in poorer districts**. Urban and semi-urban consumers have been shifting to private banks.

#### Concerns associated with Privatisation of PSBs

- **Financial exclusion of the weaker sections:** Driven by the profit motive, private sector banks **concentrate on the more affluent sections** of the population and the metropolitan/urban areas. Privatisation of PSBs will therefore lead to the financial exclusion of the weaker sections of the society, particularly **in the rural areas**.
  - State-owned banks focus on **public interests** and provide many services to the common people at **affordable cost**.
  - Merger of PSBs has resulted in **decline in PSBs branches by 3,321** between 2017 and 2021. PSB privatisation would **accelerate these trends**.
- **Job loss:** PSB mergers have brought down the number of PSBs from 27 to 12, resulting in **employee retrenchment and bank branch closures**. Total employee strength of PSBs has fallen from **8.57 lakh in 2017 to around 7.7 lakh in 2021**.

- The privatisation will **further shrink employment opportunities** for the youth. The **SC/ST/OBC sections would be deprived** because unlike the public sector, the **private sector does not follow reservation policies** for the weaker sections.
- **Concerns regarding safety of deposits:** A significant number of private banks and financial institutions have failed in recent times. But there is not even a single instance of **bank failure in the case of PSBs**. Privatisation of PSBs will **remove the sovereign guarantee** behind the PSB deposits and make household **savings less secure**.
  - It is to be noted that **PSBs account for 65% of all commercial bank deposits and 70% of all individual bank deposits in India**. It shows that Indian customers preferred the **safety and security of their deposits** offered by the PSBs.
- **Macroeconomic effects of bank failures:** Any failure of banks will have a **tremendous contagion effect and will derail the economy**. From 1935 to 1947, there were **900 bank failures** in our country. From 1947 to 1969, **665 banks failed**. This became driving factor for **bank nationalisation** in 1969.
  - The depositors of all these banks lost their deposited money. Even after 1969, 36 banks failed but these were rescued by **merging them with other government banks**. Few very recent instances of failure are **Lakshmi Vilas Bank and YES Bank**.
- **Privatisation is not a panacea to problems faced by PSBs:** The major problem faced by banks i.e. **NPAs is common for both the private and public sector banks**. The government may have **difficulty in providing additional capital** to the government banks on account of **fiscal constraint** and the banks are in need of **additional capital to maintain Capital Adequacy Ratio** for continuing their lending operations.
  - Some experts consider that getting rid of PSBs on account of such problems is akin to **throwing the baby out with the bathwater**. Opponents of privatisation say that stringent regulation and freedom from political and bureaucratic control and influence are the **right set of solutions for strengthening PSBs**.

#### Few recent steps taken to strengthen PSBs

Area	Details
Tech-enabled, smart banking	<ul style="list-style-type: none"> <li>● Setting up of <b>Loan Management Systems and Centralised Processing Centres</b>, resulting in reduced retail loan disbursement turnaround time.</li> <li>● Launch of <b>PSBloansin59minutes.com</b> and adoption of the <b>Trade Receivables Discounting System (TReDS) for digital lending for MSMEs</b> and retail customers.</li> <li>● <b>Advanced queue management systems</b> in transaction-intensive branches, with <b>single-window operations</b>, to reduce customer waiting and transaction time.</li> <li>● A few PSBs have introduced <b>centralised processing hubs</b> for faster time-bound processing and <b>app-based loan application</b> and offers for agricultural loans;</li> <li>● Larger PSBs are providing <b>customer-need driven credit offers</b> through analytics.</li> </ul>
Monitoring of loans	<ul style="list-style-type: none"> <li>● Institution of comprehensive, <b>automated Early Warning Systems (EWS)</b> in banks, <b>use of third-party data and workflow</b> for time-bound remedial actions, to proactively <b>detect stress and reducing slippage into NPAs</b>;</li> </ul>
Risk management	<ul style="list-style-type: none"> <li>● Institution of <b>technology- and data-driven Risk Scoring and Scrutiny systems</b> in banks that comprehensively factor in <b>third-party data and non-financial risk factors</b> and provide for higher scrutiny of high-risk cases;</li> <li>● <b>Improved adherence</b> to risk-based pricing;</li> <li>● <b>Empowerment of bank Boards</b> to recruit the bank's Chief Risk Officer from the market, on <b>market-linked compensation</b>.</li> </ul>
Resolution and recovery	<ul style="list-style-type: none"> <li>● RBI's <b>revised prudential framework on stressed assets</b>.</li> <li>● Putting into place <b>one-time settlement</b> platforms and portals, eDRT (Debt Recovery Tribunals) for online recovery case management.</li> </ul>
Governance	<ul style="list-style-type: none"> <li>● Introduction of <b>non-executive chairmen</b>;</li> <li>● Strengthening of the <b>Board committees</b> system;</li> <li>● Effective use of <b>non-official directors</b>, by giving them mandate to play role akin to independent director and institution of their <b>peer evaluation and training</b>.</li> </ul>
Human resource	<ul style="list-style-type: none"> <li>● Ensuring <b>role-based e-learning</b> for continuous learning for all officers;</li> <li>● Putting in place <b>objective Performance Management Systems</b>.</li> </ul>
Recapitalisation	<ul style="list-style-type: none"> <li>● Infusion of <b>Rs.3.17 lakh crore by the Government</b>;</li> <li>● <b>Mobilisation of over Rs. 2.49 lakh crore</b> by the banks themselves;</li> </ul>

<b>Marketing strategy and reach</b>	<ul style="list-style-type: none"> <li>• <b>Doubling of the dedicated marketing salesforce</b> between March 2018 and March 2020;</li> <li>• <b>Quadrupling of sourcing of loans</b> through the salesforce and marketing tie-ups between Q4 FY2017-18 and Q4 FY2019-20.</li> </ul>
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## Road Ahead

- **Privatisation can be limited to few PSBs:** While privatising few PSBs sounds a logical decision in light of immense benefits, attempting to privatise all banks will **undermine the tremendous contribution of these banks** to the country over the years.
- **Graded Format towards privatisation:** Government may **not fully exit** from the state-run banks that are to be privatised and **instead retain at least a 26% stake** for the first few years. Even Narasimham Committee – I had recommended **dilution of government stake in PSBs to 33 percent**. The extent of the stake sale will depend on **interest from investors and market conditions**.
- **Identification of investors:** identifying a **fit and proper investor** to own the stake in these banks will be important. One of the options could be, the **stakeholders of existing large banks may consider acquiring** these PSBs, retain them as **wholly owned subsidiaries** with independent identity until they attain **better operational efficiency**. They can **eventually merge with acquirer bank**.
- **Achieving the objective of big banks:** Privatized PSBs can be **merged with existing large private banks**, to attain the **kind of scale and size** to develop **higher risk appetite and lending capacity**.
- **Developing new asset quality review (AQR):** The last asset quality review (AQR) of banks in 2015 failed to **detect lenders evergreening loans** outside the formal restructuring process. Evergreening refers to banks **extending fresh loans to delinquent borrowers** to help them repay existing loans, **hiding the true extent of bad loans**.
  - **RBI audit had found that** Private sector lender Yes Bank had **under-reported bad loans** by ₹3,277 crore in the FY2019.

## 3.2. FINANCIAL STABILITY REPORT

### Why in news?

Reserve Bank released the 24th issue of the **Financial Stability Report (FSR)**, a **bi-annual report** that reflects risks to **financial stability and the resilience** of financial system.

### Highlights of report

- **Global Economy:** The global economic recovery has been **losing momentum in the second half of 2021** in the face of resurfacing COVID-19 infections, the new variant **Omicron**, **supply disruptions** and bottlenecks, **shifts in monetary policy stances** across advanced and emerging economies.
- **Domestic Economy:** On the domestic front, **progress in vaccination has enabled the recovery** to regain traction after the debilitating second wave of the pandemic. Notwithstanding **signs of slowing pace more** recently, the **corporate sector is gaining strength** and bank credit growth is improving.
- **Risk assessment: All broad categories of risks** – global; macroeconomic; financial market; institutional; and general – were perceived as **‘medium’** in magnitude but risks arising on account of **global and financial markets** were rated **higher** than the rest.
  - **Commodity prices, domestic inflation**, equity price volatility, asset quality deterioration, **credit growth** and **cyber disruptions** were rated as the **major risks**. (Refer table for key parameters.)
- **MSME Sector: Credit to the MSME** segment slowed down (y-o-y) by the end of September 2021 vis-a-vis March 2021. Emerging signs of **stress in micro, small and medium enterprises (MSME)** as also in the micro finance segment call for **close monitoring** of these portfolios going forward.

Parameters	Key findings from report	Definition
Gross non-performing asset (GNPA) ratio	<ul style="list-style-type: none"> <li>• <b>For Scheduled commercial banks (SCBs):</b> GNPA ratio may increase <b>from 6.9 per cent in 2021 to 8.1 per cent by 2022</b> under the baseline scenario and to <b>9.5 per cent</b> under a <b>severe stress</b> scenario.</li> <li>• <b>For NBFCs:</b> GNPA ratio which had declined in 2020, rose to <b>reach 6.5 per cent</b> at the end of 2021.</li> </ul>	NPAs indicate how much of a bank's loans are in <b>danger of not being repaid</b> . A very high gross NPA ratio means the bank's <b>asset quality is in very poor shape</b> .



<b>CRAR</b>	<ul style="list-style-type: none"> <li>• <b>Capital to risk-weighted assets ratio (CRAR)</b> of scheduled commercial banks (SCBs) rose to a new peak of <b>16.6 per cent</b> in 2021.</li> </ul>	It is the ratio of a <b>bank's capital in relation to its risk weighted assets</b> and current liabilities.
<b>Provisioning coverage ratio (PCR)</b>	<ul style="list-style-type: none"> <li>• PCR of SCBs stood at <b>68.1 per cent</b> in September 2021.</li> </ul>	PCR is ratio of <b>provisioning to gross non-performing assets</b> and indicates the <b>extent of funds</b> a bank has kept aside to cover <b>loan losses</b> .

### 3.3. FINTECH

#### Why in news?

Prime Minister inaugurated **InInfinity Forum**- a leadership Forum on **Financial Technology (FinTech)** through video conferencing.

#### More about news

- It was **hosted by the International Financial Services Centres Authority (IFSCA)** under the aegis of the Government of India in collaboration with Gujarat International Financial Tec-city (GIFT) City and Bloomberg.
- It brings together the **leading minds of the world** in business and technology to come together to discuss how **technology and innovation can be leveraged by the FinTech industry** for inclusive growth and serving humanity at large.

#### About India's Fintech Industry

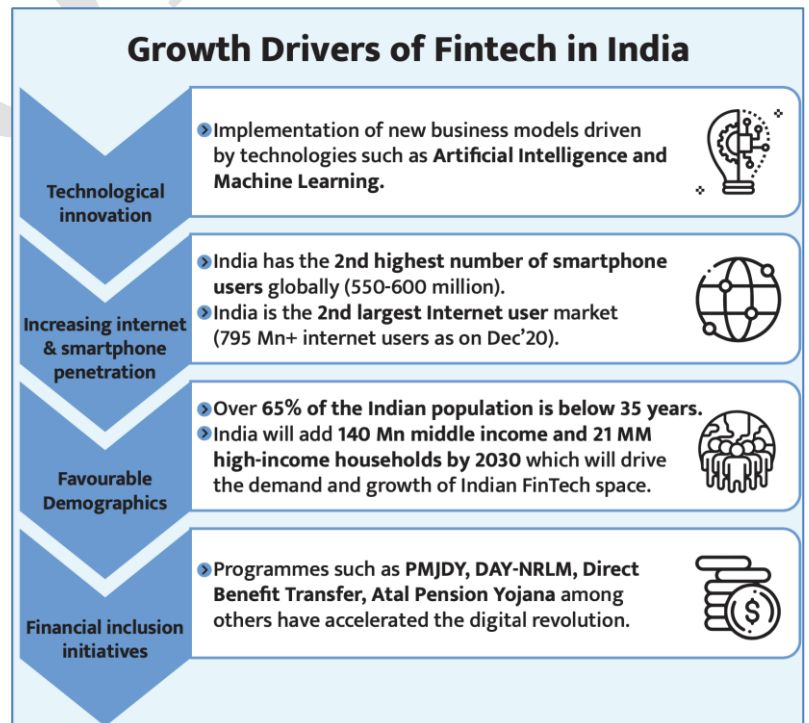
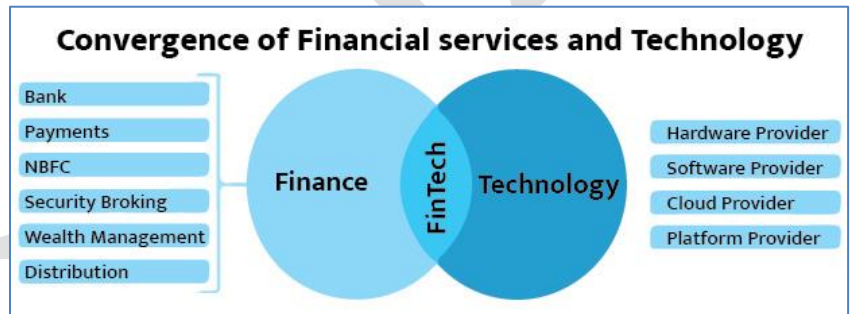
- The term "FinTech" is a contraction of the words "**finance**" and "**technology**". It is an umbrella term to denote **technological innovation** having a bearing on **financial services (Refer infographic)**.
- Indian FinTech industry valued at **\$ 50-60 Bn in FY20**. According to a Boston Consulting Group report, Indian fintech companies will reach a valuation of **US\$150-160 billion by 2025**.
- India is a frontrunner among emerging economies in terms of Fintech adoption, with an **adoption rate of 87%** in March 2020, compared to a **global average of 64%**. **India has 3rd largest FinTech ecosystem globally**

#### Sectoral Potential of Fintech companies in India

- **Credit:** Fintech solutions have the potential to **transform the lending and investment landscape**. Fintech helps consumers and businesses with **faster and easier access to capital**, providing online services to **directly match lenders with borrowers** who may be individuals or businesses. Examples include **Crowd Funding and Peer-to-Peer Lending**.

#### Related concepts

- Neo-banks are **online-only financial technology (fintech) companies** that operate solely digitally or via mobile app. Ex. Razorpay X, EpiFi etc.
  - They have disrupted the traditional banking system by **leveraging technology and artificial intelligence (AI)**.
- As a related concept, **Challenger banks also leverage technology to streamline the banking process**. However, they also maintain a brick and mortar physical presence.
  - They are different from traditional banks in the sense that their **presence is much smaller**.



- **Payments:** Fintech provide services that **enable transfer of funds** for various use cases - P2P (Person-to-Person), P2M (Person-to-Merchant), G2P (Government-to-Person) etc. For instance, introduction of **Unified Payment Interface (UPI)** has provided a boost to the payments sector in India.
- **Insurance and advisory services:** Fintech firms are providing platforms to **consumers to save, invest, manage their wealth and choose from a spectrum of financial products** across categories such as personal loans, home loans, credit cards, saving accounts and mutual fund.
- **Pensions:** Fintech-enabled technologies such as robo-advise can make **financial planning** more accessible. Fintech is increasing the **efficiency of the operation** of pension schemes through **risk management** applications, **automation** of investment processes and **facilitation of regulatory compliance**
- **Account aggregator services:** These services **aggregate financial data of a customer** from different financial services providers and leverage this data to **build analytics and insights to help consumers manage their financial commitments** and goals. In 2016, RBI released **guidelines for NBFCs** that intend to function as account aggregators.
- **Trade Finance:** Invoice trading is another nascent area of fintech application in India. It assists MSMEs that often struggle with **working capital and cash flows** due to delayed payments. For example, TReDS is an online mechanism for **facilitating the financing of MSMEs** through multiple financiers.

### Challenges faced by Fintech sector in India

- **Data security and privacy risk:** **Data leaks, platform downtimes, and information theft** has become quite rampant in the financial services space. Developing a **strong mechanism to protect data** is of paramount importance, and players will have to **invest deeply in mechanisms to control this risk** and comply with regulatory requirements towards data security.
- **Varied adoption:** It's not easy for **every type of business** to adopt FinTech. It is especially complicated for an economy like that of India's which is dominated by MSMEs that largely sit on the fence of **digital adoption**.
- **Rapidly changing regulations:** Regulatory compliance comes with a **cost, and frequent changes** do not help to offer business confidence. A few regulations, such as regulations for investment exits, cryptocurrency, payment regulations, data, infrastructure security, and consumer protection, are **still evolving**.
- **Lack of financial literacy and awareness:** About **70%** population of India lives in the villages, and the use of these FinTech platforms is **largely concentrated** in the urban segment. This sector needs to make its way to **smaller cities and towns** with and through awareness and **financial literacy**.

### Road Ahead

- **Strengthening foundational infrastructures:** Foundational infrastructures include **telecommunications, along with digital and financial infrastructures** (such as broadband internet, mobile data services, data repositories, and payment and settlement services). The infrastructures should enable **efficient data collection, processing, and transmission**, which are central in fintech advances.
- **Conducive Policy framework:** The successful and large-scale adoption of technology would be facilitated by an enabling policy framework. Policymakers should address the risks of **market concentration**, and should foster **standardization, interoperability, and fair-and-transparent access** to key infrastructures.
- **Enhanced understanding of Evolving Financial Systems:** This can be done by maintaining **an ongoing dialogue with the industry, both innovators and incumbents**—to identify **emerging opportunities and risks**, and to facilitate the timely formation of policy responses.
- **Forging global alliances for smooth retail mobile payments of low value and high velocity:** The government can focus on partnering through an **extension of UPI networks** or forging global alliances with neighbouring governments and regulators. These partnerships can **enable social and inclusive use cases** such as remittances for people visiting India for medical reasons etc.
- **Focus on targeted digital literacy programmes:** The government can focus on creating awareness on mobile payments through **regional language advertisements** and systematically planned digital literacy programmes. The programmes can focus on areas such as **cybersecurity** in payments to **increase level of trust** in mobile payments.
  - The government can also **collaborate with industry players** to build consensus and **harmonise standards of visual representation** of payment systems in rural hinterlands to improve both **merchant and end customer experience**.

- To build **digital payment literacy** at a young age, basic digital payment literacy concepts can be incorporated in **school curriculums**.
- **Other measures:**
  - **Adapt Regulatory Framework and Supervisory Practices for Orderly Development and Stability of the Financial System** and facilitate the safe entry of new products, activities, and intermediaries; sustain trust and confidence; and respond to risks.
  - **Safeguard the Integrity of Financial Systems** by identifying, understanding, assessing, and mitigating the risks of criminal misuse of fintech, and by **using technologies that strengthen compliance** with anti-money laundering and combating the financing of terrorism (AML/CFT) measures.
  - **Modernize Legal Frameworks to Provide an Enabling Legal Landscape** with greater legal clarity and certainty regarding key aspects of fintech activities.

### 3.4. SERVICES DOMESTIC REGULATIONS (SDR)

#### Why in News?

Recently, **67 member countries** of the **World Trade Organisation (WTO)** concluded their negotiations on Services Domestic Regulations (SDR).

#### Trade in Services and General Agreement on Trade in Services (GATS)

Services sector is a **dynamic** and **fastest-growing sector** of the global economy, representing **60% of world GDP in value-added terms** and over **50% of employment**.

- The **International Trade Rules on Services** are **governed by GATS**, an outcome of Uruguay Round and entering into force in January 1995.
- It provides a **framework of rules** governing services trade on all services (with two exceptions only). The exceptions are:
  - Services supplied in the exercise of governmental authority, and
  - Coverage measures affecting air traffic rights and services directly related to the exercise of Air Transport Services.
- GATS is applicable to four-modes of supplying services (as given in **Image**) and establishes a mechanism for all WTO members (to varying degree) to make commitments to liberalize trade in services, and
- The agreement provides a mechanism for resolving disputes between countries.

#### Services Domestic Regulation (SDR) and its Potential Benefits

Launched at the **11<sup>th</sup> Ministerial Conference** at Buenos Aires (**2017**), the new **plurilateral agreement** is the first set of rules on services in **24 years** at WTO.

- **Membership:** The **67** agreed members include both developed and developing countries, together accounting for **over 90%** of world trade such as the USA, China, European Union (EU), Brazil, etc.
- **Incorporation methodology:**

## 4 Modes of supply

### MODE 1:



Think about online architectural plans from abroad

**Cross-border supply:**  
when services flow from the territory of one WTO member into another.

### MODE 2:



Think about international tourists

**Consumption abroad:**  
when a person consumes a service in another member's territory.

### MODE 3:



Think about foreign bank branch

**Commercial presence:**  
when a service supplier of one member establishes a commercial presence in another member's territory to provide a service.  
About 60% of global services trade in 2017 took place through this mode.

### MODE 4:

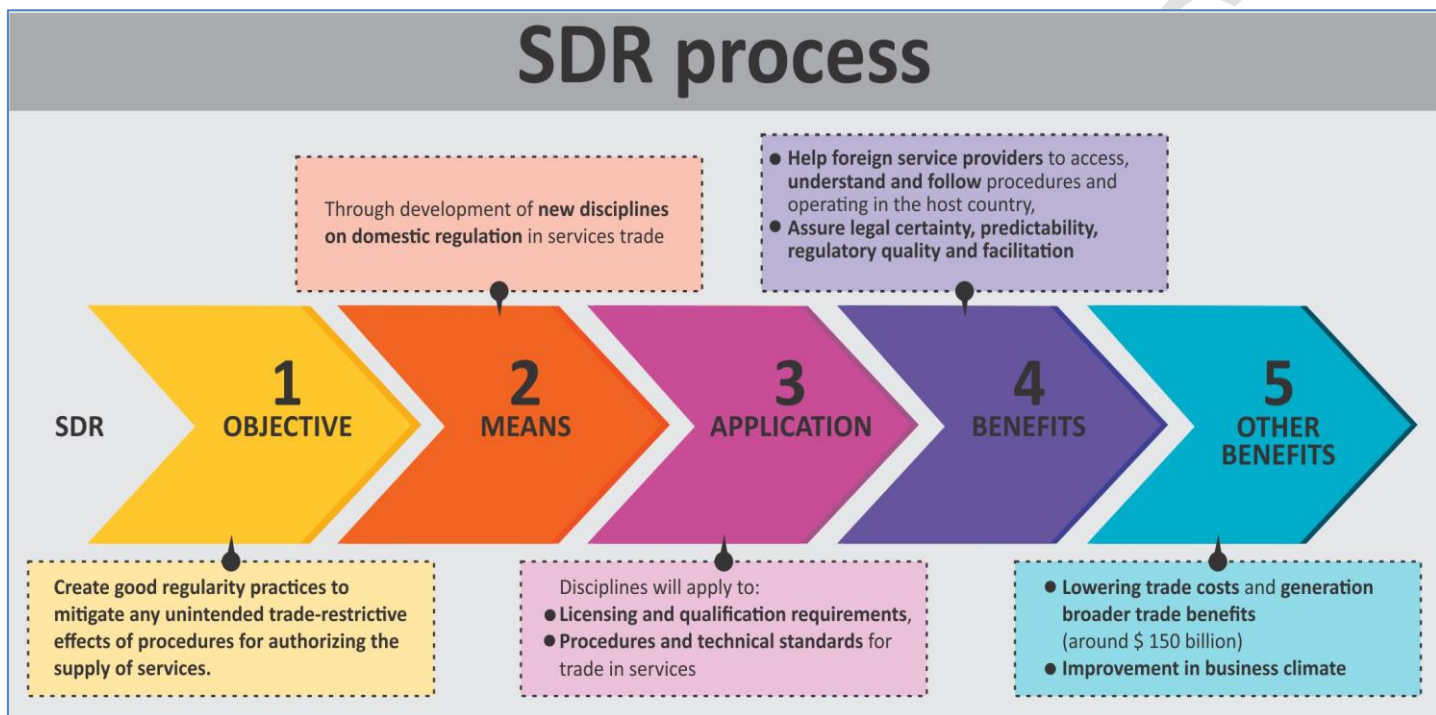


Think about an international music band

**Movement of natural persons:**  
when individuals of one WTO member temporarily enter the territory of another supply a service.



- The new disciplines under it will be incorporated as **additional commitments** by the member's services commitments under **GATS Schedules** (GATS Article XVIII).
- The signatories have agreed to leave the pact open for other countries to join in and apply it on a "**Most-Favored Nation (MFN)**" basis, i.e., giving equal treatment to countries that are not parties to the agreement as given to parties to the agreement.
- **Potential Benefits:**
  - With cost-of-service trade estimated to be **twice as high** as trade costs for goods, SDR works on reducing the costs attributable to regulatory divergence and opaque regulations.
  - It will also check cumbersome procedures through its objectives, means etc. as given in image.



- As a **unique feature** of the agreement, these rules contain provisions on **non-discrimination between men and women**. It will **support women empowerment** and boost **women's participation in services trade**.

### Concerns over SDR by nations like India

Though aimed at creating a more **transparent operating environment**, slash **administrative costs** and offer benefit to all WTO membership, it is opposed by other nations as:

- It establishes a **competing and parallel mechanism** to pursue and achieve same objectives without the entire WTO membership consent.
- GATS allows the member countries to determine the extent of market access they will grant in various service sectors and treat the Foreign Service providers differently. New disciplines will **further deny market access** to short-term service providers,
  - E.g. US, Canada, and EU have restricted market access to independent professionals and used **Mode 4** to deny market access to short-term services.
- It can be used to bring in rules to **erect barriers to services trade** and **cross-border movement of professionals** through **qualification and licensing requirements**, and **technical standards**.
- **Working Party on Domestic Regulation (WPDR)** was established in 1999 (under **Article VI:4** of GATS) precisely to put these disciplines- domestic regulations (qualification requirements and procedures, technical standards, and licensing requirements) from constituting unnecessary barriers to trade

## Conclusion

The new disciplines address a **dynamic** and **fast-growing segment** of global output through **easy availability of information** on Qualifications, processes for applying and obtaining the licenses, clarity on reasons for rejection of application, and technical standards affecting trade in services.

As of **2020**, more than **70% of WTO members** have concluded **at least one Regional Trade Agreement** with provisions on **domestic regulations** going **beyond GATS**. Therefore, there is a need for **lesser hesitation** on a more **objective, reasonable and impartial agreement** to consolidate good regulatory practices within the **WTO legal framework**.

## 3.5. GLOBAL MINIMUM TAX RATE

### Why in News?

Organisation for Economic Co-operation and Development (OECD) released Pillar Two model rules for domestic implementation of 15% global minimum tax.

### About Global Minimum Tax Rate

- It requires countries to impose a **minimum tax on large multinational companies (MNCs)** (such as Google, Amazon, Facebook and Apple (GAFA)) to counter efforts by such firms to **escape taxes in their country of operations**.
- It will **undercut any advantage of shifting to lower-tax places** and pressures countries to conform to the global norm.
  - Large MNCs have traditionally been **taxed based on where they declare their profits rather than where they actually do business**.
  - This **allowed several large companies to avoid paying high taxes** in countries where they do most of their business by shifting their profits to low-tax jurisdictions.
- Global Minimum Tax is **part of the inclusive framework on Base Erosion and Profit Shifting (BEPS)** agreed upon by G20 countries and OECD.
- Global Minimum Tax **will apply to MNCs with revenue above €750 million** and it aims for developing a **taxation structure that is relevant for a digital and globalised world**.

### Did you Know

- The **average global corporate tax rate was over 40% in the early 1980s and dropped to well below 25% in 2020** as governments competed against each other to lower their tax rates in order to attract businesses.

### OECD and Global Minimum Tax

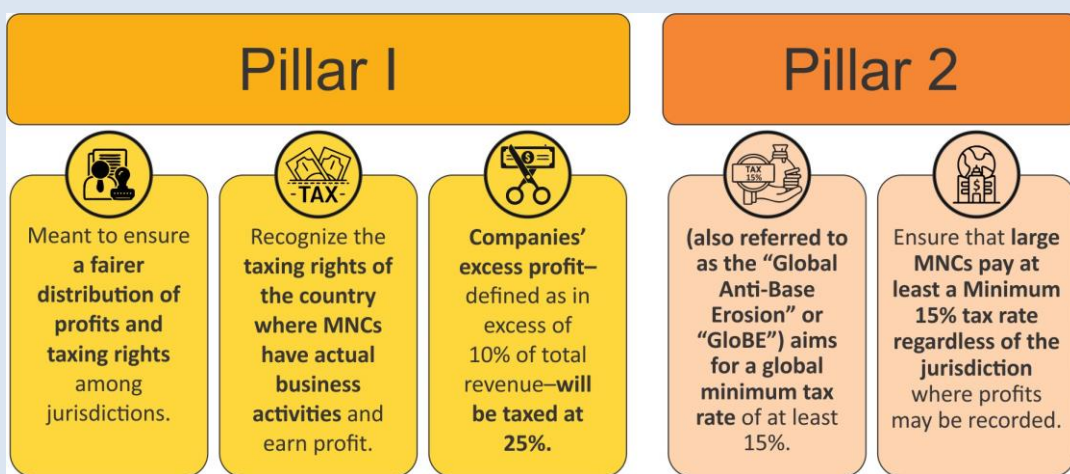
- Under the OECD/G20 Inclusive Framework on **Base Erosion and Profit Shifting (BEPS)**, 139 countries and jurisdictions are **collaborating to put an end to tax avoidance strategies** arising from digitalisation and globalisation of the economy.
  - BEPS refers to tax planning strategies used by MNCs that **exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations** where there is little or no economic activity, resulting in little or no overall corporate tax being paid.

- **Recently, over 130 countries, including India, have joined a new two-pillar plan** to reform international taxation rules and ensure that multinational enterprises pay a fair share of tax wherever they operate.

- Now, **OECD released Pillar Two model rules for domestic implementation of 15% global minimum tax**.

- Model rules **provide governments a precise template for taking forward the two-pillar solution and set out the mechanism for GloBE** rules and will assist countries to bring GloBE rules into domestic legislation in 2022.

- GloBE rules **provide for taxation system to ensure large Multinational Enterprises (MNEs) groups pay this minimum level of tax** on income arising in each of the jurisdictions in which they operate.



- Rules create a “top-up tax” to be applied on profits in any jurisdiction whenever the effective tax rate is below minimum 15% rate.

## Need for a Global Minimum Tax Rate

### Neutralizes Low Tax Incentive

- ▶ It will help stop the “race to the bottom” as countries compete against each other to cut taxes to attract businesses.

### Additional Tax Revenue

- ▶ With budgets strained after the COVID-19 crisis, this will shore up tax revenues and help governments invest in social development, fighting the pandemic etc.
- ▶ OECD estimates the minimum tax will generate \$150 billion in additional global tax revenues annually.

### Checking Tax Abuse

- ▶ According to the Tax Justice Network report, countries are losing a total of \$483 billion in tax a year to global tax abuse committed by MNCs and wealthy individuals.
- ▶ India’s annual tax loss is estimated at over \$10 billion.

### Check on Tax Havens

- ▶ It neutralizes the low tax incentive and will discourage multinationals from shifting profits - and tax revenues - to low-tax countries.
- ▶ Almost 90% of the world’s top 200 companies have a presence in tax havens.

### Better Competition Among Nations

- ▶ Based on economic fundamentals like the skill of workforces, capacity to innovate, and strength of legal and economic institutions, rather than ever-lower tax rates that deprive governments of money for infrastructure and education.

## Challenges

- **Global consensus:** small economies benefited a lot from attracting investments with low corporate tax as large and developed economies have a considerable advantage because of better infrastructure quality, labor quality, economic and political stability etc.
- **Impact on socio-economic development:** All countries run various tax incentives to attract MNCs which are a source of FDI and help to generate demand with efficient utilisation of resources and create employment.
- **Consensus on tax rate:** World Inequality Report has suggested that 15% rate is lower than what working-

### Implication on India

- Experts believe the tax would be advantageous for India as the **effective domestic tax rate is above the threshold** and India, being a large potential market, would continue to attract foreign investments.
- The tax deal will mean **removal of existing digital service taxes and other unilateral measures by 2023**. India will need to withdraw the equalization levy that was introduced in 2016.
  - India will **get additional taxing rights which are beneficial** but the exact quantum will need to be compared to domestic equalisation levy.
- **Large Indian headquartered MNEs may also need to comply with Pillar One rules** and India will need to share its taxing right with other countries.
- It is also **likely to negate any treaty benefit** to achieve minimum taxation.
- India could end up **losing revenue from other not-so-digitised companies** in the top 100.
- In respect of outbound investments, it **will prevent base erosion of tax in the country** as the government will be able to claw back any shortfall in tax paid below 15% by an overseas business owned by an Indian resident.
- However, India, which has been an important market for these companies, **needs to insist for a greater share of profits** to be allocated to countries that are important markets for these tech firms.



class and middle class people typically pay in high-income countries. It is also lower than the average statutory rate that corporations face in those places.

- **Reduced ability to pursue specific policy objectives:** Governments use tax incentives to pursue specific policy objectives, such as promoting innovative activities or economic development, for instance, via investment tax incentives or tax incentives for research and development.
- **Favoring rich nations:** As per Oxfam report, G7 and EU will take home two-thirds of new cash that GMT will bring in, while the world's poorest countries will recover less than 3%, despite being home to more than a third of the world's population.
- **Ban on unilateral taxes:** Many developing countries have expressed concerns about the implementation of these new taxing rules being conditioned upon them removing all unilateral taxes on technology companies.
  - Many countries earn significant revenue by levying tax on digital services.

### Conclusion

A global minimum tax is a laudable **attempt to make international tax arrangements fairer and work better** in a digitalised and globalised world economy.

However, there are **major obstacles that may impede the overall implementation** of the agreement.

There is a need to support this effort to build a consensus as **countries, rich and poor, need more resources to fight the pandemic and the consequent economic fallout.**

## 3.6. PM-KISAN

### Why in news?

According to agriculture ministry, since 2019, about **Rs 374.78 crore amount is pending for reprocessing** after failed transactions occurred under **PM-KISAN scheme**.

### More about news

- The scheme saw a **14.22 lakh pending failed transaction** during 2019-20 fiscal. In the **ongoing 2021-22 fiscal**, the number of pending failed transactions **stood at 9.11 lakh** till November 2021.
- Number of failed transactions is **less than one per cent of the total number of transactions** under the scheme.
- Under the scheme, **more than 11.60 crore farmers** have been given the financial benefits of **approximately Rs 1.60 lakh crore** through various instalments since the launch of the scheme.

### About the scheme

- **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)** is a **central Sector scheme** launched in December 2018 with 100% funding from Government of India.
- It provides to each **eligible farmer's family Rs 6000 per annum** in three instalments of Rs 2000 each. Definition of family for the scheme is **husband, wife and minor children**.
- Initially, **farmers with less than 2 hectares** of land were eligible. However, from June 2019 it was **extended to all farmers** i.e. 140 million farmers.

#### Exclusion criteria for PM-KISAN scheme

**All Institutional Land holders** and Farmer families which belong to **one or more of the following categories** have been excluded:

- Former and present holders of **constitutional posts**;
- Former and present **Ministers/ State Ministers** and former/present Members of **Lok Sabha/ Rajya Sabha/ State Legislative Assemblies/ State Legislative Councils**, former and present **Mayors** of Municipal Corporations, former and **present Chairpersons** of District Panchayats;
- All **serving or retired officers and employees** of Central/ State Government Ministries /Offices/Departments and its field units and regular employees of the Local Bodies (Excluding **Multi-Tasking Staff /Class IV/Group D employees**);
- All superannuated/retired pensioners whose **monthly pension is Rs.10,000/-or more** (Excluding Multi-Tasking Staff / Class IV/Group D employees) of above category);
- All Persons who **paid Income Tax** in last assessment year;
- **Professionals** like Doctors, Engineers, Lawyers, Chartered Accountants, and Architects registered with Professional bodies and carrying out profession by undertaking practices.

- The **responsibility to identify the farmer families which are eligible** for support as per scheme guidelines lies with respective State Government and UT administration. The fund is **directly transferred** to the bank accounts of the beneficiaries.
- There are various **Exclusion Categories** (Refer box) for the scheme.

#### Why PM-KISAN is better than other subsidy schemes?

- **Direct Income support:** The scheme aims to provide income support to farmers by addressing the **liquidity constraints of farmers for meeting their expenses** for acquisition of agricultural inputs and services.
- **Verification of data:** The data received on the PM-KISAN web portal goes through **various levels of verification** and validation, including **Aadhar and income tax databases**.
- **No selection bias:** Such schemes are often subject to **elite capture and selection biases**. However, **IFPRI-ICAR study** depicted there was **no selection bias** in terms of social, economic, and farming characteristics. 30% of farmers received the **income benefit within three months** of the scheme's implementation.
  - Banking infrastructure created through Pradhan Mantri Jan Dhan Yojana (PMJDY), played a key role in the **funds' disbursement**.
- **Compatible with WTO norms:** The scheme assumes importance as India's **farm subsidy and export subsidy are increasingly being challenged** at the World Trade Organization (WTO) for violating multilateral trading rules. Direct income support is considered part of the **Green Box** at WTO.

#### Issues with the scheme

- **Insufficient amount:** Given that India's poverty line is **₹32 per person per day in rural areas and ₹47 in urban areas**, according to the **Rangarajan Committee**, the income support of **₹17 a day for a household** (offered by PM-KISAN), is largely insufficient for **even bare minimum sustenance** of vulnerable farmers.
- **Neglect of lessee cultivators and sharecroppers:** PM KISAN has not **explicitly mentioned the benefits accruing to lessee cultivators or sharecroppers**. Though KALIA scheme in Odisha offers benefit of Rs. 10,000 per sharecropper / lease holder per year, **identification** of tenant farmers remains a huge challenge there.
- **Concerns of data inconsistencies in identification of beneficiaries:** In light of fact that many states have **incomplete tenancy records** and land data are not digitised, identification of beneficiaries is **daunting**.
  - Results of a joint study conducted by NITI Aayog and Department of Food in 2016 suggest that the **government's pilot programmes** to replace subsidised food grains with cash in three Union Territories have failed due to **data inconsistencies**.
- **Failed transactions:** There are several reasons for transaction's failure under the PM-KISAN scheme, such as **account closed or transferred, invalid IFSC code, account inactive, account dormant**, amount exceeding the limit set on account by the bank for credit/debit per transaction, among others.
- **Many beneficiaries left out:** Study done in Andhra Pradesh has shown that about **29% of the farmer beneficiaries** of the scheme in the State **have not received their full benefits**. Further, good number of **bank rejection cases and 'State action required'** cases were unresolved for **three to 18 months**.

#### Road Ahead

- **Adequate cash transfer:** To be effective, any cash transfer scheme should ensure that there is **enough cash provided** to help **bring an affected community out of poverty**. For instance, the **Rythu Bandhu in Telangana** provides ₹4,000 per acre to each farmer in each season.
  - Also, **Krushak Assistance for Livelihood and Income Augmentation scheme in Odisha** offers ₹5,000 for a farm family over five seasons, **among other benefits**.
- **Index transfers with inflation:** Given the **volatile market and price fluctuations** in different regions, it is important to index the cash transfers to **local inflation**. The failure of Direct Benefit Transfer in kerosene in Rajasthan is a case in point, where the cash transferred to families has been insufficient to purchase kerosene, as the **market price increased substantially**.
- **Better timing of providing benefits:** **IFPRI-ICAR study** found that farmers receiving instalments in the agricultural peak season are more likely to spend it on agriculture, and those **getting it in the off-season are more likely to spend it on consumption**. Thus timing of benefits has **implications on spending patterns**.

- **Multiplier effects:** Study has found that by investing **more in agricultural advisory services**, the government can encourage farmers to **invest some or all part of the income support in productive assets** for achieving the multiplier effect of PM-KISAN. Therefore, PM-KISAN along with agricultural advisory services has the potential to **break the cycle of intergenerational poverty**.
- **Strengthening IT backbone:** States with **robust computerized land records data base and a good IT infrastructure** are in a better position to implement PM-KISAN. Farmers not having bank accounts should be **encouraged to open 'no-frills' accounts** under the Jan-Dhan Yojana.
- **Investing in infrastructure and R&D:** Any income support scheme can't cover all the farm households and therefore, enhancing **investments in rural infrastructure** (roads; irrigation, marketing infrastructure, etc.) and **agri R&D** would have long-term outcomes in **raising farm incomes**.

### 3.7. COMPTROLLER AND AUDITOR GENERAL (CAG) REPORT ON INDIAN RAILWAYS

#### Why in news?

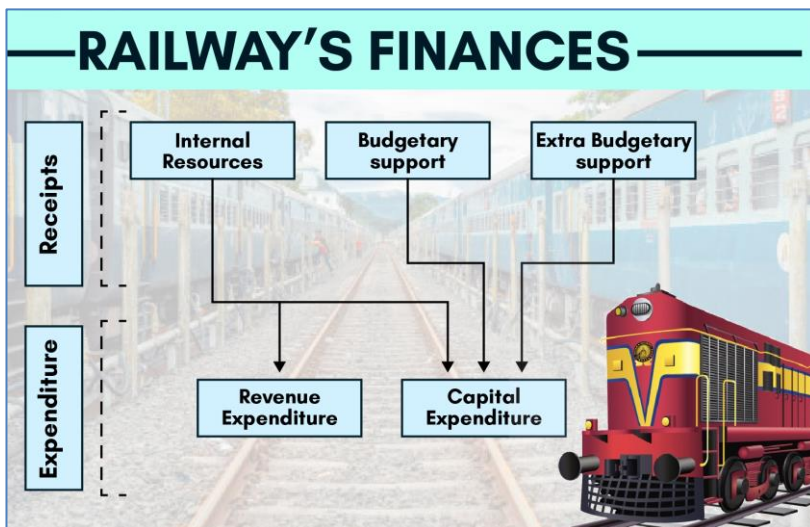
Recently, CAG report on the Indian Railways' (IR) finances tabled in Parliament paints a grim picture based on earnings, expenditure, reserves and operational efficiency.

#### Key Highlights of the report

- **Decrease in receipts:** Total Receipts **decreased by 8.30% in 2019-20** as compared to 6.47% increase in 2018-19.
- **Cross-Subsidization:** Profits from freight traffic were utilised to compensate for the loss on operation of passenger and other coaching services.
- **Coal dependence:** Heavy dependence on transportation of coal which constituted around **49% of the total freight earnings** during 2019-20. Any shift in bulk commodities transport pattern could affect the freight earnings significantly.
- **Operating Ratio (OR):** OR **deteriorated to 98.36% in 2019-20** from 97.29% in 2018-19. Due to **less appropriation to Pension Fund**, Railways could show surplus and higher OR.
  - OR is the **ratio of the working expenditure** (expenses arising from day-to-day operations of Railways) **to the revenue earned from traffic**.
  - A higher ratio indicates a **poorer ability to generate surplus** that can be used for capital investments.
- **Capital Output Ratio (COR):** COR **increased in 2019-20**, indicates the decrease in physical performance of the IR as compared to capital employed.
  - COR indicates the **amount of capital employed to produce one unit of output**.
- **Decline in internal resources:** Contribution of **internal resources for capital projects declined** resulting in greater dependence on Gross Budgetary support (GBS) and Extra budgetary resources (EBR).

#### Comptroller and Auditor General (CAG) of India

- The CAG is an **independent authority** established under **Article 148** and **appointed by President**.
- He is the head of the **Indian Audit and Accounts Department**.
- He is the **guardian of the public purse** and controls the entire financial system of the country at the Centre and state level.
- The **administrative expenses** of the office of CAG are charged upon the **Consolidated Fund of India**.
- CAG shall **not be eligible for further office**.
- CAG is fulfilling the **role of an Auditor-General only** and not that of a Comptroller.
- Its main role is to **audit and check accounts** relating to **all Union & state government departments and offices**, including Railways, Posts and Telecoms.
  - It also scrutinises the accounts of companies owned or financed by the government.
- CAG submits **three audit reports** to the President:
  - **Appropriation accounts**
  - **Finance accounts**
  - **Public undertakings**





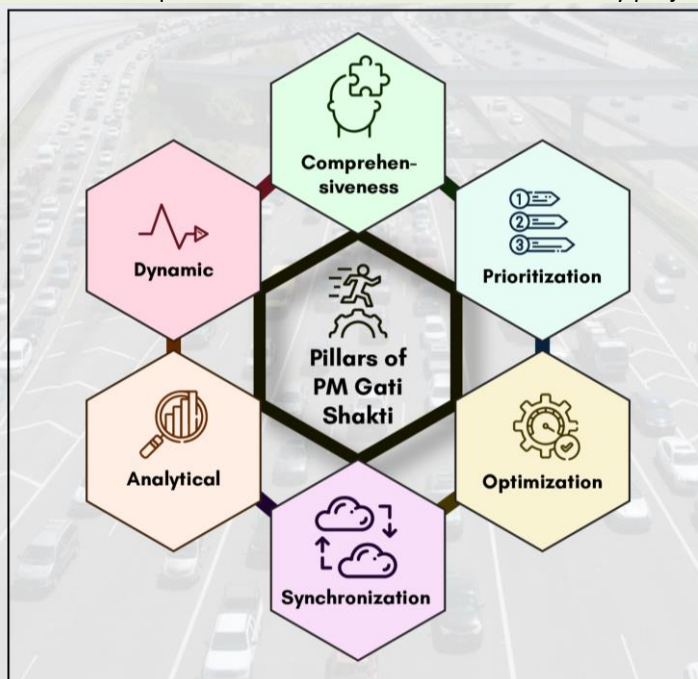
- IR has **three primary sources of revenue**:
  - ✓ **GBS** includes the sum it gets from the Central Government's budget allocation each year.
  - ✓ **Internal Resources** includes freight and passenger revenue and leasing of railway land.
  - ✓ **EBR** includes borrowings, earnings through partnerships and institutional finance.
- **Staff productivity**: Deterioration in staff productivity in 2019-20 was due to decline in freight carried (tonnage) and passenger originating (total distance carried/ travelled).

### Other issues associated with Indian Railways

- **Operating Efficiency**: Indian railways has a huge employee base which includes powerful workers' unions and become is a **centralised organisation with hierarchical decision-making**. As a result, even simple decisions take years to resolve.
- **Outdated technology**: The quality of railway services and technology usage is very poor. The existing technology of both electric and diesel locomotive is considerably old.
- **Low investment**: Poor finances of Railways had led to low investment, leading to **poor services and issues** like low speed, delays, and safety concerns, resulting in loss of remunerative business for Railways which has led to further **deterioration of finances**. This has become a vicious cycle for Railways.
- **Project pendency**: Projects are delayed for years due to inefficient work force and uncertainty in the availability of funds. Moreover, there is a constant pressure to undertake new project.
- **Infrastructure**: The biggest constraint that railways face today is of **inadequate network capacity and infrastructure** with the increase in traffic output thus, there is a **huge congestion** of the system.
- **Increase in competition**: The competition with road and airline transport is growing in intensity and the **lack of coordination** between railways and road transport has lowered the earning capacity of the railways. Beside this, **without ticket journey** also makes **heavy losses for railway** department.
- **Common corridor**: There is a **common corridor for both freight and passenger traffic**. Passenger trains are given importance over running of freight trains leading to financial losses.

### Steps taken by government to improve Indian Railways

- **PM Gati Shakti- National Master Plan for Multi-modal Connectivity**: To bring Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.



- **National rail Plan (NRP) 2030**: To develop infrastructure by 2030 to cater to the traffic requirements up to 2050 and increase modal share of rail in freight to 45%.
  - **Vision 2024** has been launched for accelerated implementation of certain critical projects by 2024 such as **100% electrification, multi-tracking of congested routes** etc.
- **Encourage private entities**: Bibek Debroy Committee, 2015 had recommended private entry into running **both freight and passenger trains** in competition with Indian railways should be allowed.
- **Rail Development Authority (RDA)**: Centre approved setting up RDA, an independent regulator **to recommend passenger and freight fares and set service level benchmarks**.
- **Dedicated Freight Corridors (DFCs)**: To faster transportation of goods and reduced logistic cost and improved supply chain efficiency.
- **Bharat Gaurav Trains scheme**: To showcase the country's rich cultural heritage as well as magnificent historical places to the public.
- **Miscellaneous E-Receipts System (MERS) portal**: To facilitate digital payments of inward receipts to Railways.

### Way forward

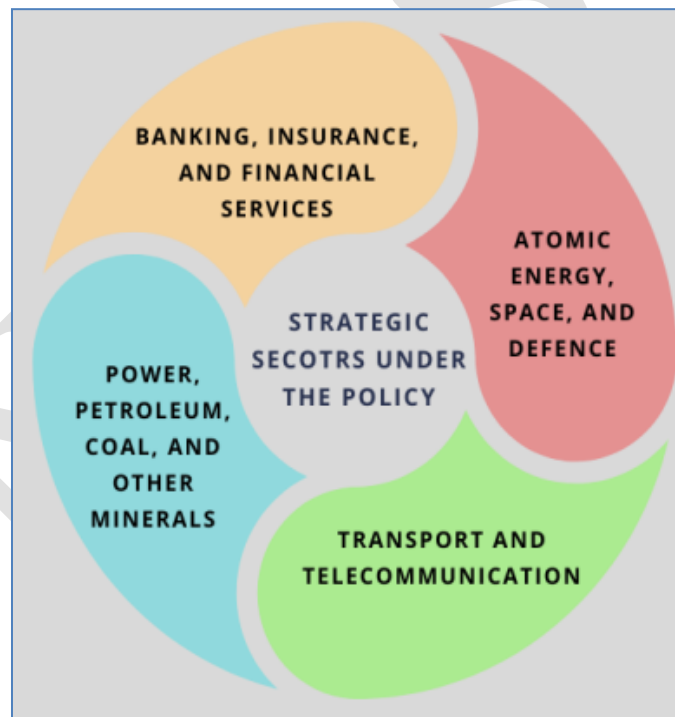
- **Infrastructure**: The government should undertake a **massive infrastructure expansion and decongestion programme** with up-gradation of technology and judicious electrification of tracks along with enhancement of terminal capacity.

- **Technology:** There is need for introduction of technology with **higher horsepower electric and diesel locomotives** which are more fuel efficient. It is also necessary to build a technology base of the country to achieve self-sufficiency in railway sector.
- **Diversify freight basket:** There is need to take steps to diversify their freight basket to enhance freight earnings and also exploit its idle assets to increase other earnings.
- **Improve service quality:** To keep railway stations and trains clean, punishable law can be introduced along with improving food quality and amenities at railway station, train coaches etc.
- **Revisit tariffs:** It is imperative to revisit the passenger and other coaching tariffs so as to recover the cost of operations in a phased manner and reduce its losses in its core activities.

## 3.8. NEWS IN SHORTS

### 3.8.1. GUIDELINES FOR CENTRAL PUBLIC SECTOR ENTERPRISE (CPSE) DISINVESTMENT RELEASED BY MINISTRY OF FINANCE

- Guidelines are aimed at **privatisation, merger, closure or subsidiarisation of non-strategic CPSEs** to implement new PSE Policy.
- **Key provisions**
  - **Department of Public Enterprises to identify CPSEs for closure or privatization** in non-strategic sectors and prepare note for Cabinet Committee on Economic Affairs approval.
  - Once approved, disinvestment or closure **process to be completed within seven months.**
- **Disinvestment typically refers to selling or liquidating an asset or subsidiary** either as a strategic move or for raising resources. It is also **referred to as 'divestment' or 'divestiture'.**
- **Main objectives are** to reduce financial burden on government, introduce, competition and market discipline, encourage wider share of ownership etc.
- **Based on the percentage of stake sale, it is of three types:**
  - **Minority disinvestment:** government retains a majority stake (more than 51%) and management control. E.g. ONGC Limited.
  - **Strategic disinvestment:** Sale of 50% or even higher portion of the government shareholding, along with transfer of management control. E.g. planned sale of BPCL.
  - **Complete disinvestment:** Majority disinvestment where 100% control of the company is passed on to a buyer. E.g. recent sale of Air India.
- **New Public Sector Enterprise (PSE) Policy**
  - Notified in February 2021 for Atmanirbhar Bharat, **new policy classified CPSEs into strategic and non-strategic sectors with exemption to certain CPSEs** which are not for profit or support the vulnerable and weaker sections.



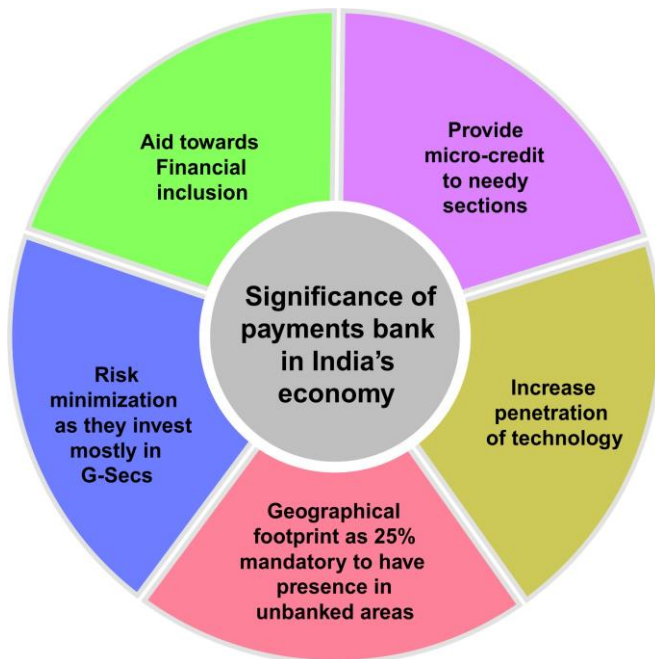
### 3.8.2. PAYMENTS BANK

- Recently, Paytm Payments Bank was accorded scheduled bank status by the Reserve Bank of India.

#### Benefits of getting scheduled bank status

- Scheduled banks refer to those banks which have been included in the **Second Schedule of Reserve Bank of India Act, 1934.**
  - Other payments banks that have been added are **Fino Payments Bank** and **India Post Payments Bank.**
- With the scheduled bank status, Paytm Payments Bank can explore new business opportunities, take part in **Request for Proposals** issued by the government and other large corporations, **primary auctions, fixed-rate and variable rate repos** and **reverse repos.**
- It can also participate in **Marginal Standing Facility** and will be eligible to **partner** in **government-run financial inclusion schemes.**

- It is now eligible for **refinancing facility from the RBI** at the **bank rate**, **acquire membership to clearing house**, and get **access to currency storage facility**.



#### About Payments Bank

- They were created on recommendations of RBI's **Committee on Comprehensive Financial Services for Small Businesses and Low Income Households** headed by **Nachiket Mor** in **2013**.
- It is **registered under Companies Act, 2013** and licensed under **Banking Regulation Act, 1949**.
  - A Promoter / promoter group can also have **Joint Venture** with an existing scheduled commercial bank.
- It has to **maintain Cash Reserve Ratio (CRR)** with RBI and invest in eligible government securities/ treasury bills under **Statutory Liquid Ratio (SLR)**.
- It can access **inter-bank uncollateralised call money market** and **collateralized repo and CBLO market** for temporary liquidity management.
- **Minimum paid-up equity capital** of the payments bank is **INR 100 crores** and it is required to maintain a minimum **capital adequacy ratio of 15%**.
- **Promoters** of the payments bank should hold at least **40% of its paid-up equity capital** for the **first 5 years**.

### 3.8.3. IRDAI RETAINS LIC, GIC, NEW INDIA AS DOMESTIC SYSTEMICALLY IMPORTANT INSURERS (D-SIIS)

- Life Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC) and New India **have been identified, like in 2020-21, as D-SIIs for 2021-22**.
  - **D-SIIs are identified on an annual basis** by Insurance Regulatory and Development Authority of India (IRDAI).

- D-SIIs refer to insurers of such size, market importance and domestic and global inter connectedness, **whose distress or failure would cause a significant dislocation in the domestic financial system**.
  - Their continued functioning is thus critical for the **uninterrupted availability of insurance services** to the national economy.
  - They are perceived as insurers '**too big or too important to fail**'.
- **Parameters for identification of D-SIIs**
  - **Size of operations in terms of total revenue**, including premium underwritten and value of assets under management.
  - **Global activities** across more than one jurisdiction.
- Due to their importance, D-SIIs are **subjected to additional regulatory measures** to deal with the systemic risks and moral hazard issues.
- Similarly, **RBI identifies domestic systemically important banks (D-SIBs)** or banks that are considered as "too big to fail".
  - **SBI, ICICI Bank, and HDFC Bank** are identified as D-SIBs for 2020-21.

### 3.8.4. SEBI SEEKING TO REGULATE ALGO TRADING

- **Algorithmic trading or Algo trading** is a **computer assisted** buying and selling of stocks.
  - Under it, **pre-programmed computer strategies** execute buy and sell trades depending on **set parameters, instructions or market pattern and conditions**.
  - Around **50 per cent of the daily trading volume** in Indian stock markets is through an advanced form of algo trading.
- **Benefits of Algo-trading:** It can place high-volume orders at **high speed**, reduction of transaction costs, can identify differently priced stocks, avoid significant price changes, **highly accurate** without any human errors.
- **Need to regulate**
  - Algo trading came to India in 2008, but in 2015, it was revealed that NSE gave **preferential access** to a few algo traders.
  - Can be **misused for systematic market manipulation** and to **lure retail investors** by guaranteeing them higher returns.
- **Concerns regarding regulation**
  - **Algo trading volumes could fall** once the proposed SEBI norms are implemented, since approval of pre-programmed trading strategies **could be a complex affair**.
  - All algo strategies **may not be approved by the exchanges** due to their **complex nature**.



- Submitting algo programmes to exchanges for their approval would mean that **vendors may have to reveal their formula.**

- Rationale behind it is that **price signals emerging from production side** of the economy are **not influenced by the fiscal policy.**

### 3.8.5. WHOLESALE INFLATION

Wholesale inflation, based on the Wholesale Price Index, **jumped to 14.23% in 2021 from 12.54% in 2020** (on a year-on-year basis).

#### More on News

- This is the **highest WPI rate in the 2011-12 series** and has **remained in double digits** for the **8<sup>th</sup> consecutive month.**
- This is reflective of manufacturers **passing on the higher input costs to their output prices.** Fuel continues to push up input cost pressure, despite recent reduction in taxes on fuel.
- Rising inflation has raised fears that it may translate into **elevated retail or consumer price-based inflation** in short term.
- **Factors responsible for rising inflation**
  - The high rate of inflation in 2021 is primarily due to **rise in prices of mineral oils, basic metals, crude petroleum & natural gas, chemicals and chemical products, food products** etc.
  - Since fuel is a **major input into transportation cost**, higher fuel prices **push up the distribution cost** further.
  - **Input price pressures** and **supply-side shortages** are pushing up prices at the consumer level and may further impact demand.
  - The risks from the **new Omicron variant** are also expected to **push up global commodity prices.**
  - Recent **depreciation of Rupee in Forex market** has also contributed to higher Wholesale Inflation.

### 3.8.6. INCENTIVE SCHEME TO PROMOTE RUPAY DEBIT CARDS APPROVED

- Cabinet approved an incentive scheme worth ₹1,300 crore **for promotion of RuPay debit cards and low-value (up to ₹2,000) BHIM-UPI transactions** (person-to-merchants(P2M)).
- Under the scheme, **acquiring banks will be incentivised, by way of paying percentage of value of transactions (P2M) done through RuPay Debit cards and BHIM-UPI modes of payments.**
- **Benefits of the scheme**
  - Will facilitate acquiring Banks in **building robust digital payment ecosystem.**
  - Help in **making accessible digital modes of payments to unbanked and marginalized populations.**

### 3.8.7. MIS (MANAGEMENT INFORMATION SYSTEM) PORTAL

- **Department of Land Resources developed MIS portal for rankings of States/UTs in Land Acquisition Projects** under Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
  - In the first phase, **land acquisition undertaken from 01.01.2014 onwards will be covered** for ranking purposes.
- **Ranking will make it easier for states to monitor the progress** of the developmental projects and will help in **increasing speed of the projects.**

### 3.8.8. ULIP HACKATHON- LOGIXTICS

- Department for Promotion of Industry and Internal Trade (DPIIT) has launched the **Unified Logistics Interface Platform's (ULIP) Hackathon – 'LogixTics'.**
- **About ULIP Hackathon:**
  - It is organised by **NITI Aayog and Atal Innovation Mission** and supported by others to crowdsource ideas which will **benefit logistics industry.**
  - ULIP is designed to **enhance efficiency and reduce logistics cost** in India by creating a **transparent platform** that can provide **real time information** to all stakeholders and **remove all asymmetry information.**
  - **ULIP will bring more transparency and visibility** to the whole trade making India logistically more efficient and competitive.

#### Wholesale Price Index

- It **measures average change in the prices of commodities for bulk sale** at the level of **early stage of transactions.**
- The index basket of the WPI covers commodities falling under the 3 Major Groups namely **Primary Articles, Fuel and Power and Manufactured products.**
- The prices tracked are **ex- factory price for manufactured products, agri-market (mandi) price for agricultural commodities** and **ex-mines prices for minerals.**
- Weights given to each commodity covered in the WPI basket is **based on the value of production adjusted for net imports.** WPI basket **does not cover services.**
- It is released by **Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade.**
- The base year of All-India WPI has been revised from **2004-05 to 2011-12.**
  - A significant change in the new series of WPI has been the **exclusion of indirect taxes while compiling indices** of manufactured products.

### 3.8.9. NSE PRIME

- National Stock Exchange (NSE) has launched a new **corporate governance initiative** 'NSE Prime'.
- **About NSE Prime:**
  - It is a framework that prescribes **higher standards of corporate governance for listed companies** than those required by regulations.
  - All the NSE-listed companies can adopt **NSE Prime voluntarily**.
  - **Benefits:**
    - ✓ Will **raise the bar for corporate governance standards** in India,
    - ✓ **Enable investors to identify companies** that have voluntarily signed up for higher standards of corporate governance,

- ✓ **Broaden the quality of investors** in listed companies etc.

### 3.8.10. CARD TOKENISATION

- RBI has **deferred the implementation** of tokenisation of cards for online transactions by six months i.e., till June 30, 2022.
  - The decision came after **receiving various representations** on the card tokenisation guidelines.
- Tokenisation is a process by which **card details are replaced by a unique code or token**, allowing online purchases to go through **without exposing card details**.
- It will help in improving **data security**.



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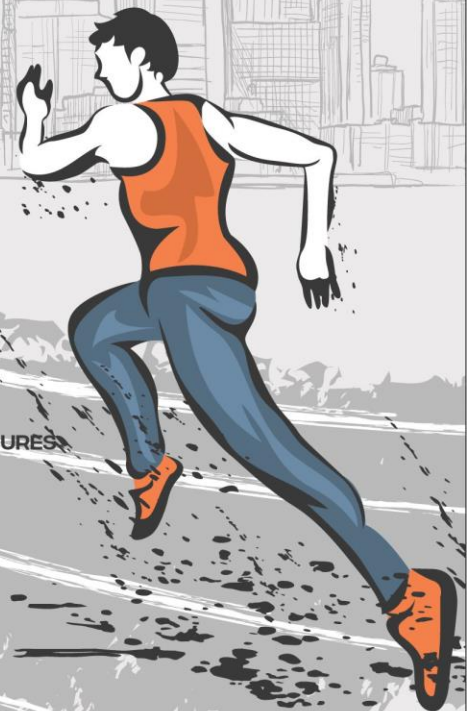
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# 4. SECURITY

## 4.1. EMERGING TECHNOLOGIES AND THREAT TO NATIONAL SECURITY

### Why in News?

Recently, Union Home Minister said that **indigenously made anti-drone technology would soon be available** to tackle the challenges faced by drones in areas bordering Pakistan.

### More on News

- As drones from Pakistan continue to pose a threat in the border areas, the **country's security agencies have been discussing measures to deal with the arising situation.**
  - Recently, **Air Force Station Jammu was attacked by low-flying drones** that carried Improvised Explosive Devices (IEDs).

**Emerging Technologies**

- It commonly refers to **technologies that are currently developing, or that are expected to be available within the next five to ten years**, and is usually reserved for technologies that are creating, or are expected to create, significant social or economic effects.
- It includes technologies like artificial intelligence, machine learning, natural language processing, 3D printing, blockchain, robotic process automation and Internet of Things.

### Technology and Security

- **Leadership in technological innovation** historically has been a **crucial national security asset** for major global powers.
- **Development and introduction of weapons** such as modern small arms, nuclear weapons, stealth technology, and guided missiles **altered the security equation** and, in some instances, transformed international relations.

Emerging Technology	Possible Benefits	Possible Threat
Drones/ Unmanned aerial vehicles (UAV)	<ul style="list-style-type: none"> <li>• UAVs have been used extensively for various purposes like <b>aerial photography and filmmaking, rescue operations, wildfire mapping, crowd monitoring, etc.</b></li> </ul>	<ul style="list-style-type: none"> <li>• UAV could be used to <b>conduct reconnaissance, to spoof, distract or desensitize security forces.</b></li> </ul>
Remotely operated weapons systems (ROWS)	<ul style="list-style-type: none"> <li>• <b>Enhanced Surveillance</b> (chemical and bio detection sensors, drones etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Cyber infiltrators could gain access to control systems</b> and change the parameters of who is allowed in a given area and who is considered a threat thereby facilitate theft or sabotage.</li> </ul>
Artificial intelligence (AI)	<ul style="list-style-type: none"> <li>• <b>Counter terrorism and law enforcement informatics</b> via predictive analytics and AI.</li> </ul>	<ul style="list-style-type: none"> <li>• Automated, AI powered cyberattacks; risk of over-reliance on and over-complication of these systems; possibility that <b>terrorists and other adversaries will employ AI to help them plan and conduct more efficient physical attacks etc.</b></li> </ul>
Cyber Technology	<ul style="list-style-type: none"> <li>• <b>Enhanced security</b> at nuclear power facilities and other complex industrial sites</li> </ul>	<ul style="list-style-type: none"> <li>• Increased risk of <b>hacking, disruption, and potential for sabotage</b> of critical infrastructure.</li> </ul>
Enhanced Human Performance	<ul style="list-style-type: none"> <li>• Includes a wide variety of focus, memory and emotion manipulating neuropharmaceuticals (nootropics), <b>physical performance-enhancing drugs</b> etc.</li> </ul>	<ul style="list-style-type: none"> <li>• This might enable new ways to <b>covertly perform reconnaissance, interface with computer systems</b> or communicate with collaborators.</li> </ul>
Increasing use of outer space for defence and security	<ul style="list-style-type: none"> <li>• Plays a <b>role in States' intelligence; surveillance and reconnaissance; troop movement tracking on land</b>, at sea, and in the air; classified and unclassified telecommunications; GPS-guided weapons; cyber-warfare etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Expected introduction of directed energy weapons (DEW) and <b>possible increase in the military exploitation of satellite systems</b> for combat purposes.</li> </ul>

### Changing face of National security due to Emerging Technologies

- **Newer Threats:** New technologies and novel applications of existing technologies have the potential to disrupt labor markets and alter health, energy, and transportation systems.
- **Limited regulation:** Technological innovation is largely taking place beyond the purview of governments. In many cases, the rate of innovation is outpacing states' ability to keep abreast of the latest developments and their potential societal impacts.



- **Powerful adversaries:** Emerging technology will also allow our adversaries to more readily develop weapon systems that can strike farther, faster, and harder and challenge India in all warfare domains, including space.
- **Threat from Non-state actors:** Rapid and profound advances in hardware and software, paired with the global shift to digitally networked communications and transactions, have increased collective vulnerability to malicious states and non-state actors.
  - Groups such as al-Qaeda and ISIS used online communication on Facebook, Twitter, YouTube, and other platforms to increase their prominence and recruit collaborators.
- **More potent terrorist threats:** Potential for terrorists to acquire a nuclear weapon (or weapons-usable material) to compromise the safety of a facility housing nuclear material and/or other critical infrastructure.
- **Threat of weapons of mass destruction (WMD):** Hostile nations, realizing that they cannot stand up to technologically superior military forces, will be stimulated to develop WMD as an offset to these capabilities.

#### Steps taken by India

- In 2015, **National Supercomputing Mission** was launched to install 73 indigenous supercomputers throughout the country by 2022.
- **National Mission on Quantum Technologies & Applications** was announced in 2020 to oversee the development of quantum technologies for communications, computing, materials development and cryptography.
- **DRDO has also established several dedicated laboratories focusing on futuristic technologies** such as artificial intelligence, quantum and cognitive technologies, asymmetric technologies and smart materials.
- **Indian military is reportedly developing advanced military systems** such as directed energy weapons (DEWs), optionally manned combat platforms and swarm drones.
- Ministry of External Affairs recently (MEA) created a **New, Emerging and Strategic Technologies (NEST) division** to deal with the foreign policy and international legal aspects of new and emerging technologies.
- India has a **Defence Cyber Agency and a National Technical Research Organisation**, which are responsible for mechanisms that work to counter cyber risks and threats to the country.
- **Hand-held Thermal Imagers** have been provided to Indian security forces and being used everywhere including, manning the International Border (IB) and the Line of Control (LoC).

#### Way forward

- **Incentivizing investors and corporations** to consider national security in their decision-making process while initiating partnerships/programs to foster innovation.
- **Multilateral governance system** involving a greater number and variety of actors to initiate, shape, and implement both technical and normative solutions.
- **More partnerships and collaborative environments** to share worldwide emerging technology trends, address competitive threats, share national security concerns, and consider civil liberties, privacy, and ethical implications.
- **Forming strategic public-private partnerships** with the aim of allocating private capital to support national security objectives.
- **Develop and adopt advanced technology applications** within government and improve the desirability of the government as a customer of the private sector.

## 4.2. CLIMATE CHANGE AND SECURITY

### Why in News?

India voted against a United Nations Security Council (UNSC) draft resolution that for the first time would have defined climate change as a threat to peace.

### More on the news

- The Security Council draft resolution was co-sponsored by 113 UN Member States and tabled by Ireland and Niger, the council's current president.
- It was aimed at **systematically integrating climate-related security risks into the UN's conflict prevention, conflict management and peacebuilding work.**
- The vote on the resolution in the 15-member council was 12 in favor, with Russia and India opposed and China abstaining.

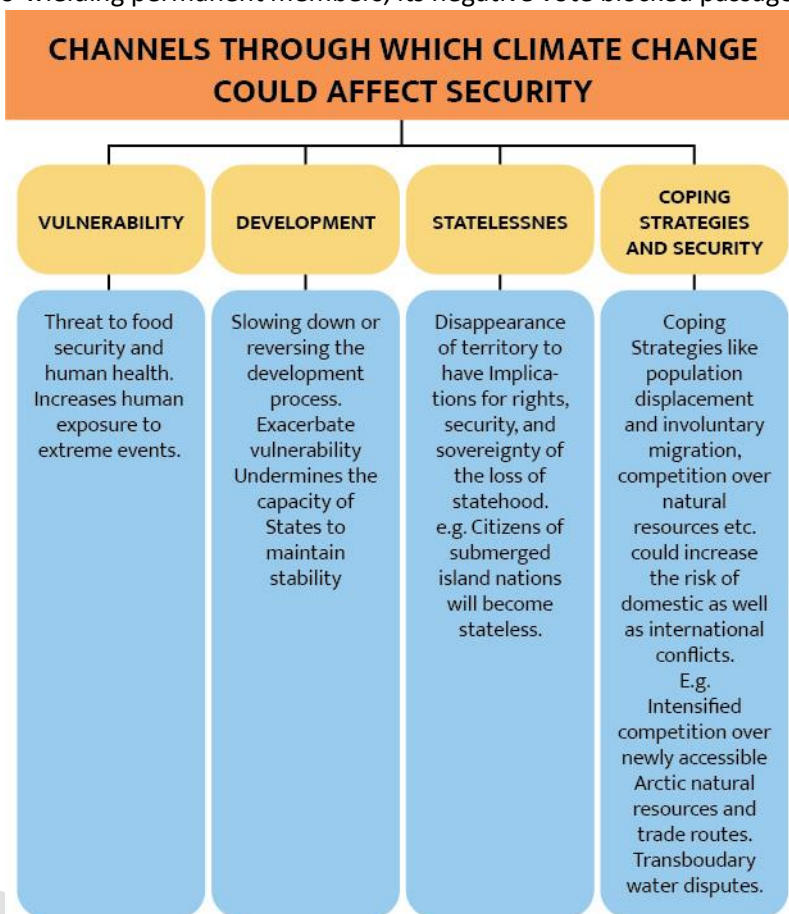
#### About UNSC

- It is one of the six principal organs of the United Nations (UN).
- Its primary responsibility is maintenance of international peace and security.
- It has 15 Members, ten elected members, and five permanent members--China, the United States, France, the United Kingdom, and the Russian Federation.
- Each member has one vote, but permanent members have the power to veto any substantive resolution.

- Because Russia is one of the council's five veto-wielding permanent members, its negative vote blocked passage.

### Need of the resolution

- **Interlinkage between Climate change and security:** Climate is creating security risks in the world (see infographic), which will exacerbate in the future with water shortage, migration and a destruction of livelihoods.
  - For example, people and countries most vulnerable to climate change also are most vulnerable to terrorist recruitment and violence.
- **Progress of UNFCCC conferences is slow** and outcomes are inadequate, leading to demand of faster collective action to tackle climate change and associated challenges.
- **UNSC already has tools to address climate change within its mandate:** It is the principal organ of the United Nations responsible for international security and can ensure that the security impacts of climate change are integrated into the critical work of peacekeeping, peacebuilding and humanitarian response.



### Concerns regarding resolution

- **Viewing conflicts through the prism of climate change is misleading and an oversimplification:** While climate change has the potential to impact peace and security, the nexus between the two is complex. This diverts the attention from genuine deep-rooted reasons for conflict in some countries.
  - For instance, other factors such as environmental degradation, food shortages and unfair distribution of resources are most likely to lead to tension and conflict.
- **Climate change lies outside the ambit of UNSC:** UNSC's primary responsibility is "maintenance of international peace and security" and climate change-related issues are outside its ambit. All matters related to climate change are being discussed in the UN Framework Convention on Climate Change (UNFCCC), a specialised agency.
- **Lake of participative approach:** Bringing the issue under the UNSC may give more powers to the world's industrialised countries, which hold a veto power, to decide on future action on climate-related security issues, unlike UNFCCC, where decisions are made by consensus.

### Way forward

- **UNFCCC can expand the scope of discussions to include climate-related security issues.**
- **International community must provide stronger support to climate change adaptation** in developing countries, including through investments in capacity-building at all levels.
- **Enhance global efforts to ensure the sustainable and equitable development of all countries,** notably through developed countries' meeting their international commitments on development assistance.
- **Anticipate and prepare to address unprecedented challenges** posed by climate change like e possibility of large numbers of persons displaced across borders by climate change, prospect of statelessness of citizens of submerged island nations, drastic reduction in water availability etc.
- **Improve the flow of information and sharing of assessments,** particularly on early warning, between different regional and international organizations.

## 4.3. INTERNET SHUTDOWN

### Why in news?

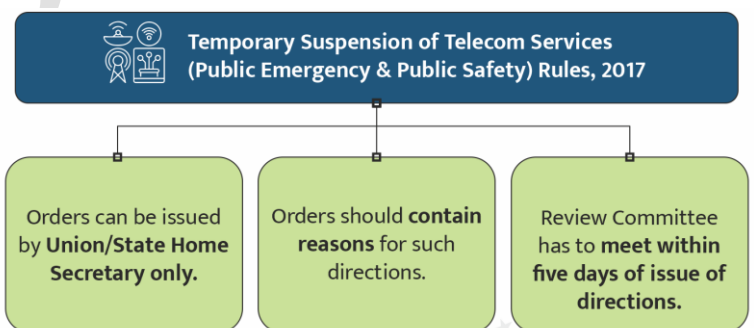
Report on 'Suspension of Telecom Services/Internet And Its Impact' was presented in the parliament by Standing Committee On Communications And Information Technology (2021-22).

### About Internet Shutdown & Rules related to internet shutdown

- An Internet shutdown is an **intentional disruption of digital communications** leading to little or no access to the Internet.
  - Shutdowns **can take place nationally or target a certain region**.
  - According to Software Freedom Law Centre (SFLC) there have been a **total of 550 internet shutdowns in India so far since 2012**.
- **Reasons for Internet Shutdown**
  - to improve the law and order situation,
  - bring peace, ensure security and stability of the state.
  - to stop the spread of fake news, administrative convenience.
- **Rules/legal provisions for Internet shutdown**
  - **Temporary Suspension of Telecom Services (Public Emergency & Public Safety) Rules, 2017**.
    - ✓ Currently, suspension of telecom services (including internet shutdowns) is governed by the **2017 Rules** notified under the **Indian Telegraph Act, 1885**.
    - ✓ 2017 Rules **provide for temporary shutdown of telecom services** in a region on grounds of public emergency (up to 15 days at once).
    - ✓ 1885 Act **empowers the central government to regulate various types of telecom services** including internet services and grant licenses for them.
  - **Supreme court in its 2020 judgment**
    - ✓ **Directed for publishing of all orders for suspension** of telecom services to enable the affected persons to challenge it before the High Court
    - ✓ Suspending internet services **indefinitely is impermissible** under the Rules, 2017.
    - ✓ Order is **subject to judicial review**.
  - In view of SC judgements, **2017 Rules have been amended in 2020** to ensure that any suspension order issued under these rules **shall not be in operation for more than fifteen days** and that all such orders need to be published.

### Key observations by the committee on the 2017 rules

- **Inadequate rules for Internet shutdown:** No proper procedure has been laid down for lifting of internet shutdown.
- **Undefined Grounds for suspension of telecom services:** 'Public Emergency' and 'Public Safety', the two grounds on which internet shutdown can be ordered are **both un-defined in the 1885 Act or the 2017 Rules**.
  - In the absence of parameters to decide the merit of the internet shutdowns, shutdowns have been **ordered purely on the basis of subjective assessment by District level officer**.
- **Use for other purposes:** Shutdowns have been resorted to as a tool for routine policing and even administrative purposes, such as preventing cheating in exams to defusing local crime.
- **No records for Internet shutdown:** There are no records with Home Affairs or Department of Telecom on how many **states have issued internet suspension orders, including their details, reasons etc**.
- **Internet shutdown under Section 144:** As opposed to ordering shutdown under Suspension Rules, 2017, states have been ordering shutdowns under Section 144, Cr. P.C. which was clarified as **being unconstitutional by the Supreme Court**.
- **High Monetary loss due to Internet Shutdown:** As per Cellular Operators Association of India (COAI), **telecom operators lose INR 24.5 million per hour in every Circle Area where there is a shutdown or throttling**.



Earlier **before 2017 internet shutdowns were ordered under Cr.PC section 144**, but SC has disallowed it.

### Adverse impact of Internet Shutdowns

- **Impact on businesses and service delivery**
  - **India has more than 15 million WhatsApp Business users, a lot of whom are small and medium businesses**. They rely on digital modes of payment such as UPI.



- As per report by UK-based privacy and security research firm Top10VPN, **Internet shutdowns in 2020 cost India \$2.8 bn**, almost 70% of the total loss of \$4 bn to the world economy.
- **Impact government efforts of digitisation:** Shutdowns during the lockdown has a **major impact on education**. As learning for so many professional courses and competitions is being given online, **an internet blackout impedes learning opportunities**.
- **Violation of the rights of the citizens:**
  - **Around 42% shutdowns in 2020 directly impeded human rights** by abusing freedom of assembly, election interference and infringement on freedom of press.
  - Shutdown such as that imposed in J&K also **bring into question the principle of democracy being curbed**.

#### Recommendations made by Committee

- **Regulation of suspension of telecom service**
  - **Reviewing the Rules** to address all aspects of internet shutdown
  - Bringing the Rules **in tune with changing technology** to ensure minimum disturbance to the public,
  - Issuing **uniform guidelines for states/UTs**, required to be followed while ordering an internet shutdown
- **Grounds for suspension of telecom services:**
  - **Codifying defined parameters** that constitute as public emergency and public safety,
  - **Putting in place a mechanism** to decide the merit of an internet shutdown.
  - Maintain a **centralised database of all internet shutdown** orders in the country
- **Others recommendations**
  - Ensure that **internet shutdowns are resorted to as rarely as possible**.
  - DoT/MHA Department to **lay down a clear cut principle of proportionality and procedure for lifting of shutdown** so that these are not extended indefinitely even when the situation comes under control.
  - DoT to **explore the option of banning of selective services**, such as Facebook, WhatsApp, Telegram, etc. instead of banning the internet as a whole.

## 4.4. NEWS IN SHORTS

### 4.4.1. PINAKA EXTENDED RANGE (PINAKA-ER)

- **Pinaka-ER Multi Barrel Rocket Launcher System (MBRLS) was successfully tested** at Pokhran range.
- New Pinaka ER gives it a **range of around 70 km**, over the 45 km existing range of the missile.
  - **Pinaka can fire a salvo of 12 rockets** over a period of 44 seconds.
  - It has been **designed by DRDO Armament Research and Development Establishment laboratory** and Pune-based High Energy Materials Research Laboratory.
- Also, **Successful tests of Area Denial Munitions (ADM) and indigenously developed fuzes** have been carried out.

### 4.4.2. STAND-OFF ANTI-TANK (SANT) MISSILE

- Defence Research and Development Organisation (DRDO) and Indian Air Force (IAF) flight-tested the **indigenously designed and developed Helicopter launched SANT Missile** from Pokhran ranges.
- SANT missile is equipped with a **state-of-the-art millimetre wave (MMW) seeker which provides high precision strike capability** from a safe distance.

- It can **neutralise targets in a range up to 10 kms**.
- This is the **third in the series of indigenous stand-off weapons** to be tested in recent times after long range bomb and smart anti airfield weapon (SAAW) for strengthening IAF.

### 4.4.3. SUPERSONIC MISSILE ASSISTED TORPEDO (SMART)

- Recently, **DRDO tested a long-range SMART** from Wheeler Island in Odisha.
- SMART is a next-generation missile-based **standoff torpedo delivery system**.
- It has been designed to **enhance anti-submarine warfare capability** far beyond the conventional range of the torpedo.

### 4.4.4. AGNI PRIME

- Defence Research and Development Organisation (DRDO) successfully test-fired the **new generation nuclear-capable ballistic missile 'Agni Prime'** from APJ Abdul Kalam island off the coast of Odisha in Balasore.
- It is the **sixth missile in the Agni series**, it has a **range of 1,000-2,000 kilometres** making it capable of covering vital targets all across Pakistan. It **weighs 50%**

less than the Agni 3 missile and can be launched from rail or road. It can be stored for a longer period and has easy movability.

#### 4.4.5. CONTROLLED AERIAL DELIVERY SYSTEM-500 (CADS-500)

- The Defence Research and Development Organisation (DRDO)'s Aerial Delivery Research and Development Establishment (ADRDE) in Agra, conducted a flight demonstration of its CADS-500.
- CADS-500 can be used for **precise delivery of payloads up to 500 kilograms at a predetermined location** by making use of manoeuvrable capabilities of **Ram Air Parachute (RAP)**.
- It **autonomously steers its flight path** using waypoint navigation towards target location by operating controls.

#### 4.4.6. VERTICAL LAUNCH SHORT RANGE SURFACE TO AIR MISSILE (VL-SRSAM)

- **India successfully test-fired the missile for the second time** from Chandipur off the coast of Odisha.
  - Launches were carried out for **demonstration of vertical launch capability**.
- It is meant for **neutralising aerial threats at close ranges, including sea-skimming targets**.
  - Sea skimming targets are those assets that **fly as close as possible to sea surface to avoid being detected by the radars** onboard warships.

- It is **indigenously designed and developed by DRDO for the Indian Navy**.

#### 4.4.7. PRALAY MISSILE

- **Launched by Defense Research and Development Organization (DRDO)**, maiden flight test of Pralay missile was successfully conducted.
- **About Pralay**
  - Indigenously developed **surface-to-surface missile**.
  - Has a range of 150-500 kilometres with an accuracy of less than 10 metres.
  - Has a guidance system that includes state-of-the-art navigation mechanisms and integrated avionics.

#### 4.4.8. ARMY SECURE INDIGENEOUS MESSAGING APPLICATION (ASIGMA)

- **Launched by:** Indian Army
- It is an **in-house messaging service** to meet real time data transfer and messaging requirements of the Army.
  - It is being deployed on the Army's internal network as a **replacement of Army Wide Area Network (AWAN)** messaging application.
- It has a variety of contemporary features including **multi-level security, message prioritisation and tracking, dynamic global address book** and various options to meet the Army's requirements.

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# 5. ENVIRONMENT

## 5.1. BIOLOGICAL DIVERSITY (AMENDMENT) BILL, 2021

### Why in News?

The Biological Diversity (Amendment) Bill, 2021 was recently introduced in Lok Sabha and then referred to a joint parliamentary committee (JPC).

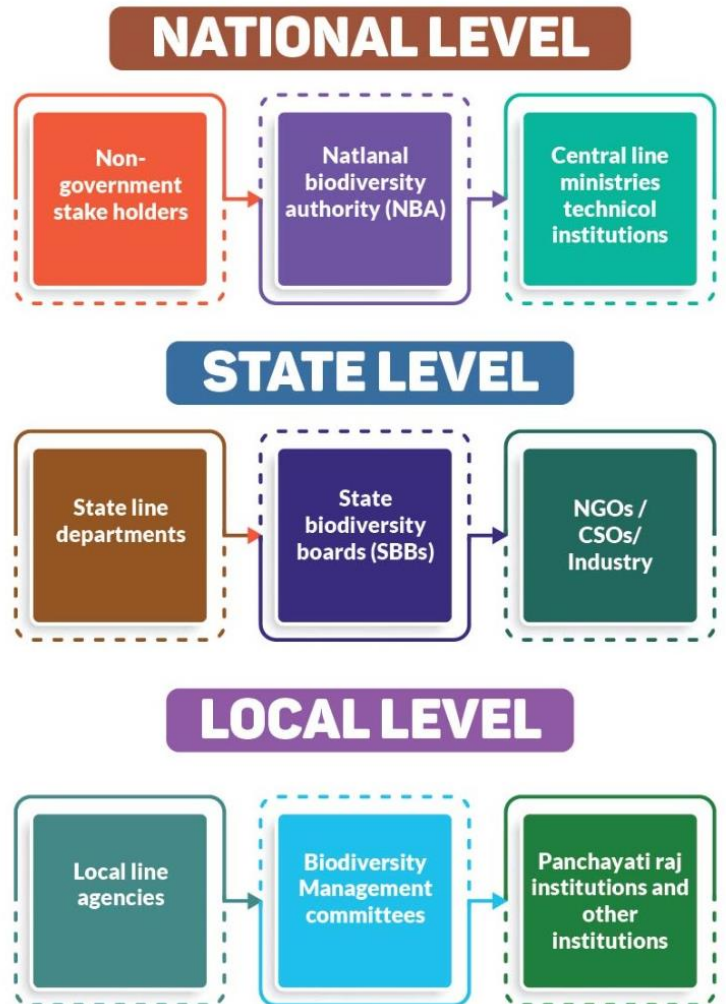
### About Biological Diversity Act, 2002

- It was enacted to provide for the conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources and knowledge.
- **Aim:** To fulfill India's obligations under the **Convention of Biological Diversity and Nagoya Protocol on Access and Benefit Sharing**.
- It provides for a decentralised three-tiered mechanism (see infographic) for implementation of the Act.
- **Biodiversity Management Committees (BMC)** are responsible for preparing **People's Biodiversity Registers** which keep a record of all flora and fauna including details of traditional knowledge available in their region.

### Key Provisions of the Proposed Amendments

- **Extension of Exemptions:** Registered AYUSH medical Practitioners, people accessing codified traditional knowledge, cultivated medicinal plants and its products, people who are practicing indigenous medicine including Indian systems of medicine for sustenance and livelihood are exempted from giving prior intimation to SBB for accessing biological resource from certain purposes.
- **Simplifying access to biological resources and intellectual property rights (IPR):**
  - Certain entities must seek approval from the NBA for obtaining biological resources, including organisations registered in India, with any non-Indian shareholding or management, which has been changed to any foreign-controlled company registered in India.
  - Applicants can now obtain NBA's approval before the grant of IPR and not before applying for IPR.
  - Anyone who does not need approval from NBA to access biological resources must

## IMPLEMENTATION ARCHITECTURE FOR BIODIVERSITY ACT

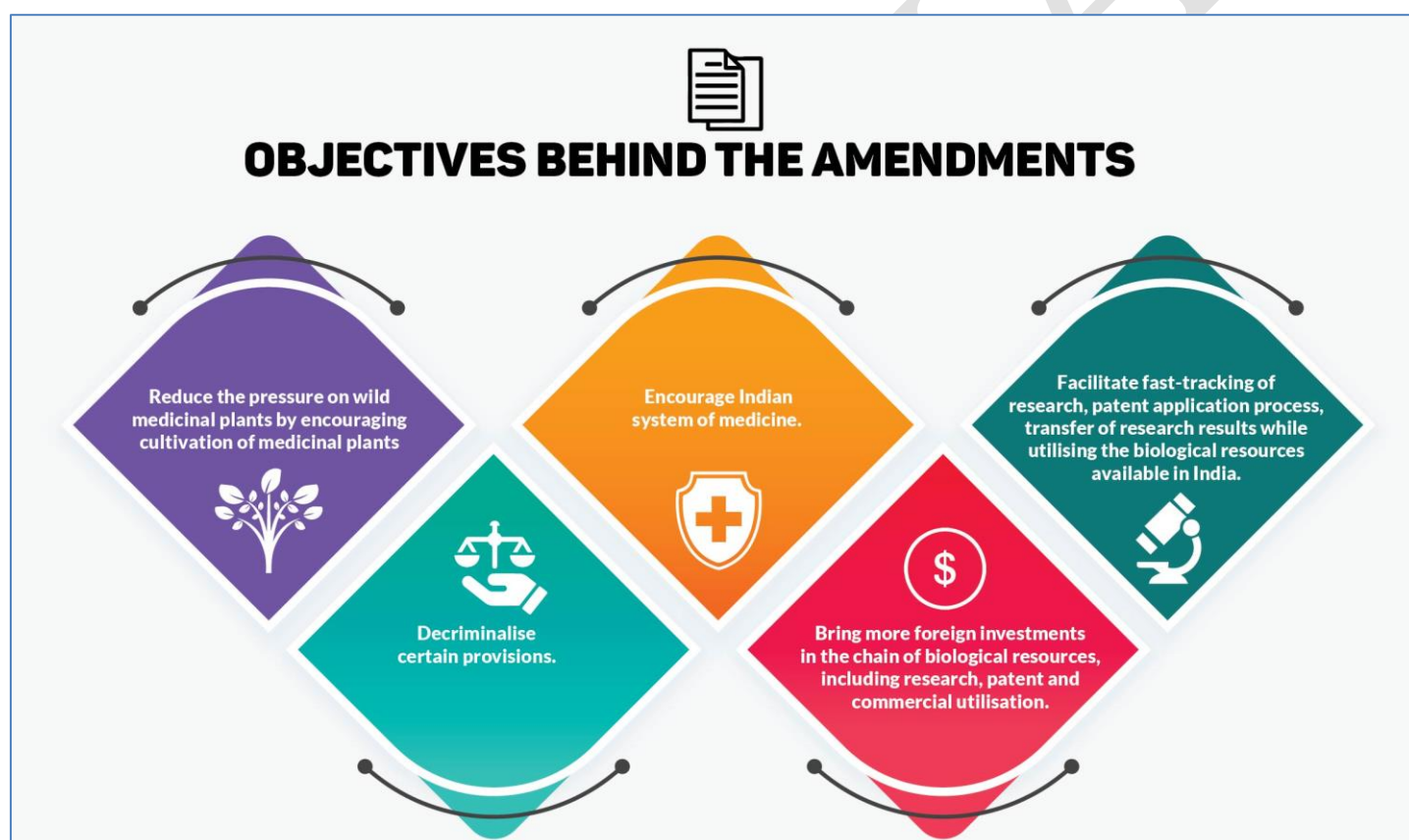


<ul style="list-style-type: none"> <li>▶ An international legally binding multilateral treaty.</li> <li>▶ 196 Parties, including India.</li> <li>▶ Opened for signature in 1992 at the <b>Rio Earth Summit</b>.</li> </ul>			
<b>3 MAIN OBJECTIVES</b>	Conservation of biological diversity	Sustainable use of the components of biological diversity	Fair and equitable sharing of the benefits arising out of the utilization of genetic resources
	Supplementary agreements (India has signed and ratified all 3)	Nagoya Protocol on Access and Benefit-sharing	Cartagena Protocol on Biosafety Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol



give prior intimation to the concerned SBB. Further, they must- register with the NBA before the grant of IPR, and get prior approval of the NBA before commercialising the granted IPR.

- **Reduction of certain offences:** The provision which made offences under the act cognizable and non-bailable was deleted. However, penalties may extend upto ₹1 crore.
- **Provisions related to BMC:** State government will prescribe the composition of BMCs, whose strength has been fixed between seven to eleven members. Further, state governments may also constitute BMCs at the intermediate or district Panchayat level.
- **States can declare Threatened species:** Central government can delegate the power to notify any species which is near-extinction as a threatened species to the state government.
  - However, before notifying any threatened species, the state government must consult the NBA.
- **Expansion of NBA:** 11 additional members to be added to NBA, including:
  - 6 ex-officio members dealing with wildlife, forestry research, and Panchayati Raj
  - **4 representatives from SBBs** (on a rotational basis), and
  - **1 Member-Secretary** (must have experience in biodiversity conservation), who **will be the chief coordinating officer of the NBA.**
- **Changes in Definitions:** For example, 'bio-utilisation' has been removed, and 'bio-survey' has been redefined.



### Concerns regarding Amendments

- **Allowing large companies to evade the requirement for prior approval or sharing the benefits:**
  - Majority of the AYUSH firms are registered under the name of the practising AYUSH doctors and excluding them could exempt their companies as well.
  - It is difficult to certify whether the raw material used by companies came from the forest areas or cultivated lands.
  - A company under foreign management but registered in India wouldn't need to seek permission from the NBA to use a specific

### What is access and benefit-sharing?

When an Indian or foreign company or individual accesses biological resources such as medicinal plants and associated knowledge, it has to take prior consent from the national biodiversity board. The board can impose a benefit-sharing fee or royalty or impose conditions so that the company shares the monetary benefit from commercial utilisation of these resources with local people who are conserving biodiversity in the region.

resource and develop a product from it, and without the NBA's cognisance, any monetary benefits that arise from sale of the product won't reach the local communities.

- **Issues regarding changes in definitions:**
  - **Threat of Bio-piracy:** Due to deletion of the term Bio-utilisation, an array of activities like characterisation, inventorisation and bioassay, which are undertaken with commercial interest, may go undetected.
  - **Replacing 'biological resources or knowledge' with just 'results of research'** may open channels for anyone who has once obtained permission from the NBA to transfer the biological resource or knowledge to any third party without any restrictions or the cognisance of the NBA.
  - **Uncertainty regarding regulation of biosurveys:** Studies and tests that researchers use to understand physical, chemical and other characteristics of a resource – say, a plant or an insect – or the potency of a substance (by measuring its effect on biological matter) have all been eliminated from the Bill, leading to uncertainty about how they will be regulated.
- **Post of a 'member secretary' in the NBA, can create two power centres**– the other being the existing position of the chairman of the NBA.

#### **Case in Point: Ayush companies seeking relaxation of the benefit-sharing provisions**

- The Uttarakhand Biodiversity Board (UBB) sent a notice to Divya Pharmacy in 2016 stating that the company was in violation of the Biodiversity Act for using biological resources from the state for its ayurvedic formulations, without intimating the board and that it was liable to pay an access and benefit-sharing fee.
- Challenging the board's notice, the company filed a writ petition before the Uttarakhand high court in December 2016 challenging the powers of the biodiversity board to determine benefit-sharing by Indian companies.
- The court in 2018 upheld the powers of the biodiversity board in its judgement.

#### **Way Forward**

There is a need to bring back the focus on protecting the interests of the local communities and sharing the profits with them. The main focus of the legislation should be to protect India's rich biodiversity and associated knowledge and protect biological diversity and local growers through a three-tier structure of Central and State boards and local committees.

## **5.2. WILD LIFE (PROTECTION) AMENDMENT BILL, 2021**

#### **Why in News?**

A bill to amend the Wild Life (Protection) Act, 1972 was recently introduced in Lok Sabha.

#### **About Wild Life (Protection) Act, 1972 (WPA)**

- The act provides for the protection of wild animals, birds and plants with a view to ensuring the ecological and environmental security of the country.
- It empowers the State to declare protected areas, under four categories- National Parks, Wildlife Sanctuaries, Community Reserves and Conservation Reserves.
- Important bodies established under the act include-
  - **National Board for Wildlife**
  - **National Tiger Conservation Authority**
  - **Central Zoo Authority**
- The act has created **6 schedules for specially protected plants (one), specially protected animals (four), and vermin species (one)**, which gave varying degrees of protection to classes of flora and fauna.

#### **Rationale behind amendments:**

- **Rationalise Schedules for the purposes of clarity:** Present classification of schedules cause confusion and is unnecessary, as WPA essentially has only two levels of protection for animals in 4 of its schedules-
  - **Species listed in Schedule I and Part II of Schedule II** which are accorded higher level of protection.
  - **Species listed in Part I of Schedule II, Schedule III, and Schedule IV** which are comparatively accorded lower level of protection.
- **Proper implementation of the provisions of the CITES** (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), which India is a party to.
- **Enable control of invasive alien species.**



- **Add provisions for better management of protected areas**, better care of seized live animals and disposal of seized wild life parts and product.
- **Empower the Central Government for improved implementation** of the Act.

### Proposed Amendments in the Wild Life (Protection) Amendment Bill, 2021

- **Rationalisation of the Schedules:** The Bill reduces the total number of schedules from 6 to 4 by:
  - reducing the number of schedules for specially protected animals to two (one for greater protection level),
  - removing the schedule for vermin species, and
  - inserting a new schedule for specimens listed in the Appendices under CITES (scheduled specimens).

An international legally binding agreement between governments.

Established by IUCN.

**AIM: To ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.**

## PROPOSED STRUCTURE OF SCHEDULES

**Schedule I: Animal species with the highest level of protection.**

**Schedule II: Animal species with a lesser level of protection.**

**Schedule III: Protected plant species.**

**Schedule IV: Species listed in the Appendices under CITES.**

- **Wild animals to be declared as Vermin by the way of notification** by the Central Government for any area and for a specified period.
- **Controlling Invasive alien species:** Empowers the central government to regulate or prohibit the import, trade, possession or proliferation of invasive alien species. An officer can be authorised to seize and dispose the invasive species.
  - Invasive alien species refers to plant or animal species which are not native to India and whose introduction may adversely impact wild life or its habitat.
- **New Chapter VB for implementation of CITES:** with following provisions-
  - **Designation of authorities:** The Central government will designate a:
    - ✓ **Management Authority**, which grants export or import permits for trade of scheduled specimens.
    - ✓ **Scientific Authority**, which gives advice on aspects related to impact on the survival of the specimens being traded.
  - **Identification mark:** As per CITES, the Management Authority may use an identification mark for a specimen. Modification or removal of the identification mark is prohibited.
  - **Registration certificate:** Person possessing live specimens of scheduled animals must obtain a registration certificate from the Management Authority.
- **Control of sanctuaries:** Chief Wild Life Warden shall control, manage and maintain all sanctuaries in accordance with the management plan prepared as per guidelines issued by the Central Government.
  - In the case of sanctuaries falling in Scheduled Areas or areas where the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 is applicable, in accordance with the management plan prepared after **due consultation with the concerned Gram Sabha**.
- **New section 42A for Surrender of captive animals:** Any person to voluntarily surrender any captive animals or animal products to the Chief Wild Life Warden.



- No compensation will be paid to the person for surrendering such items and the surrendered items become property of the state government.

- **Penalties:** The Bill increases fines for violating the provisions of the Act.

- **Relaxation of certain restrictions:**

- **Including film-making** (without making any change in the habitat or causing any adverse impact to the habitat or wildlife) **as one of the purposes for which permits may be granted** to enter or reside in a sanctuary.

- **Allow for transfer or transport of live elephants by person having ownership certificates** in accordance with conditions prescribed by the Central Government.

- **Certain activities such as**, grazing or movement of livestock, bona fide use of drinking and household water by local communities, etc., **shall be considered as non-prohibitive under section 29** i.e. allowed without a permit in a sanctuary.

- **Other changes:**

- The Preamble to the Act amended to include the aspects of ‘conservation’ and ‘management’ of wild life.
- **Allow the Central Government to declare conservation reserves** in areas leased or otherwise transferred to it by the State Government.
- **State Board for Wild Life permitted to constitute a Standing Committee.**
- **Enable the Central Government to call for information and issue directions** for proper implementation of the Act.
- **No renewal of any arms licences shall be granted to any person residing within ten kilometres of a sanctuary** except under the intimation to the Chief Wild Life Warden or the authorised officer

Type of Violation	1972 Act	2021 Bill
General violation	Up to Rs 25,000	Up to Rs 1,00,000
Specially protected animals	At least Rs 10,000	At least Rs 25,000

## Conclusion

The amendments to the WPA, 1972 were long overdue and needed for efficient implementation of the CITES.

## 5.3. DEVELOPMENT INDUCED DISPLACEMENT

### Why in news?

The **Polavaram irrigation project will displace** the highest number of people in India’s history of such projects i.e., about 1 lakh families in Andhra Pradesh, upon completion.

### More about news

- Polavaram irrigation project is to be build on **Godavari River**.
- The areas which are **already submerged and will be submerged** by next year due to the project are **scheduled areas**, with predominant **tribal population**.

### About Development Induced Displacement (DID)

- It is characterized by the **permanent relocation of all households within a geographic area** as a result of the construction of **infrastructure projects**.
- **Categories:** DID may be **divided into two categories** (direct and indirect):
  - **Direct displacement** refers to those cases, where **due to the initiation and construction** of developmental projects there is a **direct displacement** of people.
  - **Indirect displacement** occurs when the people are forced to leave the area due to the **functioning of those developmental projects**. This is because the functioning of the projects **consumes the natural and environmental resources** in the surrounding and deprives their traditional means of livelihood.
- **Global Status:**
  - **Direct displacement:** Assessments sponsored by the World Bank have estimated that every year since 1990, **roughly 10 million people worldwide** have been **displaced involuntarily** by infrastructural development projects. **Dams** for irrigation and hydropower are a **major cause** of such forced displacement.

- **Indirect displacement:** According to World Bank though large dams constitute only 26.6 per cent of the total WB funded projects causing displacement, the resulting displacement makes up **62.8 per cent of the total number of people displaced.**
- **India's status:**
  - In India around **50 million people** have been displaced due to development projects in over 50 years.
  - The tribals who comprise 8.08% of India's population are estimated to be **more than 40% of the displaced population.** Dalits constitute **20% of displaced persons (DPs).**
  - Study of 54 large dams done by the Indian Institute of Public Administration concluded that the **average number of people displaced by a large dam is 44,182.**



#### Risks associated with Development-Induced Displacement

- **Landlessness:** Expropriation of land **removes the main foundation** upon which people's **productive systems and commercial activities** are constructed. This is the principal form of **de-capitalization and pauperization** of displaced people, as they **lose both natural and human-made capital.**
- **Joblessness:** The risk of **losing wage employment is very high** both in urban and rural displacements for those employed in **enterprises, services, or agriculture.** **Unemployment or underemployment** among resettlers often **endures long after physical relocation** has been completed.
- **Homelessness:** Loss of shelter tends to be **only temporary for many** resettlers. But for some, homelessness or a **worsening in their housing standards** remains a lingering condition.
- **Marginalization:** Marginalization occurs when families lose economic power and **spiral on a "downward mobility"** path. Economic marginalization is often accompanied by **social and psychological marginalization**, expressed in a **drop in social status**, a feeling of **injustice**, and **deepened vulnerability.**
- **Food Insecurity:** Forced uprooting **increases the risk** that people will fall into **temporary or chronic undernourishment**, defined as calorie-protein intake levels **below the minimum necessary** for normal growth and work.
- **Increased Morbidity and Mortality:** Massive population displacement threatens to cause **serious decline in health** levels. Displacement-induced **social stress and psychological trauma** are sometimes accompanied by the outbreak of relocation related illnesses, particularly **parasitic and vector-borne** diseases.
  - **Unsafe water supply** and improvised sewage systems increase vulnerability to **epidemics and chronic** diarrhea, dysentery, and so on. The **weakest segments** of the demographic spectrum: infants, children, and the elderly are affected most strongly.
- **Social disintegration:** Life-sustaining **informal social networks** that provide mutual help are rendered non-functional. **Trade linkages** between producers and their customer base are interrupted, and local labor markets are **disrupted.**
- **Violation of Human Rights:** Displacement from one's habitual residence and the loss of property **without fair compensation** can, in itself, constitute a **violation of human rights.** The risk of **communal violence** also increases when new settlers move in **amongst existing populations.**

- Arbitrary displacement can also lead to **violations of civil and political rights**, including: arbitrary arrest, degrading treatment or punishment, temporary or permanent disenfranchisement and the **loss of one's political voice**.

#### Efforts towards Rehabilitation and associated issues

##### National Rehabilitation and Resettlement Policy (2007)

- It replaced the **National Policy on Resettlement and Rehabilitation for Project Affected Families, 2003**.
- It aims at **striking a balance** between the need for land for developmental activities and, at the same time, **protecting the interests** of the land owners, and others.
- **Objectives:**
  - To **minimise displacement** and to promote, as far as possible, non-displacing or least-displacing **alternatives**;
  - To ensure **adequate rehabilitation package** and **expeditious implementation** of the rehabilitation process with the active participation of the affected families;
  - To ensure that special care is taken for protecting **the rights of the weaker sections** of society.

##### Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013

- The Act provides for **rehabilitation & resettlement** and combines it with land acquisition so that the **former does not get neglected**. The '**public purpose**' for which land can be acquired by the government is **defined**.
- As per the above legislation, a **comprehensive rehabilitation and resettlement package** is provided for those who lost their livelihood support which includes the landless and tenants.
- The Act also provides for **schools and playgrounds, health centers, roads and electric connections and assured sources of safe drinking water** for each family. The role of the gram sabha **has been clearly stressed** and the government has to consult them.



#### Road Ahead

- **Developing an action plan:** Government should adopt their National Action Plans on Human Rights that include **provisions for prevention and protection against arbitrary displacement** due to development. It should include, inter alia:
  - **Identification** of the problems of displaced people, the measures required for **helping the displaced people** to settle in the new area,
  - Measures to be adopted for **reducing conflicts** between communities by convening consultations between internally displaced persons and populations residing in areas of resettlement,
  - Considering the **needs of the resident as well as relocated populations** in program design and taking steps to prevent stigmatization or resentment.
- **Equal treatment to women in the eligibility for R & R benefits:** In the eligibility for R & R benefits, the women should be treated at par with their male counterparts. The **major daughter and major son** should receive equal treatment. Similarly, the R & R policy should **recognize the households headed by women** and they should be treated equally for R & R benefits.
- **Disseminate information** about the **rights of displaced persons** during displacement to displaced persons and to relevant authorities. The authorities **should mandatorily disclose** to the public regarding various measures adopted for ensuring the rights of displaced people.
- **Other measures:**
  - Any developmental projects which involve displacement should be initiated only after **properly rehabilitating each and every one affected**.
  - Establish **monitoring and reporting systems** that document violations of the rights guaranteed.
  - Principles of **Sustainable Development, Polluter Pays Principle** and **Precautionary Principle** should be applied while implementing the developmental projects.



The **developmental projects are very essential** for achieving economic growth of the country as well as for providing and enhancing basic amenities of people. Therefore, the adverse impacts of developmental projects on the displaced people **must be avoided** so that these projects are **beneficial to everyone**.

## 5.4. DAM SAFETY ACT, 2019

### Why in News?

Recently, Rajya Sabha passed the Dam Safety Bill, 2019.

### More on News

- Act proposes to help all states and UTs **adopt uniform dam safety procedures** and seeks to set up an **institutional mechanism to ensure the safe functioning of specific dams** in the country.
- It provides for **adequate surveillance, inspection, operation, and maintenance of all the large dams** in the country so as to prevent dam failure related disasters.
- It was earlier passed by Lok Sabha in 2019.

### About Dams

- Dams are **artificial barriers on rivers which store water** and help in irrigation, power generation, flood moderation, and water supply.
- As on June 2019, **India has 5,745 large dams** (includes dams under construction).
  - After China and USA, **India is the 3rd largest dam-owning nation** in the world.
  - Most of the dams in India are **constructed and maintained by the states**, while some of the bigger dams are managed by autonomous bodies such as Damodar Valley Corporation or Bhakra Beas Management Board of Bhakra-Nangal Project.
- **Over 75% of these dams are more than 20 years old** and about 220 dams are more than 100 years old.
- **Most of these large dams are in Maharashtra** (2394), Madhya Pradesh (906), and Gujarat (632).

### Background

- Beginning with the **failure of the Tigma dam** (Madhya Pradesh) in 1917, **about 40 large dams are reported to have failed** so far.
  - The worst dam disaster was the **failure of Machu dam (Gujarat) in 1979**.
  - The **most recent case of failure of the Annamayya dam** (Andhra Pradesh) in November 2021 is reported to have led to the death of 20 people.
- **Central Dam Safety Organisation**, under the Central Water Commission (CWC), **provides technical assistance** to the Dam Owners, and maintains data on Dams.
- **National Committee on Dam Safety**, devises Dam Safety Policies and Regulations.
- **Dam safety by CWC**
  - **Dam Safety assurance and Rehabilitation Project (World Bank assisted)** was implemented in four States – namely Madhya Pradesh, Orissa, Rajasthan and Tamil Nadu.
  - **Dam Rehabilitation and Improvement Project (DRIP)** to improve safety of selected dams, install basic dam safety related facilities etc.
- **Other steps taken for dam safety in India**
  - **DHARMA (Dam Health and Rehabilitation Monitoring)** software for effective collection and management of asset and health data for all large dams in India.
  - **Seismic hazard analysis information system (SHAISYS)** to estimate seismic hazard at a point in South Indian Region.
- In 2007, **Andhra Pradesh and West Bengal had passed resolutions**, requesting Parliament to make a law on dam safety.
- Consequently, the Dam Safety Bill, 2010 was introduced in Lok Sabha under **Article 252, which allows Parliament to make laws on state subjects**, applicable to those states, that pass a resolution requesting such a law.

# TYPES OF DAMS

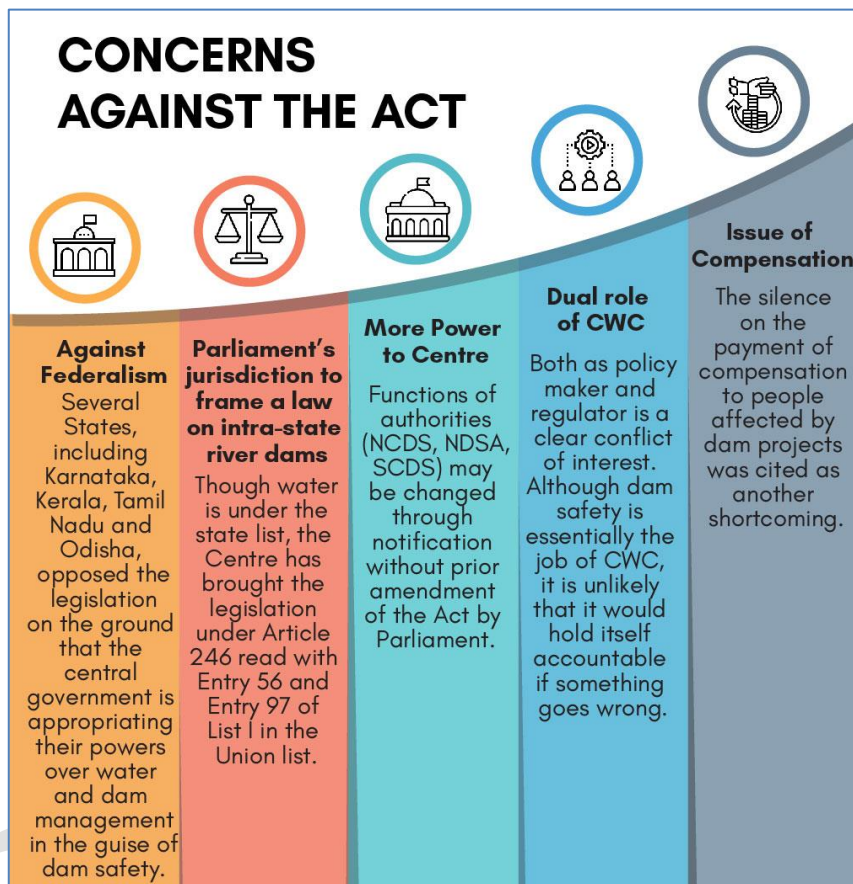
	<b>Embankment Dams</b>	<ul style="list-style-type: none"> <li>★ Include <b>earthfill and rockfill dams</b>.</li> <li>★ Embankment dams are <b>most common</b> (and often most economical); <b>Utilize materials, usually available locally</b>; more susceptible to erosion and require continuous maintenance.</li> </ul>
	<b>Concrete and Masonry Dams</b>	<ul style="list-style-type: none"> <li>★ Include <b>gravity, arch, buttress, and roller-compacted concrete (RCC) dams</b>.</li> <li>★ These are <b>best suited for in-channel overflow structures</b>, as well as narrow gorges, are less susceptible to erosion etc.</li> </ul>
	<b>Composite Dams</b>	<ul style="list-style-type: none"> <li>★ <b>Use an earthfill or rockfill embankment for the non-overflow portion of the dam and concrete or masonry for the overflow spillways</b> and/or special structures such as hydroelectric power plants and navigation locks.</li> </ul>

## Key features of the Act

<b>Applicability</b>	<ul style="list-style-type: none"> <li>● <b>Act applies to all specified dams in the country.</b> These are dams with: <ul style="list-style-type: none"> <li>○ Height more than 15 metres, or</li> <li>○ Height between 10 metres to 15 metres and satisfying certain additional design conditions such as reservoir capacity.</li> </ul> </li> </ul>
<b>Dam safety authorities</b>	<ul style="list-style-type: none"> <li>● There will be <b>four layers of monitoring, two at the central level and two at the state level.</b> <ul style="list-style-type: none"> <li>○ A <b>National Committee on Dam Safety (NCDS)</b> will be constituted to help evolve uniform dam safety policies, protocols, and procedures.</li> <li>○ A <b>National Dam Safety Authority (NDSA)</b> as a regulatory body for ensuring the nationwide implementation of dam safety policies and standards. <ul style="list-style-type: none"> <li>✓ Any decision taken by NDSA shall be binding upon all the parties.</li> </ul> </li> <li>○ At the State level, the Bill prescribes for the constitution of <b>State Committees on Dam Safety (SCDS)</b> and the establishment of the <b>State Dam Safety Organizations (SDSO)</b>. <ul style="list-style-type: none"> <li>✓ <b>SDSO will undertake surveillance, inspections and monitoring</b> of operation and maintenance of all specified dams.</li> <li>✓ Every SDSO is required to report the event of any dam failure under their jurisdiction to the NDSA.</li> </ul> </li> </ul> </li> </ul>
<b>Obligation of Dam Owners</b>	<ul style="list-style-type: none"> <li>● <b>Dam owners will be responsible for the safe construction, operation, maintenance</b> and supervision of a dam. They must provide a dam safety unit in each dam.</li> <li>● <b>Functions of Dam owners</b> include preparing an emergency action plan, carrying out risk assessment studies and preparing a comprehensive dam safety evaluation.</li> </ul>
<b>Offences and penalties</b>	<ul style="list-style-type: none"> <li>● Anyone obstructing a person in the discharge of his functions under the Bill or refusing to comply with directions may be imprisoned for a year.</li> <li>● In case of loss of life, the person may be imprisoned for two years.</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>● It also addresses in a comprehensive manner, <b>critical concerns related to dam safety on account of emerging climate change related challenges.</b></li> <li>● This Bill provides for regular inspection and hazard classification of dams.</li> </ul>

## Need for the Act

- **Safety concern:** An unsafe dam constitutes a hazard to human life, flora and fauna, ecology and public and private assets. Further, it is very important for safeguarding the huge investment in critical physical infrastructure.
  - In the absence of a proper dam safety institutional framework, shortcomings of varying degrees may get ingrained in the investigation, design, construction, operation and maintenance of dams.
- **Fulfilling dual role:** Of harnessing the river water for accelerating socio-economic growth and, Mitigating the miseries of a large population, suffering from the vagaries of floods and droughts.
- **Fulfilling basic human needs:** such as Water for Drinking and Industrial use, irrigation for agricultural operations, flood control, hydro power generation, inland navigation etc.
- **National water security:** It is also important in the emerging scenarios of India's water crisis, linked with its growing population as well as climate change.
- **Addressing inter-state conflicts:** According to the Act, if the dams of one State fall under the territories of another, then NDSA will perform the role of SDSO, thus eliminating potential causes for inter-State conflicts.
- **Uniform mechanism:** Act provides for an institutional mechanism at both Central and State levels to address structural and non-structural measures required for ensuring the safe functioning of dams.
- **Enforcing safety protocols:** There are many protocols, including pre and post-monsoon inspections, for ensuring dam safety. However, as of now these protocols are not legally mandated, and the agencies concerned have no powers to enforce them.



## Conclusion

Safety of dam is a matter of great concern to the nation. An unsafe dam constitutes a hazard to human life, flora and fauna, ecology and public and private assets.

Therefore, it is necessary to enact a law to provide for proper surveillance, inspection, operation and maintenance of dams of certain parameters in India to ensure their safe functioning.

However, given the sentiments expressed by a number of states, the Centre can hold talks with the States to allay their fears and frame rules suitably for legislation.

## 5.5. PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS ACT

### Why in news?

Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA) under the PPV&FR Act has revoked a plant variety protection certificate granted to PepsiCo India Holding on FC-5 potato variety (also called as FL-2027) on multiple grounds.



# Background of the Issue

The FL-2027 variety of potatoes ( where FL stands for Frito Lays, is used for making 'Lays' brand of potato chips) was introduced by Pepsi in 2009 through a contract farming arrangement with some 12,000 farmers.

PepsiCo supplied the seeds to these farmers and bought back the produce

The FL-2027 variety was registered under India's PPV&FR Act in 2016.

In 2019, Pepsico sued nine farmers (including some small farmers) in Gujarat for illegally growing its registered potato variety and violating its Intellectual Property Rights under Section 64 the Act, and claimed ₹1 crore in damages from them.

This triggered a furore with the farmers demanding withdrawal of the cases. Pepsi withdrew the cases after the discussions with the State government.

Now the registration of FL-2027 has been revoked on the grounds of furnishing incorrect information by the applicant, ineligibility, and infringing farmers rights. Company presented the seed incorrectly as a "new" variety instead of an "extant" one.

## About the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act

- The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, was **enacted in 2001 under Article 27(3) (b) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)**.
  - The act is in conformity with **International Union for the Protection of New Varieties of Plants (UPOV), 1978** (an intergovernmental organization, to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society).
- The Act **introduced intellectual property protection in Indian agriculture** and is the **world's only IPR legislation which grants intellectual property rights not only to the plant breeders but also to the farmers.**
- **Objectives of the Act**
  - **To recognize and protect the rights of farmers** in respect of their contributions in conserving, improving and making available plant genetic resources for the development of new plant varieties.

- **To accelerate agricultural development in the country**, protect plant breeders' rights; stimulate investment for research and development both in public & private sector for the development new of plant varieties.
- **Facilitate the growth of seed industry** in the country, to ensure the availability of high quality seeds and planting material to the farmers.
- **Institutional Mechanism:**
  - **Protection of Plant Varieties and Farmers' Rights Authority (PPV&FR Authority):** To implement the provisions of the Act by Department of Agriculture and Cooperation, Ministry of Agriculture. General Functions of the Authority include:
    - ✓ **Registration of new plant varieties**
    - ✓ **Developing DUS (Distinctiveness, Uniformity and Stability) test guidelines** for new plant species,
    - ✓ **Facilitate development and commercialisation of new varieties** through formal linkages with agricultural universities, research institutions and Krishi Vigyan Kendras,
    - ✓ **Recognizing and rewarding farmers**, community of farmers, particularly tribal and rural community engaged in conservation and improvement;
    - ✓ **Maintenance of National Gene Bank** to store the seed material
    - ✓ **Preservation of plant genetic resources** of economic plants and their wild relatives
  - **Plant Varieties Protection Appellate Tribunal (PVPAT):** The decisions of the PVPAT can be challenged in High Court. The Tribunal shall dispose of the appeal within one year.
- **Eligibility criteria:** A variety of seed is eligible for registration under the Act if it fulfill the criteria of Distinctiveness, Uniformity and Stability (DUS). The protection period is for 15 years for trees and 18 years in the case of vines.
  - The Act prescribes the registrable plant varieties that can be registered for protection, namely:
    - ✓ New varieties
    - ✓ Extant variety
    - ✓ Farmers' variety
    - ✓ Essentially derived variety
- **Rights under the Act:**

<b>Breeders' Rights</b>	<ul style="list-style-type: none"> <li>● Breeders will have <b>exclusive rights to produce, sell, market, distribute, import or export the protected/registered variety.</b></li> <li>● Breeder can appoint agent/ licensee and may exercise for civil remedy in case of infringement of rights.</li> </ul>
<b>Researchers' Rights</b>	<ul style="list-style-type: none"> <li>● Researcher <b>can use any of the registered variety under the Act for conducting experiment or research.</b></li> <li>● This includes the use of a variety as an initial source of variety for the purpose of developing another variety but repeated use needs prior permission of the registered breeder.</li> </ul>
<b>Farmers' Rights</b>	<ul style="list-style-type: none"> <li>● A farmer who has evolved or developed a new variety is <b>entitled for registration and protection</b> in like manner as a breeder of a variety.</li> <li>● <b>Section 39(1) of the Act</b> allows all farmers cultivating a registered new variety the right to "save, use, sow, resow, exchange, share or sell farm produce including seeds" except the branded seeds.</li> <li>● <b>Section 39 (2) of the Act provides for compensation</b> to the farmers for non-performance of variety.</li> <li>● Farmer shall <b>not be liable to pay any fee</b> in any proceeding before the Authority or Registrar or the Tribunal or the High Court under the Act. It will be paid through National Gene Fund.</li> </ul>

### Implications of the current verdict

- **Setting a precedent:** This was the first case of infringement of rights under the Act. It **upholds farmers' seed freedoms** and sends an important signal that farmers' rights cannot be taken lightly by IPR-holders in the country.
- **Highlighted the loopholes in the present act and its implementation** such as:
  - **Enforcement issues:** As agriculture is a state subject, enforcement is left to States. However there exists a large variance in laws across states. Unique protections provided to farmers can act as an enforcement loophole given the grey area between farmers and aggregators.
    - ✓ For instance, when any aggregator (who owns an acre of land and is also considered as a farmer) collects the seed from farmer and then sells it in a branded fashion, it may lead to pilferage of the parent seed. Rampant spread of unauthorised and genetically modified HTBt cotton seeds is an example of this.

- **Lack of IPR protection may hinder innovation:** The PPVFR requires companies to submit parent seeds when applying for registration. This has already deterred many domestic and foreign players from introducing the latest varieties.
  - ✓ Currently, less than 3% of annual revenue of seed market is ploughed back into research, in contrast with 10-12% which is the global standard.
- **Complicated and slow process for registration** of new varieties.
- **Procedural gaps exist in the process of registration.**

#### Way ahead

- **Widespread variance in State-level laws and regulations need to be addressed.**
- **Need to ensure that the farmer has a stake in innovation** by ensuring better realisations for adopting innovative varieties.
- For this, there is a need for more investment in farm infrastructure, including processing and pre-processing plants, as well as identity protected supply chains.

## 5.6. NEWS IN SHORTS

### 5.6.1. NAIROBI DECLARATION

- Recently, **Nairobi declaration was adopted by African ministers** and heads of delegations.
- Declaration underlined the **need to deliver commitments on the Programme of Action (PoA) for implementing the Sendai Framework** in Africa.
  - PoA outlines how Africa aims to implement Sendai Framework on the continent.
- Sendai framework provides for a pathway in **guiding countries and communities to substantially reduce the effects of shocks caused by natural and human-induced hazards** by 2030 compared to 2005-2015.

### 5.6.2. HAIDERPUR WETLAND

- India has designated the **Haiderpur wetland as the country's 47th Ramsar site.**
  - Ramsar is a wetland site **designated under the Ramsar Convention**, an intergovernmental environmental treaty which came into force in 1975.
- Haiderpur Wetland is **situated on the Muzaffarnagar-Bijnor border in Uttar Pradesh.**
- It was formed in 1984 by the **construction of Madhya Ganga Barrage at the confluence of Solani and Ganga rivers** and is a part of Hastinapur Wildlife Sanctuary.

### 5.6.3. GLOBAL METHANE INITIATIVE (GMI)

- **India recently co-chaired** GMI Steering Leadership Meeting.
- GMI is a **voluntary Government and an informal international partnership created to achieve global reduction in anthropogenic methane emission**

through partnership among developed and developing countries having economies in transition.

- It was **created in 2004** and has **membership from 45 countries.**
- Recently also at the **UNFCCC COP26 (Glasgow)**, the **Global Methane Pledge was launched** that aims to cut down methane emissions by up to 30% from 2020 levels by the year 2030.
- Methane is a **greenhouse gas having 25-28 times more harmful effect than CO2.**
  - It is also the **second-most abundant greenhouse gas** in the atmosphere, after carbon dioxide.

### 5.6.4. NEARLY 49K RURAL HABITATIONS AFFECTED WITH WATER CONTAMINATION, SAYS PARLIAMENTARY PANEL REPORT

- The **Standing Committee on Water Resources noted with concern that many habitations are affected by contamination of water** due to Arsenic, Fluoride, Iron, Nitrate, Heavy Metals and high Salinity. Major findings include
  - Substantial amounts of **unspent balances** were accrued under **Jal Jeevan Mission (JJM)** at the end of the **FY 2018-19 and 2019-20.**
    - ✓ **JJM aims at providing household tap water connection to every household by 2024.**
  - Financial assistance given for construction of Individual Household Latrines in the urban areas is Rs. 20,000/- while it is **Rs. 12,000/- only in rural areas.**

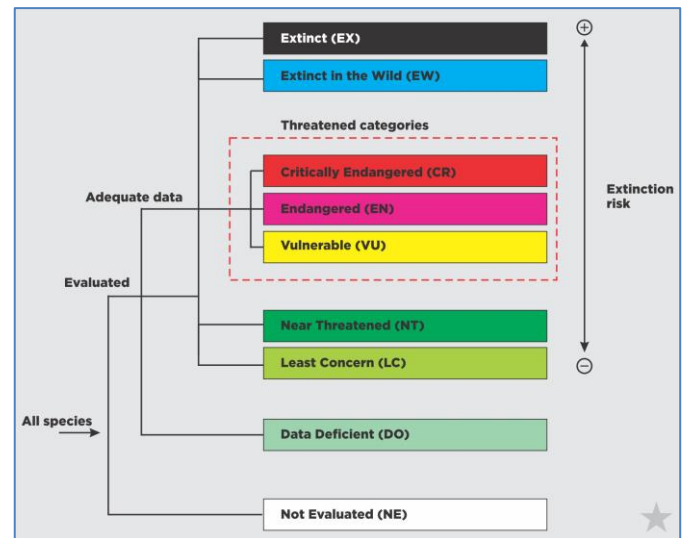


Observations	Recommendations
<ul style="list-style-type: none"> <li>No clarity on action taken for providing clean drinking water to habitation affected with other contaminants like Iron and Salinity which constituted bulk of the water quality affected habitations.</li> <li>The number of Water Quality Testing laboratories has reduced this year as compared to the previous year.</li> <li>Casual attitude regarding reported release of harmful and untreated chemicals by some industries.</li> </ul>	<ul style="list-style-type: none"> <li>Focused attention to be given towards such habitations and a time bound programme be formulated in consultation with concerned States for setting up of Community Water Purification Plants in all water quality affected habitations.</li> <li>To open sufficient number of water testing laboratories.</li> </ul>

- The project has reached out to 5500 SafaiSathis, in an effort to institutionalize workers from the informal sector.
- “Utthaan”, a social protection programme was launched to help 9000 safaisathsi.
- However, the programme suffered a setback after the COVID-19 pandemic led to widespread increase in waste, including medical plastic waste.
- The UNDP is also working with NITI Aayog and have jointly developed a ‘handbook’ model for local municipalities as well as the private sector.
  - The handbook provides a comprehensive overview of PWM by representing and discussing components of the entire plastic waste value chain.

### 5.6.7. BOESENBERGIA ALBOLUTEA & BOESENBERGIA RUBROLUTEA

- These two species of plants are now Extinct in the Wild (EW) under IUCN which were discovered around 125 years ago.
- Boesenbergiarubrolutea was endemic to Khasi Hill-Meghalaya while Boesenbergiaalbolutea was endemic to Andaman Island.
  - Classified under the genus Boesenbergia, the species belong to the family Zingiberaceae, the ginger family of flowering plants.
- Possible reasons for their disappearance include climate change, human interference and over-exploitation, or natural calamities.



### 5.6.8. CANARY BLACK BEE

- About 50 days after Cumbre Vieja volcano in the Canary Islands erupted, tens of thousands of bees were found alive inside hives that had been covered in volcanic ash.

### 5.6.5. ELECTRICITY CAPACITY FROM NON-FOSSIL FUEL

- India has achieved the ambitious target of 40% of installed electricity capacity from non-fossil fuel sources.
- According to Ministry of New and Renewable Energy, total installed non-fossil fuel-based capacity stands at 156.83 Giga Watts and the total installed electricity capacity is 390 Giga Watts.
- Government has further announced at CoP 26 in Glasgow a target of achieving 500 GW of installed electricity capacity from non-fossil fuel sources by 2030.

### 5.6.6. UNDP PLANS TO DRASTICALLY EXPAND PLASTIC WASTE MANAGEMENT (PWM) IN INDIA

- The United Nations Development Programme (UNDP) PWM (2018-2024) programme aims to almost triple its PWM to 100 cities in India by 2024.
  - UNDP launched this project, in partnership with Hindustan Coca-Cola Beverages Private Limited, Hindustan Unilever Limited among others, for building on existing systems to reduce the impact of plastic waste on the environment in India.
  - It promotes collection, segregation and recycling of all kinds of plastics to move towards a circular economy.
  - So far, 83,000 metric tonne of plastic waste has been collected.

- Honeybees use **propolis** (a resin like mixture sometimes known as bee glue), **produced from substances they collect from plants and buds, to plug tiny gaps in hive** from gases of the volcano.
- Generally, propolis is used by honey bees to **protect it from rainwater and drafts**.

#### 5.6.9. MINISTRY OF COAL HAS SET UP MISSION COKING COAL (MCC)

- **MCC** is based on the recommendations of **Inter-Ministerial Committee** set up to strategise augmentation of coking coal production in India.
  - Coking refers to the coal's ability to be converted into coke, a pure form of carbon that can be used in basic oxygen furnaces.
  - Coking coal is **used in manufacturing of steel through blast furnace route**.
    - ✓ **Domestic coking coal is high ash coal** (between 18% - 49%) and is not suitable for direct use in blast furnace. Therefore, it is **blended with imported coking coal** (<9% ash).
- **Objective of MCC**
  - To prepare an action plan **to increase production and utilisation of domestic coking coal**.
  - Adoption of **new technologies**.
  - Allocation of coking coal blocks for **private sector development**.
  - Setting up of new coking coal washeries, enhanced R&D activities and improvement of **quality parameters**.
- It helps to boost production and **strengthen in-house capabilities which thereby will reduce imports** and lead to AtmaNirbhar Bharat.
  - About 50 MT coking coal is imported by the country on an annual basis and the **value of coking coal imported in FY 2020-21 was Rs.45435 crore**.

#### 5.6.10. GOVERNMENT ISSUES ADVISORY TO CARMAKERS TO INTRODUCE FLEX-FUEL ENGINES IN VEHICLES

- Car makers have been **given six months to introduce flex fuels** so that cars can also run on ethanol in the future.
- **Flex Fuel Vehicle** is a **modified version of vehicles that could run both on gasoline and blended petrol** with different levels of ethanol blends.
  - These are currently being used successfully in Brazil, **giving people the option to switch fuel** (gasoline and ethanol).
  - Flex-fuel, or flexible fuel, is an **alternative fuel** made of a combination of gasoline and methanol or ethanol.

- **Advantage of FFV**
  - Provides **option for using bio-fuels**, which are better than petrol (are import substitute, cost effective, pollution-free and indigenous).
    - ✓ **Target date for achieving 20% ethanol-blending with petrol has been advanced by five years** to 2025.
  - Help in **addressing the problems of surplus food grains** (can be used in making ethanol).
  - **Reduce dependence on oil imports**.
- **Challenges:**
  - Require **additional investment from auto companies** in production lines and technology transfers.
  - Ethanol can also cause **corrosion and damage to the engine**.
  - Ethanol is also **not as economical as gasoline** as it does not provide the same level of fuel efficiency.

#### 5.6.11. AGRICULTURAL PHOTOVOLTAIC (AGRI-PV)

- Cochin International Airport Ltd (CIAL) has developed **large-scale agri-voltaic farming**.
- Agri-voltaic farming- is a **mixed system of solar energy production associating solar panels and crop** at the same time on the same land area.
- It is an **evolving practice in sustainable development** that combines the production of food and energy.
- **PV-module are installed in Agri voltaic system (AVS)** inclination angle equal to the latitude of the place of installation.
- Agri-PV overcomes the present either-or situation by **achieving both power generation and agricultural yield**.

#### 5.6.12. INDIA-EU CLEAN ENERGY AND CLIMATE PARTNERSHIP

- During **India-EU Energy Panel meet**, both sides have agreed to step up their Clean Energy and Climate Partnership.
  - They jointly agreed on a **detailed work programme** until 2023 to implement the **2016 India-EU Clean Energy and Climate Partnership**.
- The Energy Panel agreed on increased technical cooperation in **energy efficiency, renewable energy, green hydrogen, grid integration**, sustainable financing etc.
- As part of this strengthened cooperation, the EU and India will undertake **new studies, study visits and joint workshops**, exchanging knowledge and best practices on these areas.

### 5.6.13. SHUNYA LABELLING FOR NET ZERO ENERGY BUILDINGS (NZEB)

- Recently, Shunya programme for NZEB and Net Positive Energy Buildings (NPEB) were launched
- NZEB are highly efficient buildings with extremely low energy demand.
- Based on Energy Performance Index (EPI), i.e. total energy consumed in a building over a year divided by total built up area, the buildings having

- $10 \leq EPI \leq 0$  kWh/m<sup>2</sup>/year, will be awarded by Shunya Label.
- $EPI < 0$  kWh/m<sup>2</sup>/year will be awarded by Shunya+ label.
- It will encourage to make energy efficient buildings and further making improvements to make it NZEB/NPEB.



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- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
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- **Philosophy • Sociology • Political Science & IR**

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## 6. SOCIAL ISSUES

### 6.1. MARRIAGE AGE OF WOMEN

#### Why in news?

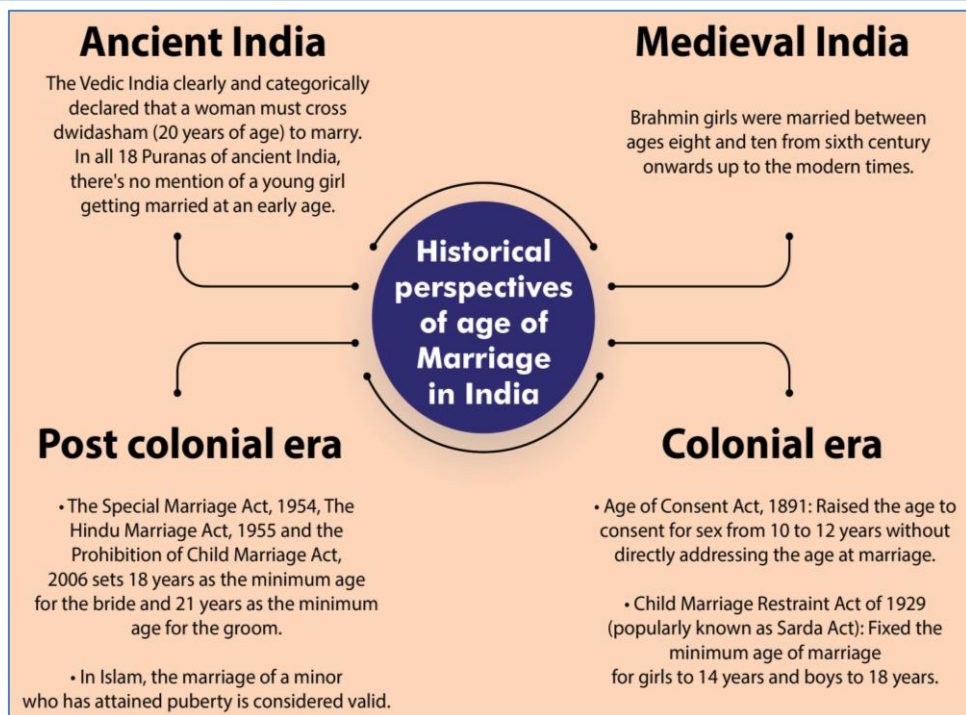
Recently, the Prohibition of Child Marriage or PCMA (Amendment) Bill, 2021, that proposes to raise the legal age of marriage for women from 18 to 21 years — the same as men, was introduced in the Lok Sabha.

#### More on news

- The bill is based on recommendations submitted to NITI Aayog in December 2020 by the Centre's task force, headed by Jaya Jaitly. It was constituted to examine matters pertaining to
  - age of motherhood,
  - imperatives of lowering MMR (Maternal Mortality Rate),
  - improvement of nutritional levels and related issues.
- Key highlights of the draft Bill
  - The draft bill would **amend the PCMA, 2006**.
  - **Aim:** To **bring women on a par with men in terms of marriageable age**, overriding all existing laws, including any custom, usage or practice governing the parties pertaining to marriage.
  - Laws that will be superseded:
    - ✓ The Indian Christian Marriage Act, 1872,
    - ✓ The Parsi Marriage and Divorce Act, 1936,
    - ✓ The Muslim Personal Law (Shariat) Application Act, 1937,
    - ✓ The Special Marriage Act, 1954,
    - ✓ The Hindu Marriage Act, 1955, and
    - ✓ The Foreign Marriage Act, 1969,
  - **Definition of child:** "Child" means a male or female who has not completed 21 years of age'.
  - The amendment has been proposed to fulfill the spirits of the Constitution by as it would ensure and gender neutrality when it comes to marriage and also facilitate women empowerment.

#### Positive aspects of raising the marriage age

- **Gender-neutrality:** With this decision, the government will be bringing the age of marriage for both men and women at par.
- **Women empowerment**
  - **Education:** Several girls are forced to drop their studies for marriage, and increasing the minimum legal age required to marry to 21 would give them time to pursue their studies and offer an opportunity to pursue higher education.
  - **Health**
    - ✓ **Physical health:** Early marriage denies girls the right to the highest attainable standard of general and reproductive health. An early age of marriage, and consequent early pregnancies, have adverse impacts on nutritional levels of mothers and their children. It also has an impact on IMR and MMR.



- ✓ **Psychological health:** Teenage brides may not be mature enough to deal with household responsibilities. This may reflect badly on the mental health of such women.
- **Economic participation:** Marriage at a young age means not even a quarter of women in India get into the labor force despite accounting for almost half of the 1.3 billion population.
- **Reducing child marriage:** The recently released National Family Health Survey (NFHS) revealed that child marriage has come down marginally from 27% in 2015-16 to 23% in 2019-20 in the country. The government has been pushing to bring this down further. Raising the age of marriage can aid in enhanced awareness about the repercussion of child marriages and reducing the same further.

#### Criticism of raising the age of marriage

- **Rise in average age of marriage:** According to government data from 2019, the average age to marry for women is 22.1 years. This figure has gradually risen over the years, which shows that the change is voluntary. The change has taken place largely as the education rate among women has improved.
- **Rising education yet falling economic participation of women:** The rise in enrolment in higher education and particularly that of women has been a feature over the last two decades. The age of marriage for women at 18, therefore, has not been a debilitating factor. However, this rise in educated women has not resulted in rise in female labour force participation.
  - Therefore, **the proposed legislation may not address the social and cultural patriarchal norms that hinder women empowerment.**
- **Not a solution for child marriage:** Even with the legal age of marriage for women being kept at 18 years, child marriages continue in India and a decrease in such marriages has not been because of the existing law but because of increase in girl's education and employment opportunities.
  - It is therefore argued that instead of legally increasing the minimum marital age, **the root cause of child marriage**, like poverty & lack of education, **should be addressed** in order to bring about a value change in society.
- **Safest age for pregnancy:** Mortality experienced by the cohort aged 20 years to 24 years (roughly those marrying at ages 18 years and higher) is by far the lowest of all age groups.
- **Abuse of law:** The law would end up being coercive, and in particular negatively impact marginalised communities, such as the Scheduled Caste and Scheduled Tribes, making them law-breakers.
  - Also, the amendment could push a large portion of the population **into illegal marriages.**
- **Contradicts with other laws:** A person upon reaching the **age of 18 could vote** but could not exercise the right of choice to marry.
  - Furthermore, as per the **2013 Criminal Law Amendment Act**, age of consent for sexual activity is 18 years. Now, there are anticipation among social activists that the age of consent would be further raised to 21 to bring it on a par with the revised age of marriage of women.
  - Similarly, the **Child Labour (Prohibition and Regulation) (Amendment) Act, 2016** allows adolescent in the age group of 14-18 years to work except in hazardous occupations and processes. But, the proposed legislation prohibits married below 21 years of the age.
- **Other way of ensuring gender neutrality:** In 2018, the Law Commission of India had suggested decreasing the minimum legal age of men from 21 to 18 years, and recommended keeping both the genders' minimum legal age to marry as 18 years.

**Way ahead:** Following deliveries must come first, as, unless they are implemented and women are empowered, the law will not be as effective.

- **Information, education and communication (IEC):** Comprehensive public awareness campaign be chalked out to encourage social acceptance of the decision. Also, sensitizing young students of both gender about the importance of individual financial stability and the dangers of teenage pregnancies is needed.
- **Empowerment of women:** Access to schools and universities for girls, including transportation in the case of educational institutes in far-flung areas. Training of women in polytechnic institutes, skills and business training and livelihood enhancement. Sex education be formalised and introduced in the school curriculum.
- **Targeted approach for reducing Child marriage:** Girls belonging to socio-economically weak families are forced into child marriages and providing them financial support, especially for pursuing education, will automatically raise the age of marriage among women.

## 6.2. BETI BACHAO, BETI PADHAO SCHEME

### Why in news?

Recently, the committee report titled "Empowerment of Women through Education with Special Reference to Beti Bachao-Beti Padhao (BBBP) Scheme" was tabled in Lok Sabha.

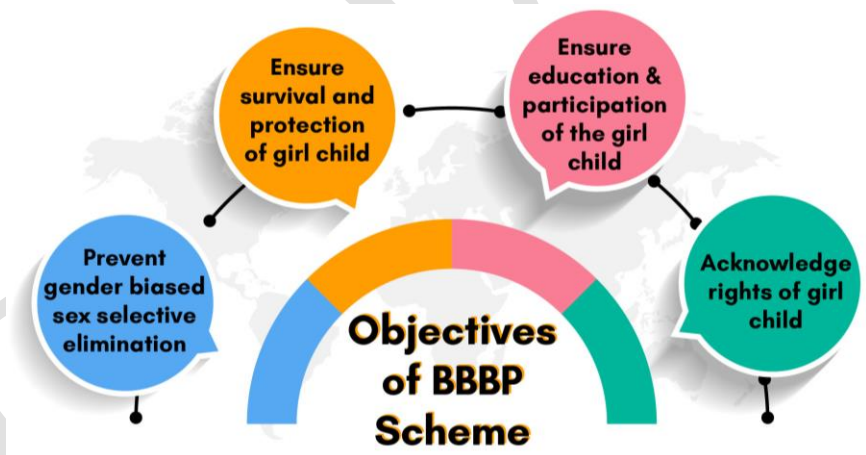
### Achievements of BBBP so far

During the last 6 years since its inception, the progress in terms of monitorable targets as per Health Management Information System (HMIS) of Ministry of Health and Family Welfare are as follows-

Parameter	Details	Status
Sex Ratio at Birth (SRB)	<ul style="list-style-type: none"> <li>In 2021, SRB has improved by 19 points from 918 to 937.</li> <li>Some districts which have shown huge improvement are Mau (Uttar Pradesh), Karnal, and Mahendergarh, Rewari (Haryana), Patiala (Punjab).</li> </ul>	Improved
Health	<ul style="list-style-type: none"> <li>Percentage of institutional deliveries has shown an improving trend from 87% to 94% in 2019-20.</li> </ul>	Improved
Education	<ul style="list-style-type: none"> <li>Gross Enrolment Ratio (GER) of girls in the schools at secondary level and percentage of schools with functional separate toilets for girls has improved.</li> </ul>	Improved

### About BBBP Scheme

- It was launched in 2015 at Panipat, Haryana to address a decline in child sex ratio and related issues of empowerment of girls.
- It brings behavioural change in the society towards birth and rights of a girl child. Scheme aims to introduce mind set change with the help of nuanced communication with the following target groups:
  - Primary:** Young and newly married couples; Pregnant and Lactating mothers; parents
  - Secondary:** Youth, adolescents (girls and boys), in-laws, medical doctors/ practitioners, private hospitals, nursing homes and diagnostic centres
  - Tertiary:** Officials, PRIs; frontline workers, women SHGs/Collectives, religious leaders, voluntary organizations, media, medical associations, industry.
- It is a tri-ministerial convergent effort of Ministries of Women and Child Development (MoWCD), Health & Family Welfare and Education.
  - MoWCD is the nodal ministry.
- 2 major components of BBBP:-
  - Advocacy and Media Campaign on BBBP
  - Multi-Sectoral intervention in selected Districts:
- It has no provision for individual cash incentive components and thus is not a DBT (Direct Benefit Transfer) scheme.
- From the financial year 2016-17, MoWCD has started the disbursement of grants-in-aid directly to the District Collectors of selected districts for implementation of BBBP Campaign.



### Issues as highlighted in report

- Inadequate use of funds sectoral interventions:** Nearly 80% of the funds for the scheme has been used for its advertising and not on sectoral interventions such as in health and education for girls.
- Poor utilisation of funds:** Since its inception till 2019-20, the total budgetary allocation was Rs 848 crore. Only 25.13% of the funds has been spent by the states/UT which reflects poor utilisation, resulting in poor performance.



- **Improper monitoring:** Irregular task force meetings and delays in collecting monthly reports or statement of expenditure from districts, reflects the **non-compliance of the guidelines** highlighting that the scheme is not being reviewed or monitored properly.
- **Lack of functional toilets** in schools is a major reason for dropping out of girls.

### Recommendations of the report

- **Planned expenditure:** The government should focus on other verticals by making ample financial provisions to help achieve measurable outcomes related to education and health envisaged under the scheme.
- **Review and Monitoring:** Regular audits and real-time updation of activities are necessary to ensure compliance.
- **Target oriented approach:** Funds should be release to the states/UT strictly on the basis of actual utilisation of earlier release and after **proper scrutiny of expenditure/ utilisation of the previous funds**. Nodal ministry must have a target-oriented approach for the states and must act in a time-bound manner.
- **Infrastructure:** Timeline should be finalised for constructing **100% segregated functional toilets for girls** in government schools, and in convergence with Jal Shakti Mission, tapped water supply be ensured in them.
- **Enhance Community Mobilisation:** Private participation, involvement of NGOs, Self Help Group platforms can be used to sensitise girls to the wider level by encouraging positive discussions about the scheme.
- **Emulate best practices:** Best practices from best performing states to be emulated by other districts/States where child sex ratio is comparatively low.

#### Steps taken by government to empower girl child

- **Sukanya Samridhi Yojana:** It is a **small deposit scheme** for a girl child and launched as a part of BBBP Campaign to meet the education and marriage expenses of a girl child.
- **Vigyan Jyoti Scheme:** To create a **level-playing field for the meritorious girls in high school** to pursue Science, Technology, Engineering, and Mathematics (STEM) in their higher education.
- **Balika Samridhi Yojana:** To support girls in financially vulnerable sections of society and ensures the enrolment and retention of girl child in primary and secondary schools.
- **Ladli Scheme:** It was launched by the Haryana government to break the stigma relating to the birth of a girl child.

#### Steps taken to increase Sex Ratio

- **Sex selection is reduced by enforcing PCPNDT act** (Pre conception and Pre Natal-Diagnostic technique Act,1994), legal action against quacks who are indulging in illegal abortions.
- As a part of creating awareness towards the importance of girl child, **opening of savings account with first deposit as Janani Suraksha Yojana amount** is done on the same day of delivery with Birth Certificate as a proof.

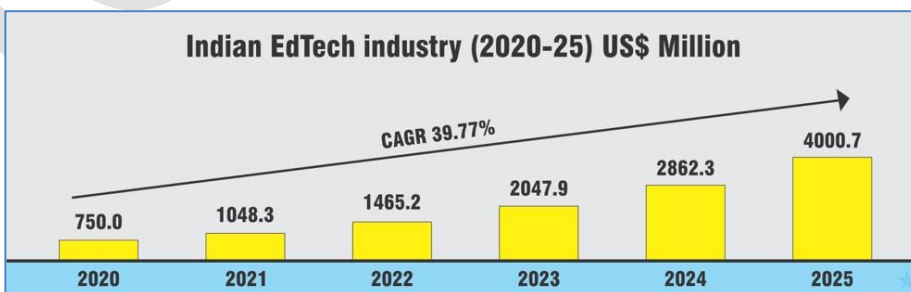
## 6.3. EDTECH SECTOR IN INDIA

### Why in News?






Recently, Ministry of Education issued advisory to citizens regarding use of caution against EdTech Companies.

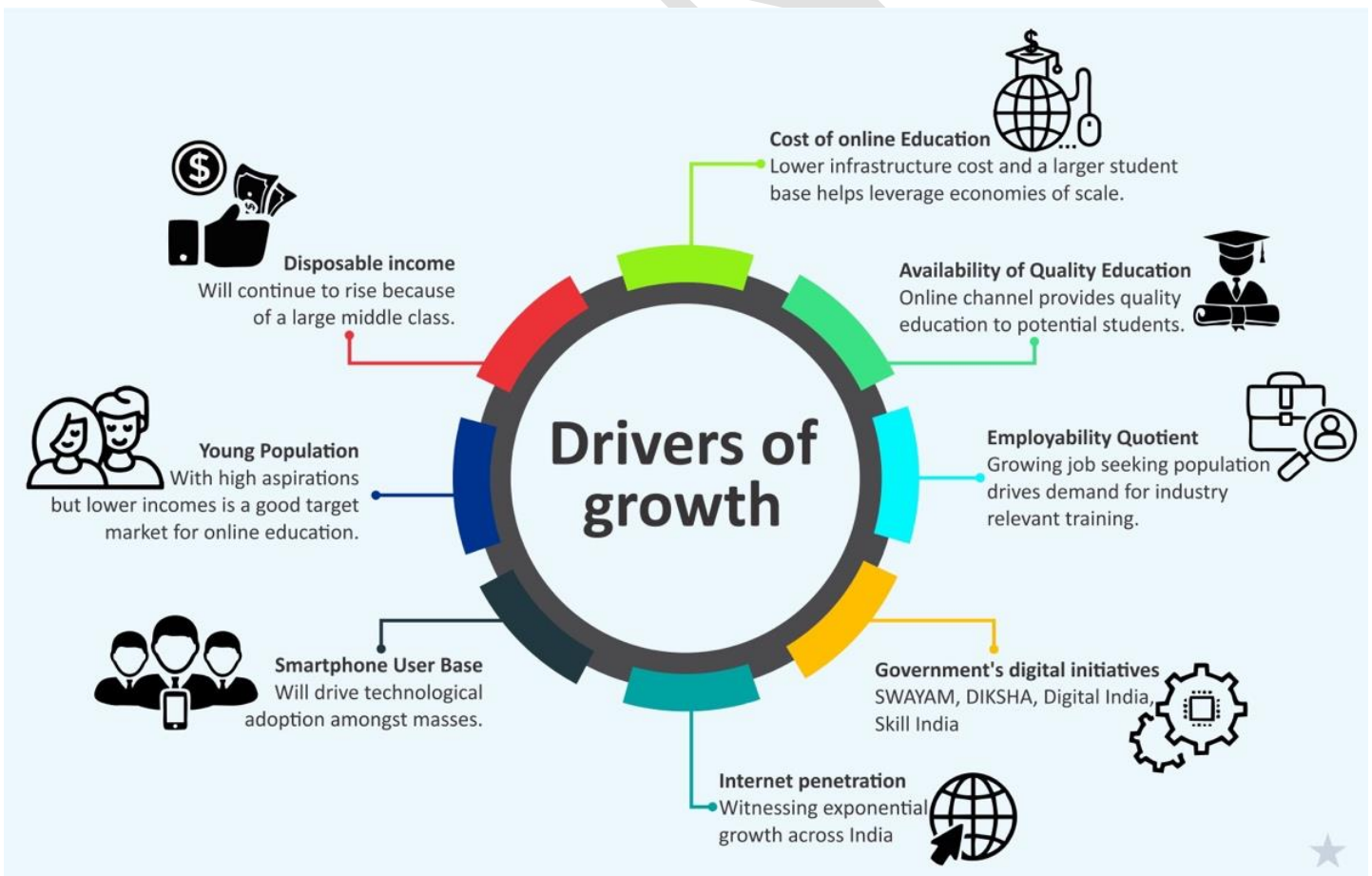
### About EdTech

- **EdTech is short for “education technology.”** It uses computers, computer programs, and educational systems to provide learning and training to students and employees.
- **Indian EdTech industry was valued at US\$ 750 million in 2020** and is expected to reach US\$ 4 billion by 2025 at a CAGR of 39.77%.
- **There are more than 4,530 EdTech companies** (September 2021) of which 435 have come about in the past two years.
- **Major EdTech startups in India:** Global (Coursera, Simplilearn, Udacity, Lynda.com, Skissoft etc), Indian (BYJU’s, Unacademy, Toppr, UpGrad etc)



# Key categories of online education

	<b>Primary and secondary supplemental education</b>	Supplement to school learning for students enrolled in primary and secondary classes in school
	<b>Higher education</b>	Provide an alternative to traditional higher education courses
	<b>Test preparation</b>	Online programmes aimed at coaching students in preparation for competitive examinations
	<b>Reskilling and online certifications market</b>	Courses designed to assist users in skill enhancement, which may result in certifications
	<b>Language and casual learning</b>	Learning of non-academic subjects such as spoken English and playing guitar



## Advantages of EdTech

- **Flexible learning option:** As online education is not based on time and place, and students only require a laptop or a smartphone with an internet connection. Also, working professionals can complete courses at their own pace.
- **More cost-effective:** than a regular on campus degree; this helps students who cannot afford a regular college degree to pursue/complete their degrees.
- **Gamification and rise of edutainment:** Companies have introduced learning through games and puzzles that make it easier and fun for students to understand concepts.
- **Imparting 'on-the-job' skills:** Career advancement courses by EdTech companies could increase the candidate's chances of landing better jobs, switch jobs, get promotions, negotiate better pay packages and stay relevant in the industry.
- **Supplement the conventional model:** the existing educational infrastructure is not equipped to meet the additional requirements. E-learning can help bridge the gap to a considerable extent.
- **Enable remote education:** EdTech enables scale and speed using a direct to the device model, breaks down geographical barriers and allowing students access to high-quality education. Teachers became facilitators, managing remotely.
- **Supplement government's digital push:** Several programmes such as 'Digital India' and 'Skill India' were launched to spread digital literacy, create a knowledge-based society, and implement three principles 'access, equity and quality' of the education policy.

## Need for regulation

- **Disruption to conventional learning due to pandemic:** As schools and universities switched to digital or online models to allow students to continue their learning, it is crucial to be mindful of the gaps in the digital experience.
- **Checking Cyber Threats:** To prevent cyberbullying, monitoring content for material unsuitable for minors, ensuring protection of students from cyberattacks or phishing scams, screening of teachers/ instructors/ content creators, etc.
- **Privacy concerns:** Privacy policies of the EdTech companies are indecisive and ambiguous and assume that consent and responsibility lie with the user. Most of the consumers are neither briefed nor have the legal know-how.
- **Neglect of social skills:** Many educational theorists, psychologists, and sociologists fear that students learning solely online will suffer from a failure to develop social skills that come only from interacting in person with other people.
- **False promises:** Some EdTech companies are luring parents in the garb of offering free services and getting the Electronic Fund Transfer (EFT) mandate signed or activating the Auto-debit feature, especially targeting the vulnerable families.
- **Protecting rights of minors:** Majority of the EdTech players in India focus on K-12 curriculum and competitive exams training and most of their customers are minors. Under Indian laws, minors (i.e., individuals below the age of 18) are not competent to enter contracts.
- **Social and ethical concerns:** Biased content delivery, Implicit influence on career decisions, less upskilling and reskilling of educators, Standardisation, and moderation of content without regulatory approvals etc.

## Way forward

- **Strengthening digital infrastructure:** Need to explore the use of low-cost digital platforms (For Ex Kerala's neighbourhood study centres) for dissemination of learning content to the masses.
- **Socialisation:** It is important to ensure adequate opportunities for social bonding and invest in the emotional well-being of students, which is largely compromised due to the siloed nature of digital lessons.
- **Data protection:** There should be well-documented processes and policies on how the data is being collected, stored, processed, analysed and used. Contact details of data privacy and legal offices of EdTech firms should be made available to end-users.
- **Raising awareness:** Educational institutions and government education departments should facilitate awareness campaigns, conduct regular auditing and performance reviews of these Edtech programmes.

### Do's and Don'ts released by Ministry of Education (MoE) for various stakeholders

- Avoid Automatic debit option for payment of subscription fee.
- Do not blindly trust the advertisements of the ed-tech companies
- Go through the child safety guidelines mentioned in the PRAGYATA guidelines by MoE before using any ed-tech platform.



- Do not allow purchases without parental consent. To avoid in-app purchases; OTP based payment methods may be adopted as per RBI's guidelines.

**MoE also asked EdTech companies to comply with the following:**

- Ed-tech companies which may be considered e-commerce entities have to comply with Consumer Protection (E-Commerce) Rules, 2020.
- Advertisements of Educational Institutions including the Ed-tech companies and Programs shall comply with ASCI's Code for Self-Regulation in advertising.

## 6.4. SURROGACY (REGULATION) ACT , 2021

### Why in news?

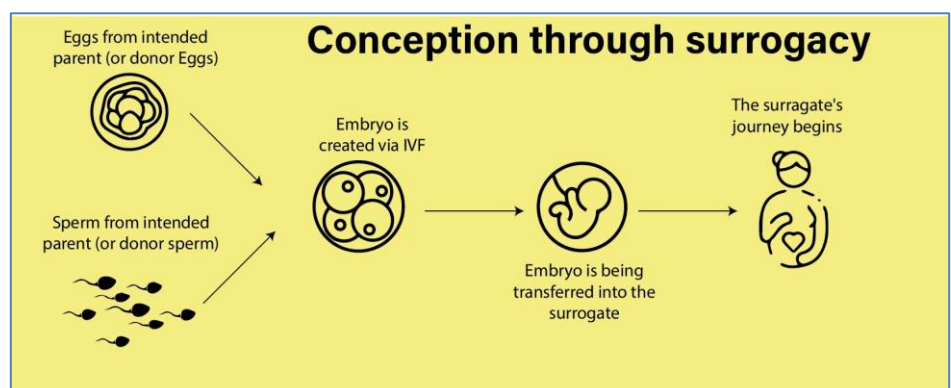
The Surrogacy (Regulation) Act, 2021 was passed by the parliament recently.

### Key Features of Surrogacy (Regulation) Act, 2021

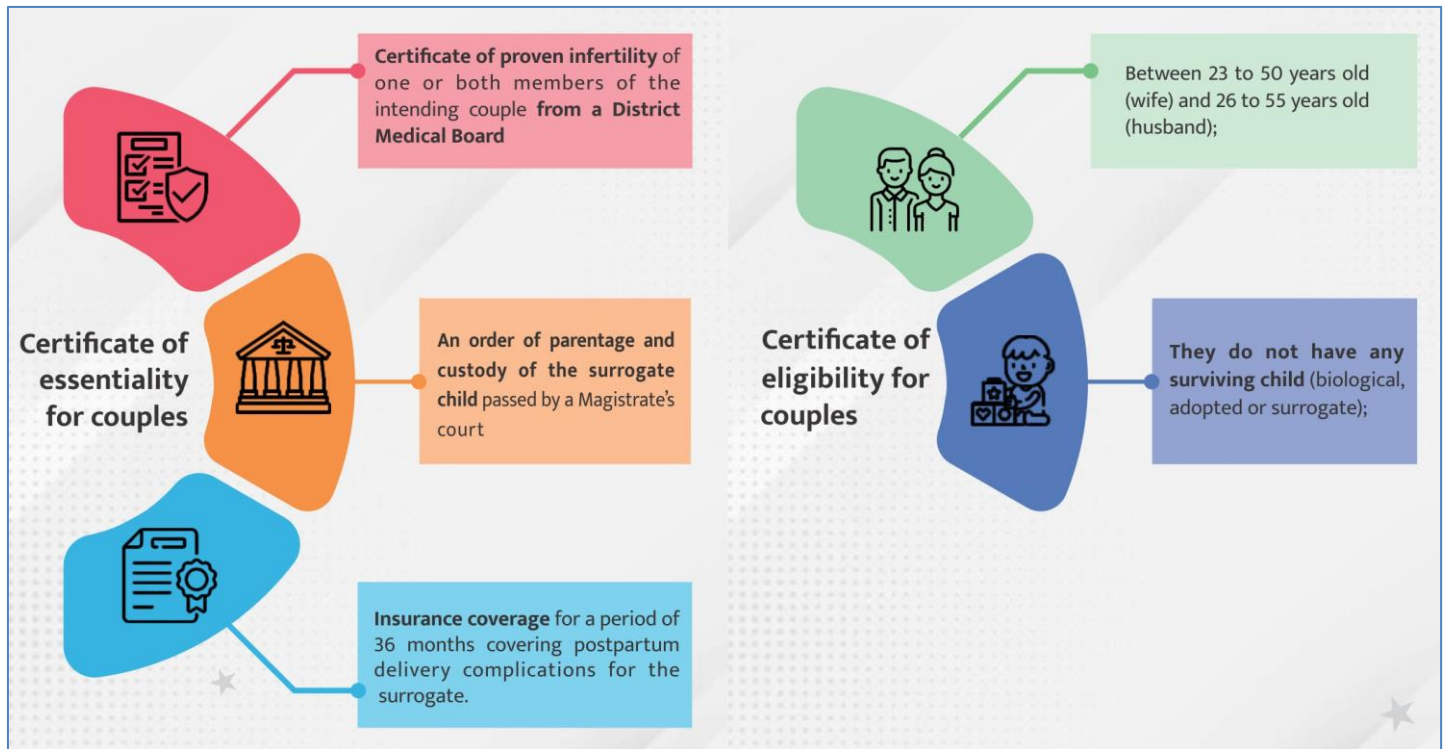
- Defines surrogacy:** Surrogacy is a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after the birth to the intending couple.
- New bodies created for regulation:**
  - Constitution of National Assisted Reproductive Technology and Surrogacy Board:** With chairman as Minister in-charge of the Ministry of Health and Family Welfare. Its functions include:
    - ✓ **Advising the Central Government** on policy matters relating to surrogacy;
    - ✓ to **review and monitor** the implementation of the Act,
    - ✓ to **lay down the code of conduct** of surrogacy clinics;
    - ✓ to **set the minimum standards** of physical infrastructure, laboratory and diagnostic equipment and expert manpower to be employed by the surrogacy clinics;
    - ✓ to **oversee the performance of various bodies** constituted under the Act;
    - ✓ to **supervise the functioning of State Assisted Reproductive Technology and Surrogacy Boards.**
  - Constitution of State Assisted Reproductive Technology and Surrogacy Boards** in each state & UT level.
- Regulation of surrogacy:**
  - Prohibits commercial surrogacy**, but allows altruistic surrogacy.
  - Surrogacy is permitted when it is**
    - ✓ for intending couples who suffer from proven infertility;
    - ✓ only for altruistic surrogacy purposes;
    - ✓ not for producing children for sale, prostitution or other forms of exploitation;
    - ✓ for any condition or disease specified through regulations.
  - Registration of surrogacy clinics** has been made compulsory.
  - Central and state governments shall appoint **one or more appropriate authorities** for evaluating and taking action against breach of the provisions of the Act.
- Eligibility criteria for surrogate mother:** Lady should be
  - a married woman having a child of her own** and 25 to 35 years old;

#### Types of Surrogacy

- Altruistic surrogacy:** It involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- Commercial surrogacy:** It includes surrogacy or its related procedures **undertaken for a monetary benefit or reward (in cash or kind)** exceeding the basic medical expenses and insurance coverage.
  - It was **first legalised in India in 2002** after which **India became the 'rent-on-womb' capital of the world.**
  - However, due to lack of proper laws and safeguards for the parties involved, multiple ethical legal challenges arose.
- Government has **banned surrogacy for foreign nationals in 2015.**



- a surrogate only once in her lifetime;
- possess a certificate of medical and psychological fitness for surrogacy.
- **Eligibility criteria for couples:** The intending couple should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.



- **Other features**
  - A child born out of a surrogacy procedure will be **deemed to be the biological child of the intending couple**.
  - An **abortion** of the surrogate child **requires the written consent of the surrogate mother and the authorisation of the appropriate authority**. This authorisation must be compliant with the **Medical Termination of Pregnancy Act, 1971**.
  - **Offences and penalties** include imprisonment up to 10 years and a fine up to 10 lakh rupees.

### Significance of the law on Surrogacy

- **Provides for Market Regulation:** Act provides for registration of surrogacy clinics and ensures appropriate safeguards in terms of penalties defined to prevent misuse.
- **Safeguards the rights of the surrogate mother:** By ensuring to the mother **basic rights of proper pre and post-natal care**. Earlier, surrogates were forced to give birth in dingy shelters which adversely impacted the health of the mother and the child.
  - Also, safeguards have been adopted to ensure **the right of the women on her body with provision for her to abort** and also by **defining the responsibility of the surrogate parents vis-à-vis the child**.
- **Safeguards the rights of the child - Abandonment of child** due to genetic or other disability, or changing of couple's social or marital status **is legally not allowed**.
- **Promotes medical tourism in the country: India is a huge market for surrogacy** as is reflected from the fact that in 2012, the size of **India's surrogacy industry was \$2 billion a year with more than 3,000 fertility clinics** engaged in this across the country.
- **Supports Intended Parents:** By helping them exercise their right to life and complete their family.

### Shortcomings of the Act

- **Total ban on Commercial surrogacy:** A total ban on commercial surrogacy will push the industry underground and render surrogate mothers even more vulnerable.

- In **B. K. Parthasarthi v. Government of A.P.**, it was decided that the right to decide about reproduction is essentially a personal choice, and the state's intrusion into such a decision-making process has to be stringently scrutinized.
- **Restricting surrogacy only to heterosexual couples:** The Apex Court in **DEVIKA BISWAS V. UNION OF INDIA**, held that right to reproduction is an essential facet of 'Right to Life' under Article 21.
  - Thus, restricting surrogacy only to heterosexual couples and within a particular age group while **denying reproductive choices to the LGBT community, single persons, and older couples is an evident violation of Article 21 and Article 14 as well.**
- **Issues with the Definition of 'infertility' restricted to failure to conceive:** It does not cover all cases in which a couple is unable to bear a child.
  - For example, medical conditions where woman may conceive but is unable to carry a child throughout the period of pregnancy.
- **Issues related to the surrogate mother being a 'close relative':** Act does not specify who will be a 'close relative'. Also, there is a possibility of coercion of daughters-in-law in families.

#### Way forward

- **Taking care of Post Partum depression:** Government must take into account postpartum depression and make provisions for it, and that maternal benefits should be extended to both mothers.
- **Rescinding the time-frame for IVF treatment:** Government should consider rescinding the time- stipulated for IVF treatment before allowing people to resort to surrogacy, as many women are medically unfit to have children, and suffer from little-known and undetectable illnesses such as "Tokophobia" or the fear of childbirth.
- **Overtime expanding the option of surrogacy to include commercial surrogacy:** Expanding the surrogacy market with proper safeguards overtime will help those deprived of the love of a child.

## 6.5. WORLD MIGRATION REPORT 2022

### Why in news?









World Migration Report 2022 was released by **International Organization for Migration (IOM)**.

### More on news

- Report analyses **relevant migration data in order to foster the understanding of migration, its main drivers and related phenomena, such as climate change, human trafficking and the impact of COVID-19.**
  - Since 2000, the IOM has been producing its world migration report every two years.

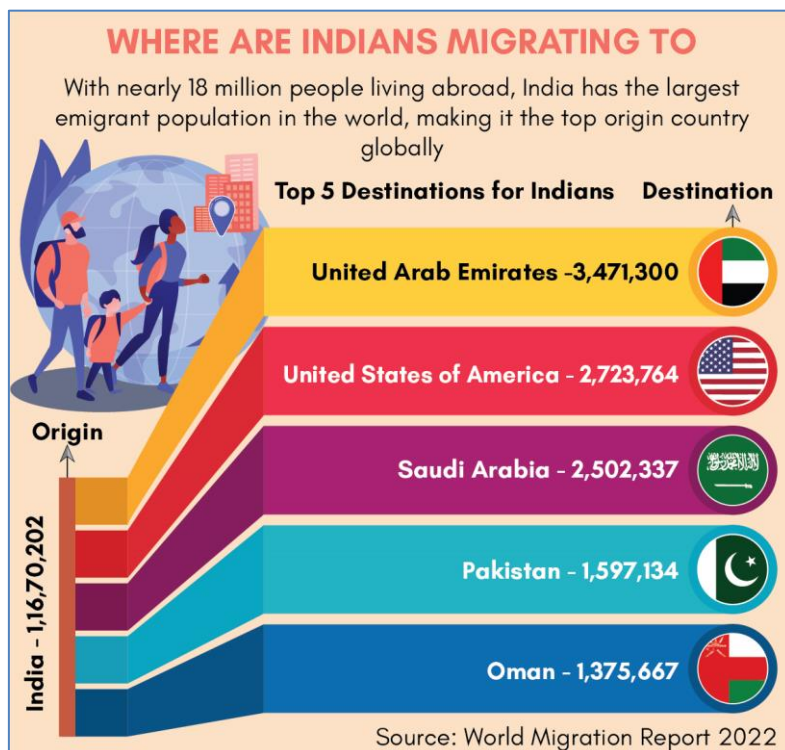
### Key findings

- The 2022 report shows that regardless of the disruption of the global mobility due to COVID-19, **internal displacement increased significantly because of natural disasters, conflict and violence.**
- **Most of the new displacement is due to climate related events**

MIGRATION AT A GLANCE		
In the last 21 years, world migration has seen a 62% jump		
	Migration report	
	2000	2022
 Estimated number of international migrants	173 mn	281 mn
 Estimated proportion of world population who are migrants	2.8%	3.6%
 Estimated proportion of female international migrants	49.4%	48%
 Estimated proportion of international migrants who are children	16%	14.6%
 Number of migrant workers	N/A	169 mn
 Global international remittances (USD)	128 Bn	702 bn
 Number of refugees	14 mn	26.4 mn
 Number of internally displaced persons	21 mn	55 mn
	<b>Down to Earth</b>	



- Earlier, the **World Bank estimated that 143 million would migrate** within their countries by 2050 due to climate change related events in sub-Saharan Africa, South Asia and Latin America.
- The amount of **international migrants has grown steadily** since 1970, currently representing 3.6% of the whole population on the planet.
  - **Work is the major reason** that people migrate internationally.
  - **61% of all global migrants live either in Europe or Asia**, which respectively host 87 million and 86 million migrants.
- Migration for work has led to a concomitant **increase in the international remittances**.
  - Covid 19 saw only a **small drop of 2.4% in 2020**.
  - In 2020, **India, China, Mexico, the Philippines, and Egypt** were the top five remittance receiving countries.
- **Digital technology has been used to support irregular migration**, as well as to enable migrants to avoid abusive and exploitative migrant smugglers and human traffickers.
  - Several government authorities have for example **harnessed emerging technologies like AI in the areas of visa application lodgement e-platforms and pre-departure checking, including the use of biometric data**.
- The **COVID-19 pandemic exacerbating** and creating vulnerabilities to **human trafficking**.
- The report showed that **the international community has not yet succeeded in implementing the Global Compact for migration and on refugees to the extent needed**.
  - It also confirms that refugee assistance and global resettlement targets are insufficient and have **neither addressed the unprecedented level of protection needs and nor demonstrated solidarity with the countries that host the vast majority of the world's refugees**.



#### About Global Compact on Refugees (GCR)

- It was **endorsed by the UN General Assembly on December 17, 2018**.
- It is designed to **promote responsibility-sharing among host countries and communities** to better support refugees.
- It is a framework for more **predictable and equitable responsibility-sharing**, recognizing that a **sustainable solution to refugee situations cannot be achieved without international cooperation**.
- It provides a **blueprint for governments, international organizations, and other stakeholders to ensure that host communities get the support they need and that refugees can lead productive lives**.

## 6.6. NEWS IN SHORTS

### 6.6.1. WORLD INEQUALITY REPORT 2022

Recently, **World Inequality Report 2022** was released which presents complete data on **global wealth, income, gender and ecological inequality**.

#### Key Highlights of the report

- **Released by:** Paris-based World Inequality Lab
- **Objective:** To promote research on global inequality dynamics

#### ● Findings

- **Wealth inequality:**
  - ✓ **Income and wealth inequalities have been on the rise** nearly everywhere since the 1980s, following a series of deregulation and liberalization programs.
  - ✓ **Inequalities within countries are greater** than inequalities observed between countries.
  - ✓ **Share of wealth held by public actors is close to zero** or negative in rich countries, meaning that the totality of wealth is in private hands.

- **Income inequality:**
  - ✓ **Middle East and North Africa (MENA)** are the **most unequal regions** in the world, whereas Europe has the lowest inequality levels.
  - ✓ India stands out as the **most unequal countries** in the world, with the top 10 percent holds 57% of the total national income while the bottom 50 percent's share is just 13% in 2021.
- **Gender inequality:** Women's share of total incomes from work (labor income) neared 30% in 1990 and stands at less than 35% today.
- Female labour income in India is equal to 18% which is lower than the average in Asia.
- **Ecological inequality:**
  - ✓ Wealth inequality had a strong correlation to carbon emission and climate change goals.
  - ✓ North America is responsible for highest average per capita emission (27%), followed by Europe and China.
  - ✓ Bottom 50% of the population in India is responsible for, on average, five times fewer emissions than the average person in the bottom 50% of the European Union

#### Related news

#### National Family Health Survey (NFHS) Data about Inequality in India

- **31% increase in the aggregate level of development**, and 41% decline in inequality of development.
- Uttar Pradesh has 37.8% of the population below **MPI (multi-dimensional poverty index)** poverty level, and at

the other extreme is Kerala with 0.71% of the population below MPI poverty.

- MPI is an **released by Oxford Poverty and Human Development Initiative (OPHI)** that develops an exclusive broadly non-monetary living standard index of poverty.
- **Higher improvement by less developed states** suggests that regional imbalances are reducing.
  - For instance, states such as Uttar Pradesh, Bihar and Jharkhand are approaching the standards of some of the developed states for indicators like sanitation, indoor air pollution.

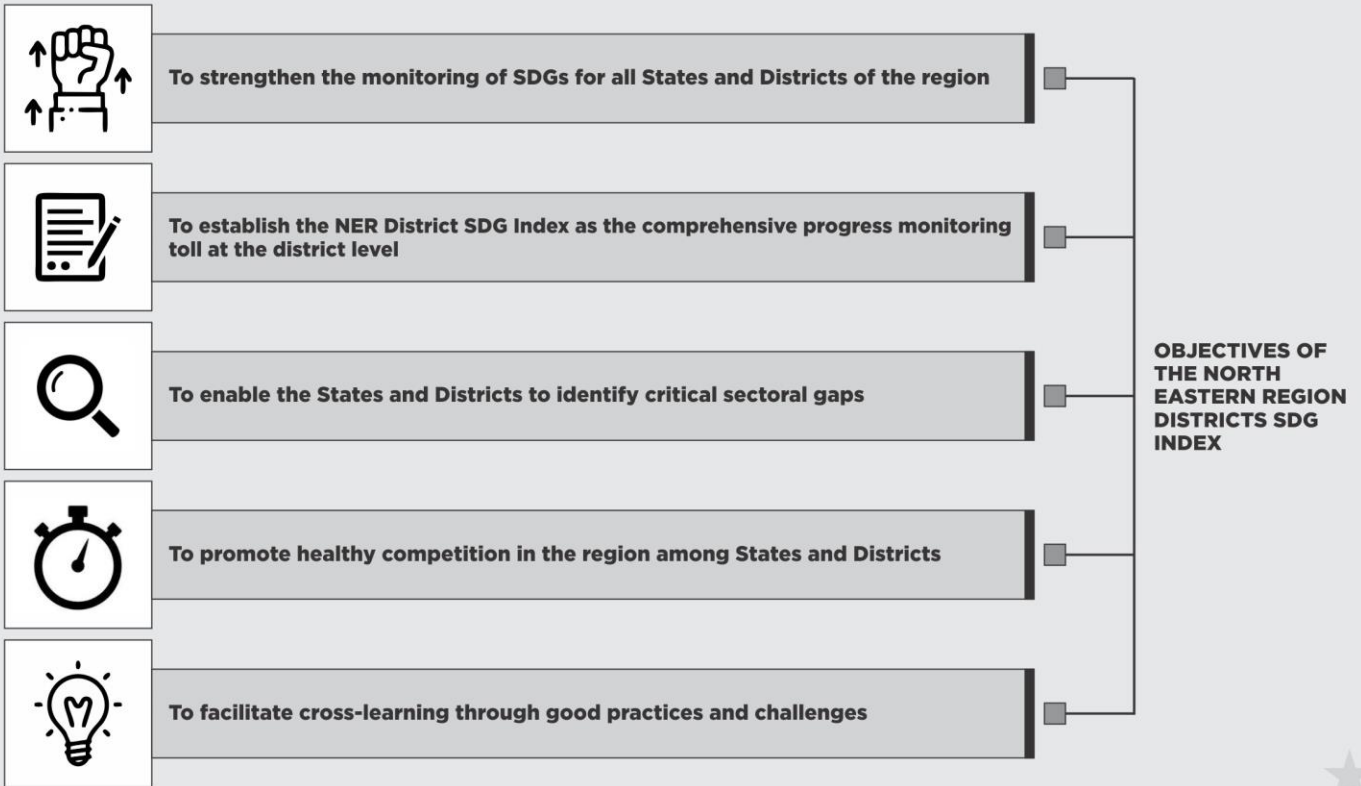
### 6.6.2. 'SHE IS A CHANGEMAKER' PROGRAMME

- Recently, **National Commission for Women launched a Pan-India Capacity Building Programme 'She is a Changemaker'** for Women in Politics.
- It aims to **improve leadership skills of grassroots women political leaders.**
- It will be undertaken in association with **region-wise training institutes** with an objective to undertake **capacity building of women political leaders** and improve their decision making and communication skills including, oration, writing, etc.
- It has **women representatives at all levels** (gram panchayats to parliament members and political workers) **including office bearers of National/State political parties.**

### 6.6.3. NITI AAYOG RELEASES NORTHEASTERN REGION (NER) DISTRICT SDG INDEX AND DASHBOARD 2021-22

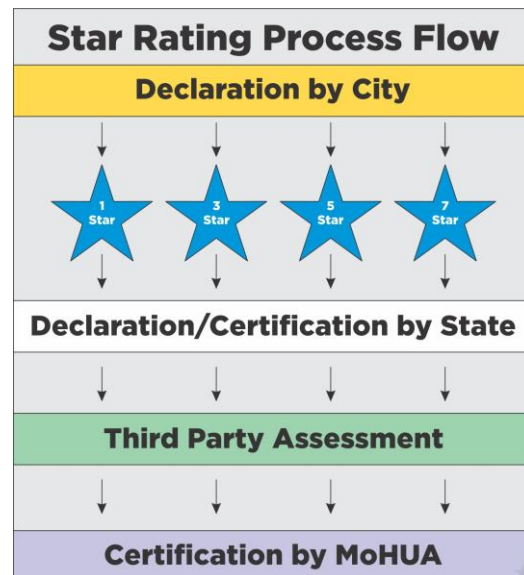
- NER District SDG Index & Dashboard is a **collaborative effort by NITI Aayog and Ministry of Development of North Eastern Region (M/DoNER) with technical support from UNDP** to measures **the performance of the District of the eight NE States.**
  - It is a step **toward Localisation of SDG in India** i.e., translating the 2030 SDG into local action and its impact thereof.
  - This SDG Index will be used as a **base for planning of development and welfare activities, education, health care.**
- **Key initiatives for NER**
  - **Revival of North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC) to help in implementation of innovative plans** like providing better farming facilities, training to farmers in clusters, organic seeds and fertilisers etc.
  - **National Mission on Edible Oils – Oil Palm (NMEO-OP)**
    - ✓ **50% of the new cultivation is targeted for NER.**
  - **Atmanirbhar Hastshilpkar Scheme by North Eastern Development Finance Corporation Ltd. (NEDFi) to develop the artisans** of the NER by providing financial assistance.
  - **North Eastern States Roads Investment Programme (NESRIP)** for construction/upgradation of roads.
  - **North East Special Infrastructure Development Scheme (NESIDS)** to strengthen the health infrastructure and combat the outbreak of COVID-19.

## OBJECTIVES OF THE NORTH EASTERN REGION DISTRICT SDG INDEX



### 6.6.4. MINISTRY OF HOUSING AND URBAN AFFAIRS (MOHUA) LAUNCHES ROADMAP TO MAKE URBAN INDIA 'GARBAGE FREE'

- MoHUA launched **Star Rating Protocol of Garbage Free Cities (GFC)-Toolkit 2022**, an important governance tool of waste management.
- Toolkit is **aligned with the priorities of Swachh Bharat Mission-Urban (SBM-U) 2.0**, with higher weightage being allocated to door-to-door garbage collection, source segregation, waste processing and dumpsite remediation.
  - SBM 2.0 was **launched with the overall vision of creating GFC**. For achieving this, a **key objective under SBM-U 2.0 is to make every Urban Local Body (ULB) at least 3-star Garbage Free** as per Star Rating Protocol.
    - A **Seven Star rating Protocol is defined for GFC**, which builds on aspirations of cities to progress towards higher standards of Swachhata (refer infographic).
- Toolkit was **felt necessary to revamp the existing GFC protocol** and make assessment process simpler, so that every ULB is motivated to apply for GFC certification.
  - For both SBM-U 2.0 and 15th Finance Commission, **release of government funds has been made conditional** subject to ULBs achieving at least 1-star certification.



### 6.6.5. SUSTAINABLE URBAN DEVELOPMENT AND SERVICE DELIVERY PROGRAM

- India and the Asian Development Bank (ADB) signed a **\$350 million loan to improve access to urban services**.



- **Sustainable Urban Development** program will establish essential **policies and guidelines for urban reforms** at the national level.
- **Service Delivery** program will provide specific **reform actions and program proposals at the state and ULB-level.**
- ADB will provide knowledge and advisory **support to Ministry of Housing and Urban Affairs.**
  - It **will also support ULBs** particularly in select low-income states.

#### 6.6.6. ATAL RANKING OF INSTITUTIONS ON INNOVATION ACHIEVEMENTS (ARIIA)

- ARIIA is an **initiative of Ministry of Education (MoE)** to systematically rank all major higher educational institutions in India on indicators related to innovation, start-up and entrepreneurship development amongst students and faculties.
- IIT Madra ranked at top, followed by IIT Bombay, whereas IISc Bengaluru spot on sixth rank for 2021.

#### 6.6.7. PARLIAMENTARY STANDING COMMITTEE (PSC) SUBMITTED “REFORMS IN CONTENT AND DESIGN OF SCHOOL TEXTBOOKS” REPORT

- Committee was set-up with a mandate **to identify references to un-historical facts in texts; ensure proportionate references to all periods of Indian history;** and highlight the role of great women achievers.
- **Key recommendations by Committee**
  - **Mandatory standards related to text-book content, graphics and layout,** supplementary materials and pedagogical approaches should be developed.
  - Need to have **more child-friendly textbooks** through use of pictures, graphics, QR codes and other audio-visual materials.
  - **Primary school textbooks should serve two purposes:** provide a strong foundation in core areas (reading, writing etc) and provoke curiosity among students.

- Textbooks should **highlight lives of hitherto unknown men and women** from different states and districts **who have positively influenced our national history,** honour and oneness.
- **Wrong portrayal** of historical figures and freedom fighters **should be corrected.**
- **Educational methodologies adopted in the ancient Universities** like Nalanda, Vikramshila and Takshila should be studied and suitably modified to **serve as a model reference** for teachers.
- **Traditional Indian knowledge systems should be linked with modern science** and contributions of ancient India in the fields of philosophy, science, mathematics etc. may also be included in the textbooks.

#### 6.6.8. SHRESTHA YOJNA

- Launched today, marking the **66th Death Anniversary of Dr. Bhim Rao Ambedkar (Mahaparinirvana Diwas)**
  - To be implemented by **Ministry of Social Justice & Empowerment.**
  - Aim is to aid **socio-economic upliftment and overall development of the Scheduled Castes students** by providing quality residential education in reputed private schools.

#### 6.6.9. SHAKTI CRIMINAL LAWS (MAHARASHTRA AMENDMENT) BILL, 2020

- The Bill was cleared by **Maharashtra Assembly to curb crimes against women and children.**
- **Important provisions of the bill**
  - **introduces death penalty** for offences such as causing grievous hurt by use of acid, rape, and gang rape.
  - **reduces the time for completion of investigation, trial, and disposal of appeal** for offences committed against women and children
  - places the **onus on social media platforms and Internet data** providing companies to share data for the police investigation.
- The Bill is modelled on the **Disha Act of Andhra Pradesh.**

#### 6.6.10. CENTRE REVISES GUIDELINES FOR PROCUREMENT OF COARSE GRAIN

- Recently, Ministry of Consumer Affairs, Food and Public Distribution has **revised guidelines for procurement, allocation, distribution, and disposal of coarse grains, allowing distribution of Jowar (Rabi) and Ragi for a longer period of 6 and 7 months** respectively.
  - **Under the earlier guidelines,** states were allowed to procure coarse grains from farmers at Minimum Support Price under Central Pool, subject to the prior approval of the Centre and Food Corporation of India and the **quantity was to be distributed within 3 months from the end of procurement period.**

- **Significance of increasing the distribution period**

- This would **increase procurement and consumption of these commodities** as the states would have more time to distribute these commodities in Target Public Distribution System/ Other Welfare Scheme.
- With the increase in procurement, **the number of farmers benefiting from the purchase of these crops will also increase.**
  - ✓ The government procures coarse grains mainly from **Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, and Uttar Pradesh.**
- Consuming coarse cereals will help **combating malnutrition in children and adolescents.**
  - ✓ Coarse grains are **highly nutritious, non-acid forming, gluten free and have better dietary properties.**



Geographical Conditions	Jowar/ Sorghum millet	Ragi/ Finger millet
<b>Temperature</b>	Grows well in <b>Warm, arid climates and needs 20-35 degrees Celsius in Kharif season and around 15 degrees Celsius in Rabi season.</b>	Requires <b>25-30 degrees Celsius</b>
<b>Rainfall</b>	Requires around <b>45-100 cms of rainfall annually.</b>	Requires <b>dry spell at the time of grain ripening and receives around 70-120cms of rainfall annually.</b>
<b>Type of Soil</b>	Grows well in <b>sandy loamy soils having good drainage and humus with a pH range from 6-7.5.</b>	Grows well in <b>red, black, sandy, loamy, and lateritic soils with pH of about 4.5-8.</b>
<b>Largest producer</b>	<b>Maharashtra</b> is the largest producer of Jowar in India.	<b>Karnataka</b> is the largest producer of Ragi in India.

### 6.6.11. CONSUMER PROTECTION (JURISDICTION OF THE DISTRICT COMMISSION, THE STATE COMMISSION AND THE NATIONAL COMMISSION) RULES, 2021

- Ministry of Consumer Affairs notified the rules **under provision Consumer Protection Act (CPA), 2019.**
  - Decision was taken as the **existing provisions** related to pecuniary jurisdiction was **causing rise in pendency and delay in disposal of cases.**
- CPA, 2019 aims to protect the rights of consumers by **establishing authorities for timely and effective administration and settlement of consumer's dispute.** It replaces CPA, 1986.
  - CPA, 2019 **provides a three-tier quasi-judicial mechanism** for redressal of disputes-district, state and national commission.
  - It **also stipulates the pecuniary jurisdiction of each tier** of consumer commission.

Commissions	Jurisdiction under existing provisions	New pecuniary jurisdiction
District	Up to ₹1 crore	Upto 50 lakh rupees
State	Between ₹1 crore and ₹10 crore	Between 50 lakh rupees and up to ₹2 crore
National	Above ₹10 crore	Above ₹2 crore

- **Mechanism provided under CPA, 2019 for settling consumer disputes**
  - **Deciding complaint within three months if complaint does not require analysis** or testing of commodities and within 5 months if it requires analysis or testing.
  - **Option of filing complaint electronically** through E-Daakhil Portal.
  - Option of **resolving disputes through mediation.**

 <b>SMART QUIZ</b>	<p>You can scan this QR code to practice the Smart Quiz of Environment at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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# 7. SCIENCE AND TECHNOLOGY

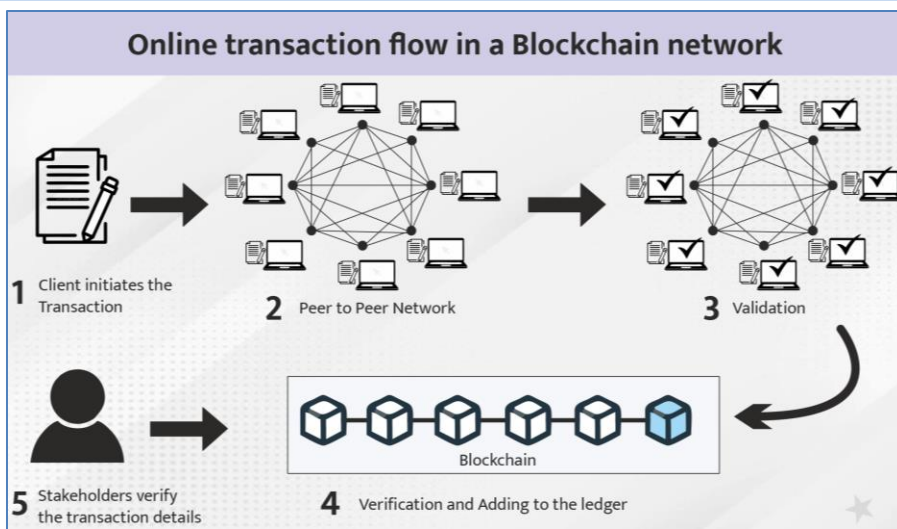
## 7.1. NATIONAL STRATEGY ON BLOCKCHAIN

### Why in news?

National Strategy on Blockchain has been formulated by the Ministry of Electronics & Information Technology (MeitY).

### Blockchain Technology Overview

- Blockchain is a **distributed or decentralised ledger technology** which was first introduced in the design and development of cryptocurrency, Bitcoin in 2009 by Satoshi Nakamoto.
- Blockchain technology is an **amalgamation of various technologies** such as distributed systems, cryptography, etc.
- Blockchain is a series of blocks, where **each block contains details of transactions executed over the network, hash(address) of the previous block, timestamp etc.**
- Data and transactions stored in blocks are **secured against tampering using cryptographic hash algorithms** and are validated and **verified through consensus** (consensus protocols) across nodes of the Blockchain network.
- Blockchain platforms** are being developed across the globe to offer Blockchain based digital transaction platforms enabled with interoperability across various chains. Popular blockchain platforms include Hyperledger, Cosmos, Polkadot, Redbelly, Ethereum etc.



### Significance of the technology

- Decentralised mechanism:** Blockchain technology provides efficient distributed ledger storage mechanism with appropriate authentication and authorization thereby **eliminating the need for a third party** to validate the transactions.
- Bringing transparency and efficiency:** Any tangible or intangible asset of value can be represented and tracked on a Blockchain network, which brings transparency, increases processing speed and reduces cost.
- Fraud prevention:** A system that is based on data stored in a number of places is immune to hackers. It is not that easy to get access to it, and if so, any piece of information can be easily recovered.
- Enabling trust in the digital world:** Features like transparency, efficiency, security and accountability fosters trust in digital arena.
- Applicability in diverse domains:** Blockchain can be used in both Permissioned and Permission-less models. These models have applications in various domains such as education, governance, finance & banking, healthcare, logistics, cyber security, media, legal, power sector, etc.

Blockchain Models	
Public/Permissionless	Private/Permissioned
Anyone can join, read, write and commit	Only authorized participants can write and commit
All are allowed to participate in consensus and anonymous resilient	Authorized nodes only can participate in consensus
Truly decentralized because of participation of unknown actors	Partially decentralized because of participation of known actors
Finality of transaction could take longer time due to more number of participants	Finality of transactions could be better in this model due to less number of participants

### Examples of potential applications

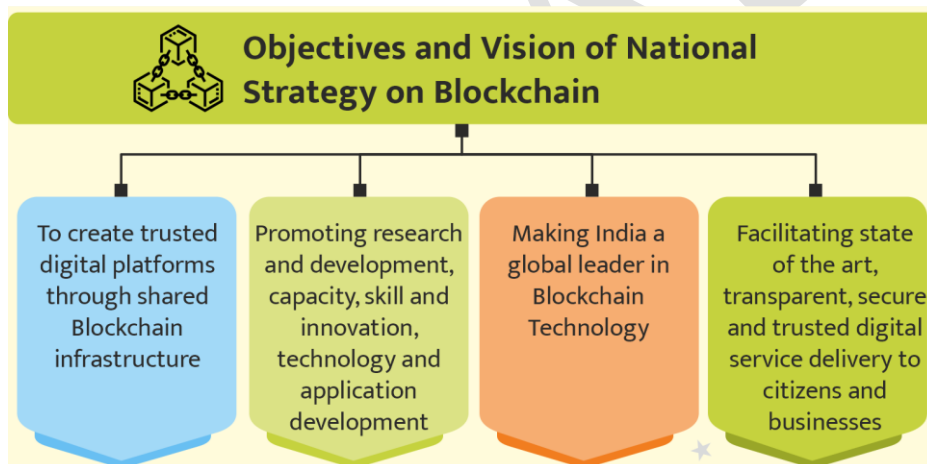
- E-Governance:** This technology can effectively be used in situations where multiple organizations or departments are involved in a particular workflow which not only makes the underlying system more efficient but also brings trust, transparency and accountability in the system.
  - This includes Property Record Management, Digital birth, death and education certificates Management etc.



- For eg: UAE through **Smart Dubai initiative**, aims to become the first city fully powered by Blockchain by 2021 and enhance everything from healthcare and education to environmental sustainability.
- **Keyless Signature Infrastructure (KSI) technology** is used in Estonian government to prove the authenticity of the electronic records.
- **Banking:** Blockchain can help in avoiding risk of payment losses involved in banking transactions, reduces cross-borders transaction fees, corporate payments and remittances.
- **Supply Chain:** Blockchain can create a tamper proof record to check the real time information about product journey from place of origin to destination place improving the reliability and efficiency of the supply chain system.
- **Healthcare:** By establishing a secure chain of network blockchain can help in handling the patient records, consent forms, billings and public health monitoring.
- **E-Courts:** Data from multiple entities such as police, judiciary, legal department, etc. can be stored in a coordinated manner using Blockchain technology.
- **Other areas such as Automotive, Tourism, Insurance, Real Estate etc.**

### Strategies and Outcomes targeted for next 5 years: National Blockchain Framework

- **Need:** Reports predicts that by 2030, Blockchain would be used as a foundational technology for 30% of the global customer base.
- **Plan:** MeitY has initiated a project on design and development of a **National Blockchain Framework (NBF)** for creation of a shared Blockchain infrastructure and offering Blockchain as-a-Service (BaaS). Initially, National Blockchain Framework would be used for e-governance domain transitioning to incorporate various use cases over time.



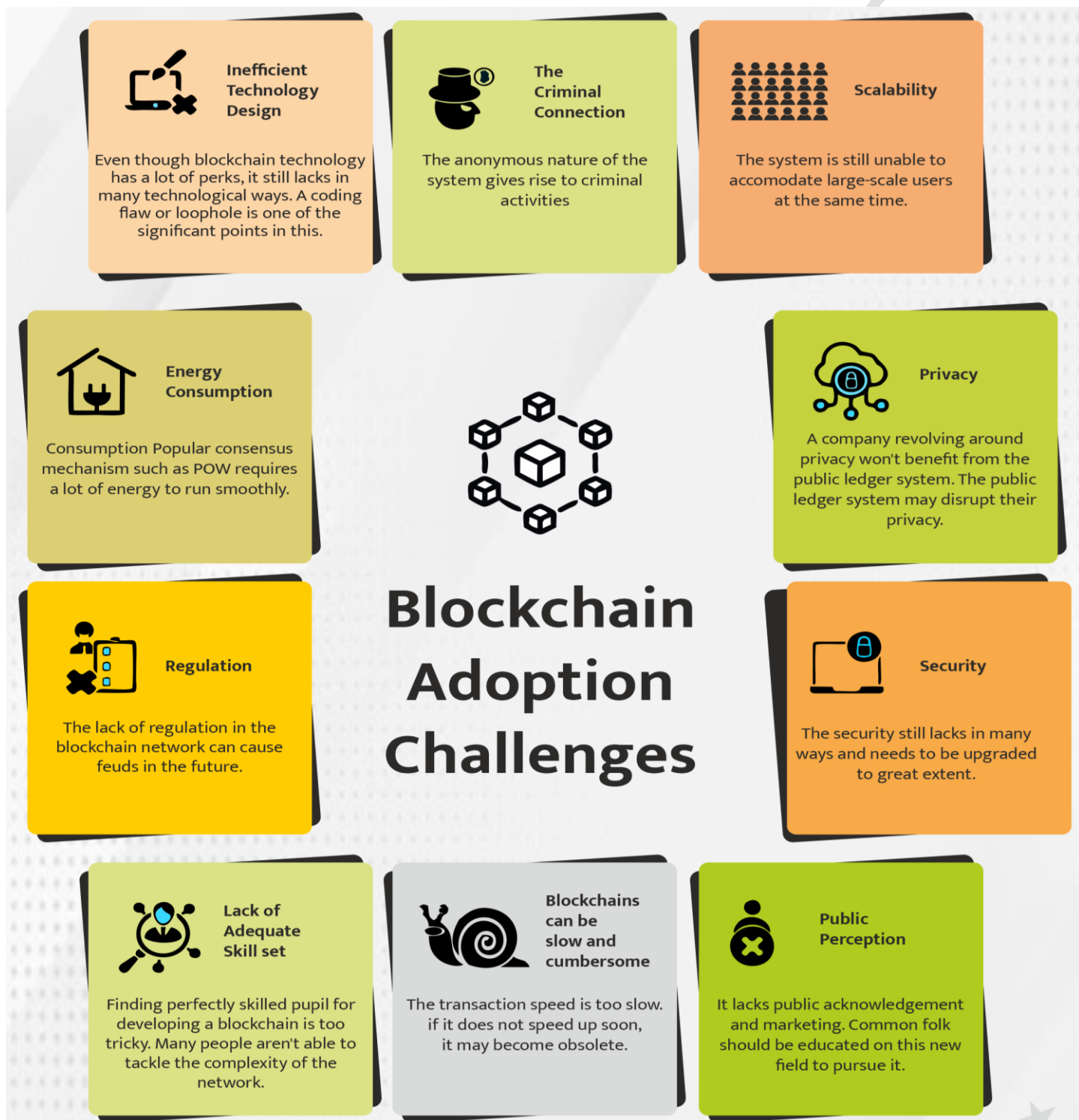
This framework comprises **following components** for a multi-pronged strategy:

- **Geographically distributed nodes** across the country, to enable citizen services at large scale and enable cross domain application development. This will facilitate effective utilization of the Blockchain technology in different domains such as health, agriculture, education, finance, etc.
- **R&D for Blockchain Challenges:** MeitY shall initiate various research projects to focus on advanced research and addressing various challenges and detection of vulnerabilities in Blockchain technology based solutions.
- **To design and develop an indigenous Blockchain platform** incorporating identified best practices and advanced technological features.
- **Integration with important National Level Services** such as online Electronic Signatures (e-Sign), ePramaan and Digilocker.
- **Awareness Creation:** Organizing user awareness workshops to sensitize the MSME/ Government departments/ judiciary and law enforcement agencies (LEAs), to boost the adoption, which would lead to new innovative use cases based on Blockchain.
- **Policies & Regulations:** The existing regulations and policies would be updated as needed as the National Blockchain Framework evolves and more experience is gained during the implementation.
- **Adoption Incentives:** Central and state Governments shall formulate their respective schemes and guidelines detailing out fiscal and non-fiscal incentives in this sector to enable large scale adoption of Blockchain in the country.

#### Other prominent efforts in this direction

- **Centre of Excellence (CoE) in Blockchain technology** was established by NIC in association with **National Informatics Centre Services Inc. (NICSI)**. Its objectives include accelerating adoption & deployment of Blockchain technology in Government.
- **NITI Aayog** in collaboration with Gujarat Narmada Valley Fertilizers & Chemicals Limited (GNFC) has developed a Blockchain based system **for fertilizer subsidy**.
- **State Level efforts:** Blockchain technology based solution for property registration has been developed and is piloted at Shamshabad District, Telangana State.

- **Human Resource Development:** Government has already started the **Future Skills Prime program** for upskilling and reskilling in emerging technologies including Blockchain in association with NASSCOM to provide the required talent pool in the country.
- **Multi-Institutional Approach:** To plan and implement the National Blockchain Framework, a multi- institutional approach involving various stakeholders from Government, premier academic & research institutions, startups and industry is proposed. Organisations like C-DAC, NIC and NICS, NeGD, State Governments shall collaboratively work in this direction.
  - Further, **Blockchain Advisory Council** and **Steering Committee** shall be constituted to provide overall guidance and for regular review and monitoring of the implementation of the Strategy respectively.



## Related Information

### Presidio Principles: Foundational Values for a decentralised future

- Presidio Principles were **released by World Economic Forum's Global Blockchain Council**.
- The document calls on **all actors**, including developers, governments, executives, international organisations, corporate boards, and others, to **uphold these tenets as they build blockchain applications** – and to self-direct their ecosystems in using these principles as a foundational vision for how users can and should be protected.
- The Presidio Principles are **grouped into four broad pillars** as shown in the figure.
- The principles are intended to serve as a steering document and are **not legally binding**.



## 7.2. DRONE TECHNOLOGY IN AGRICULTURE

### Why in News?

Recently, the Union Agriculture Minister released the **Standard Operating Procedure (SOP) for use of Drone in Pesticide Application** for Crop Protection and for spraying Soil and Crop Nutrients.

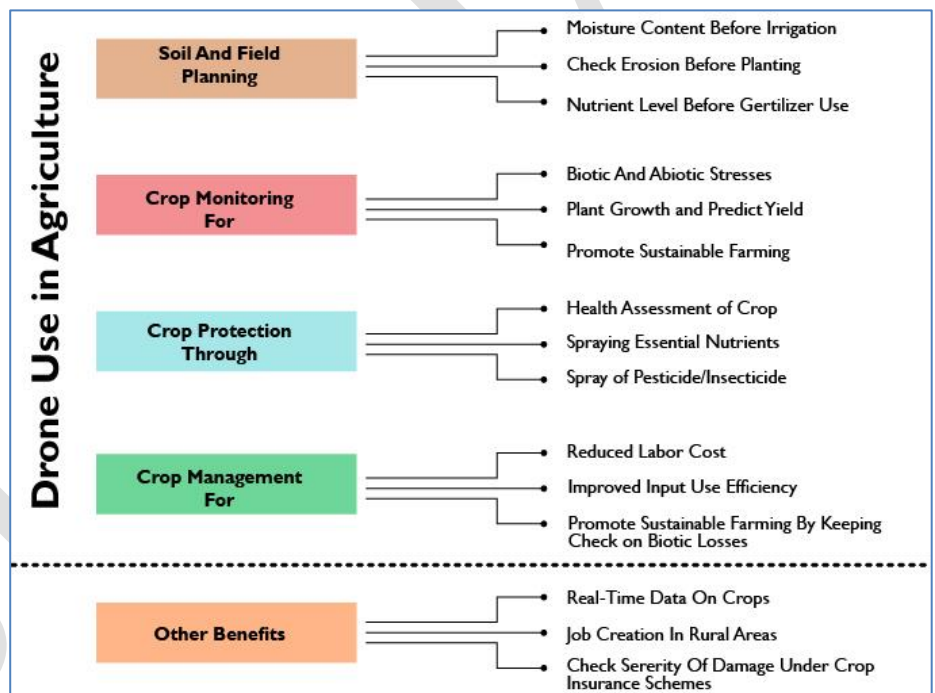
### Major Provisions of the SOPs

- It covers instructions on **pre, post and during operation, emergency handling plan** for effective and safe operations of drones.
- The SOP covers important aspects of **Pesticide application** and drones can be used in Agricultural, Forestry, Non-Cropped Areas, etc. These aspects include:
  - Statutory provisions, Flying permissions and Other Critical parameters such as area distance restrictions, weight classification, overcrowded areas restriction, drone registration, safety insurance, piloting certification, operation plan, air flight zones, weather conditions.

### Potential of Drone Technology use in Agriculture

“Drone” means an **unmanned aircraft system**, i.e., an aircraft that can **operate autonomously** or can be **operated remotely** without a pilot on board (**Drone Rules, 2021**).

- Finding use in many fields, it holds potential to **modernize the routine manual agriculture** activities as well by **linking with artificial intelligence (AI), machine learning (ML)** etc.
  - This includes mining, infrastructure, surveillance, emergency response, transportation, geo-spatial mapping, defence, and law enforcement etc.



### Why use drones for spraying pesticides?

- Being toxic in nature (Biocides), the Conventional pesticide use methods carry issues like:
  - **High Labor Cost, Lower spray uniformity and excessive application.**
  - **Health and environment risks on Oral, respiratory or dermal** (by skin) contact; pollution of soil and water.
- Drones use can **help address most of these issues.**



- It will also help in finding solutions to:
  - **Addressing Increasing food demand** with world population predicted to reach 9 billion by 2050;
  - **React faster to pest invasions.** E.g. in 2020, drones were used in fight against the attack on crops by swarms of locusts in India.
  - **Help in future needs of agriculture** through micro level resource management to overcome unsuitable farming methods. E.g. In an experiment, drones helped in reducing herbicide use by 52% in a Brazilian soybean field.
  - **Help in Smart Agriculture** through direct communication between drones and other agricultural equipment. It involves processing of drone inputs to create field maps and sending it to farm equipment.

### Challenges

- **Unviable Commercial Operation** due to small and scattered landholding. E.g. According to the Agriculture Census (2015-16), around 86% farmers in India hold land less than 5 acres.
- **Limited Flight time and range** of Drones due to relatively high payloads (20-60 minutes).
- **High Initial costs** of drones with maintenance issues.
- **Connectivity issues** in rural areas for online coverage.
- **Knowledge and skill issues** as it needs specialized skills and knowledge from farmer to utilize drone inputs,
- **Concerns over misuse of drones** to infringe privacy and security (especially in border areas).
- **Weather dependence** with difficulties to operate in windy or rainy weather.

### Way Forward

With **Drone Rules, 2021** and the **SOPs**, the main challenge of the past, i.e. **lack of national laws** or rules is taken care of. Further, a **PLI scheme for drones** would benefit all sectors including agriculture and achieve India's potential to become a global drone hub by 2030.

The **Indian Council of Agricultural Research (ICAR)** is already working on **SENSAGRI, SENsor based Smart AGRiculture** through the **Indian Agricultural Research Institute (IARI)** and partner Institutes to develop indigenous prototype for drone based crop and soil health monitoring system using hyperspectral remote sensing (HRS) sensors.

We should further expand the **scope of research** to study the quality of its operations and **fine-tune telecom, skill, and other policies/initiatives** to address the challenges of connectivity and skills among others.

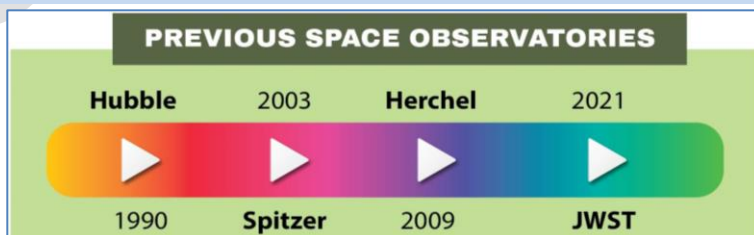
## 7.3. JAMES WEBB SPACE TELESCOPE (JWST)

### Why in news?

Recently, the James Webb Space Telescope, NASA's most powerful telescope, is rocketed into orbit.

### More on news

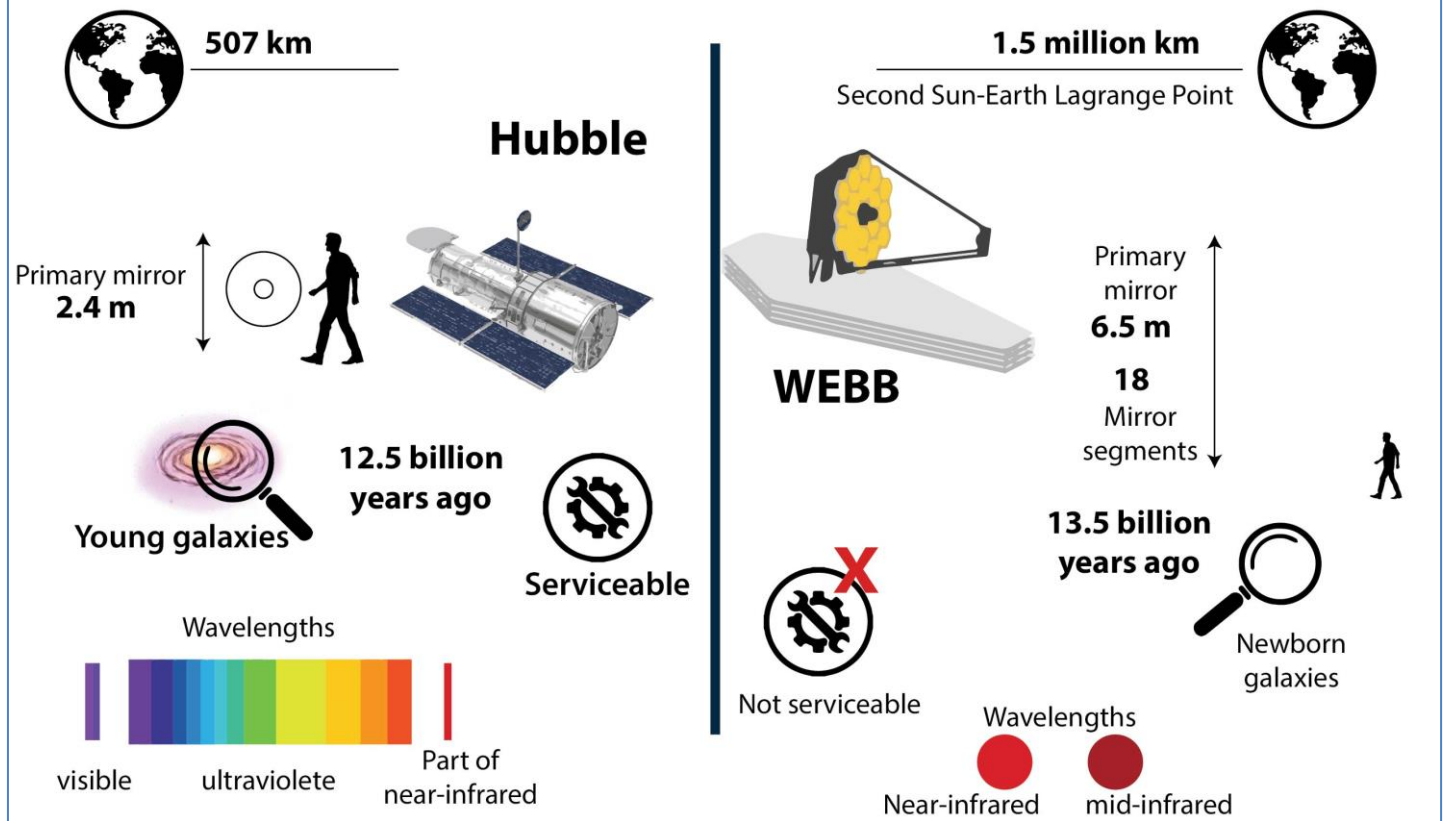
- The James Webb Space Telescope (JWST) is NASA's **infrared flagship observatory**.
- It is an international collaboration between **NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA)**.
- **Mission goals are**
  - **Search for first galaxies** or luminous objects formed after Big Bang.
  - **Determine how galaxies evolved.**
  - **Observe stars formation** from the first stages to formation of planetary systems
  - **Measure physical and chemical properties of planetary systems**, including our own Solar System, and investigate potential for life in those systems.
- **JWST is headed for Sun-Earth Lagrange Point 2 (L2).**
  - Lagrange points are **positions in space where objects sent there tend to stay put** as gravitational forces of a two body system (like Sun and Earth) equal the force required for a small object to move with them.
- **Scientific instruments on JWST:** Near Infrared Camera, Near Infrared Spectrograph, Mid Infrared Instrument and Fine Guidance Sensors/Near Infrared Imager and Slitless Spectrograph.



- The JWST is being considered as the successor of the Hubble Space Telescope (HST).

## COMPARING WEBB AND HUBBLE

Webb follows the NASA/ESA Hubble space telescope in the line of great space observatories. Both space observatories have different capabilities and will operate in parallel, complementing each other.



### Webb vs Herschel Space Observatory

- In 2009, the **European Space Agency** launched an **infrared telescope** named the Herschel Space Observatory.
- It also **orbits the Sun** similar to how Webb would. The **primary difference** between Webb and Herschel is the **wavelength range**: Webb goes from 0.6 to 28 microns, while Herschel covers 60 to 500 microns.
- Also, **Herschel's mirror is smaller** than Webb's. It is 3.5 metres in diameter, while Webb's primary mirror has a diameter of 6.5 metres.

## 7.4. PARKER MISSION

### Why in news?

NASA's Parker Solar Probe (PSP) has now flown through the Sun's upper atmosphere – the corona – and sampled particles and magnetic fields there.

### About PSP

- Launched in 2018, the PSP is part of **NASA's Living with a Star program** to explore aspects of the Sun-Earth system that directly affect life and society.
- It is named after Eugene Newman Parker, a physicist who proposed concepts about how stars give off energy.
- It **uses a carbon-composite shield, to withstand temperatures** nearly 2,500 F (1,377 C), to protect itself from Sun's heat.

- It became **the first spacecraft in history** to touch the Sun.
- It uses a series of **gravitational encounters with the planet Venus to gradually lower the orbit of the spacecraft** until it enters the outer atmosphere, or corona, of the Sun.

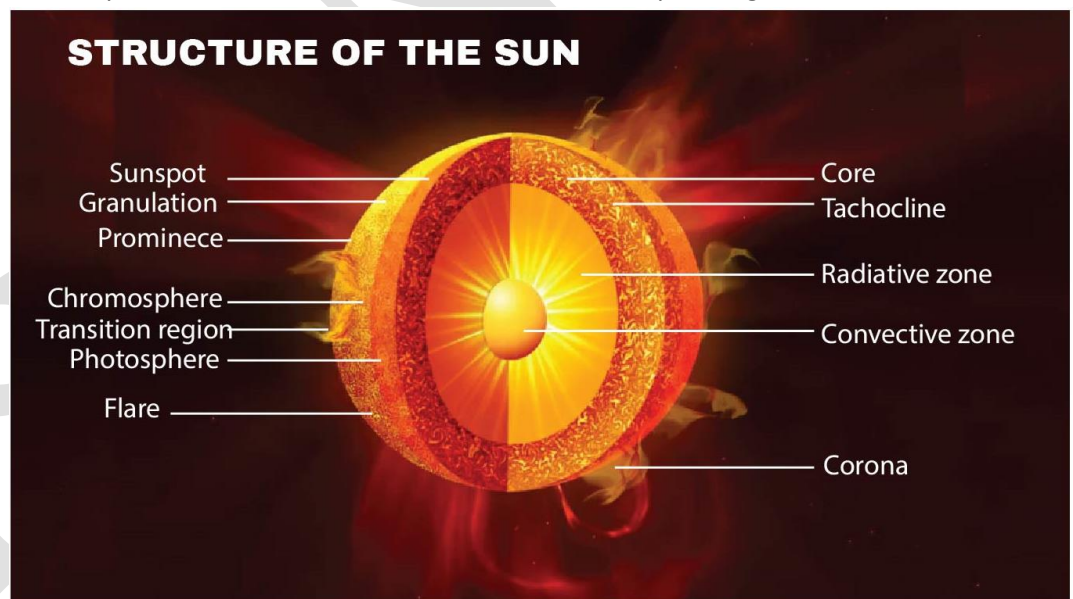
### Relevance of the PSP mission

- **Deeper insights into sun's evolution:** Touching the very stuff the Sun is made of will help scientists **uncover critical information about our star, the Sun, and its influence on the solar system.** This in turn, can also expand our knowledge on other stars in the universe.
- **Predicting extreme weather events:** The PSP promises new and valuable information to Scientists to help them forecasting solar storms. Thus, it can also help improving forecasts of major space weather events

- Solar storms are the biggest outbursts from the Sun can rattle our planet's magnetic field. In the process, communications may be disrupted, satellites can be knocked offline, and power grids will be vulnerable to electrical surges.

- **Unravelling secrets in Corona:** In Corona some **key processes take place** that currently defy explanation. For example
  - The temperature of the Sun at its **photosphere is roughly 6,000 degree C** but within the **corona** it can reach a staggering **million degrees or more.**

- It's also within this region that the **outward flow of charged particles** - electrons, protons and heavy ions - suddenly **gets accelerated into a supersonic wind.**



### Achievements

- In 2019, Parker discovered that **magnetic zig-zag structures in the solar wind**, called **switchbacks**, are plentiful **close to the Sun.** But how and where they form remained a mystery. Halving the distance to the Sun since then, PSP has now passed close enough to identify one place where they originate: **the solar surface.**
- In April, 2021, the PSP crossed the **outer edge of the corona** termed the **Alfvén critical boundary**, a point that marks the end of solar atmosphere and beginning of the solar wind.
- It should eventually get to **within 7 million km (4 million miles)** of the **photosphere in 2025.**



**Some other solar missions:** NASA's Heliophysics Missions, European Space Agency's Solar Orbiter, India's Aditya-L1 mission.

- **Aditya L1:** It will be launched in the third quarter of next year (2022) and will provide **more insights into the origin of the universe and many other unknowns.** The spacecraft in the Aditya L1 mission will be **sent 1.5 million km away from the Earth to L1 Lagrangian** ( a point between the Earth and the Sun where the gravitational pull of both the bodies on the satellite is equal to the centripetal force needed to keep the satellite in orbit).

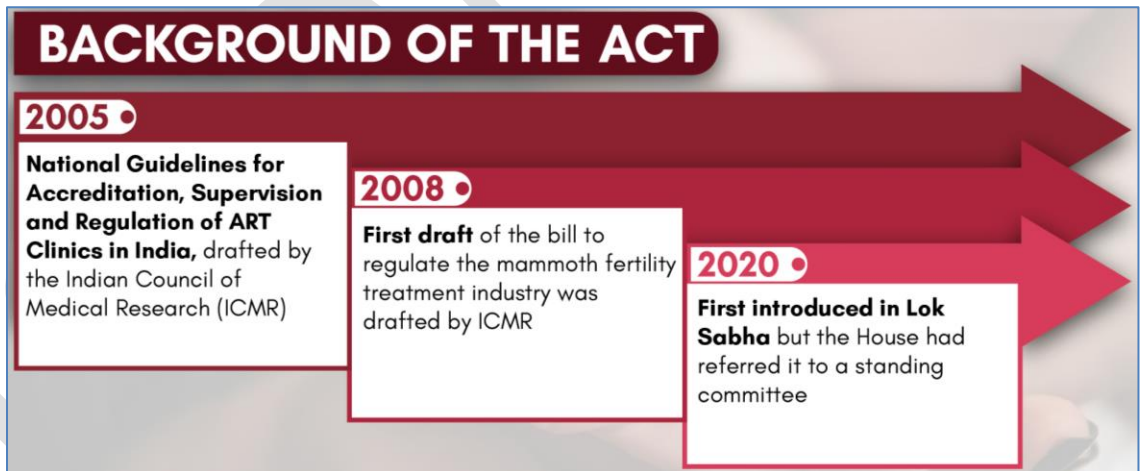
## 7.5. ASSISTED REPRODUCTIVE TECHNOLOGY (ART) REGULATION ACT 2021

### Why in news?

Recently, Parliament has passed the ART Regulation Act 2021 that provides for the safe and ethical practice of ART services.

### Key provisions of the Act

- **Definition of ART:** ART to include all techniques that seek to obtain a pregnancy by handling sperm or oocyte (immature egg cell) outside human body and transferring gamete or embryo into the reproductive system of a woman.
- **Regulation of ART clinics and banks:** Every ART clinic and bank must be registered under the **National Registry of Banks and Clinics of India.**



- **National Registry** established will act as a central database with details of all ART clinics and banks in the country.
- **State governments will appoint registration authorities** for facilitating the registration process

✓ Registration Authority will have the chairperson, who will be an officer above the rank of Joint Secretary in the Health Department.

- **ART bank** is an organisation that is set up to supply sperm or semen, oocytes, or oocyte donors to ART clinics or their patients.
- **Rights of a child born through ART:** Child born through ART will be deemed to be a **biological child of commissioning couple** and will be entitled to rights and privileges available to a natural child of the commissioning couple.
  - A donor will not have any parental rights over the child.
- **National and State Boards:** These are constituted under the Act to **regulate ART services.**
  - State Boards will coordinate enforcement of the policies and guidelines for ART as per the recommendations, policies, and regulations of the National Board.

- **No court will take cognisance of offences under the Act**, except on a complaint made by the National or State Board or any officer authorised by the Boards.
- **Stringent punishment:** Act introduced stringent punishment for those practising sex selection, sale of human embryos or gametes, running agencies, rackets, and organisations violating the law.
- **Conditions for gamete donation and supply**, offering ART services have also been prescribed.

#### Concerns associated with the Act

- **Violation of fundamental rights**
  - **Article 14:** It allows for a married heterosexual couple and a woman above the age of marriage to use ARTs and **excludes single men, cohabiting heterosexual couples and LGBTQ individuals and couples** from accessing ARTs.
    - ✓ It goes against the spirit of the Supreme Court's landmark verdict in **Navtej Johar vs Union of India (2018)**, where states were advised to take positive steps for equal protection for same-sex couples.
  - **Article 23:** Lack of compensation for providing reproductive labour violative of Article 23 of the Constitution of India which prohibits forced labour.
- **Less protection to donor:** It does little to protect the egg donor, as harvesting of eggs is an invasive process which, if performed incorrectly, can result in death.
- **Imbalance between ART Act and Surrogacy Regulation Act (SRA), 2021:** Both Acts do not work in tandem, as core ART processes are left undefined in ART Act while several of these are defined in the SRA.
  - **Duplicity:** Both laws set up **multiple bodies for registration** which will result in duplication and **lack of regulation**. For instance, surrogacy clinic is not required to report surrogacy to National Registry while ART banks and clinics have to report procedures to the **National Registry**.
  - **Offences:** Offences under the **ART Act are bailable** but not under the SRA.
  - **Records:** Records have to be maintained for **10 years** under the ART Act but for **25 years** under the SRA.
- **Lack of clarity:** Act's prohibition on the sale, transfer, or use of gametes and embryos is poorly worded and will **confuse foreign and domestic parents** relying on donated gametes.

#### Way forward

- **Grievance cell:** ART clinics and banks have to maintain a grievance cell. Clinics must instead have ethics committees. Mandated counselling services should also be independent of the clinic.
- **Definitions:** Definitions of commissioning "couple", "infertility", "ART clinics" and "banks" need to be synchronised between the SRA and ART Act.
- **Maintain confidentiality:** ART clinics and banks are required to keep information about commissioning parents or women and donors confidential.
- **Consent:** Clinics shall perform any treatment or procedure with the written consent of all the parties seeking ART and provide them insurance coverage.

#### Types of ARTs

ART is used to **treat infertility**.

- **In Vitro Fertilization (IVF):** It is the most common form of ART that is used by maximum patients. In this, woman's eggs are combined with man's sperm in a laboratory. The fertilised egg is then placed inside the woman's uterus in a procedure called embryo transfer.
  - **Mitochondrial Replacement therapy (MRT)** with a concept of three parent baby is a form of IVF.
- **Gamete intrafallopian transfer (GIFT):** The man's sperm and a woman's egg are made to combine in a lab. Then the eggs are implanted into the fallopian tubes and the **fertilization occurs inside a woman's body**.
- **Intrauterine insemination (IUI):** Also known as **artificial insemination**, it involves insertion of the male partner's (or a donor's) sperm into a woman's uterus at or just before the time of ovulation by long narrow tube.
- **Gestational Surrogacy:** In this, the embryo is created via IVF, using the eggs and sperm of the intended parents or donors, and is then transferred to the surrogate. The child is thus not biologically related to the surrogate mother, who is often referred to as a gestational carrier.

**Surrogacy:** Surrogacy is an ART process, where an intending couple commissions a surrogate mother to carry their child.

## 7.6. ANTI-DOPING BILL

### Why in News?

Recently, the government introduced a **National Anti-Doping Bill, 2021 in Lok Sabha**.

## About doping

- **Doping is the consumption of certain prohibited substances by athletes to enhance performance.**
  - When the drug is consumed by the athlete, he gets an unfair advantage over the clean athlete, thereby banning such drugs shall propagate level playing field and equality among the athletes.
- **World Anti-Doping Agency (WADA)** monitors doping in all kinds of competitive sports.
  - WADA was established in 1999 as an international independent agency composed and funded equally by the sport movement and governments of the world.
  - The WADA **periodically updates its list of Prohibited Substances and Methods.** This includes steroids, anabolic agents, stimulants, and gene doping. Some components such as narcotics are permanently banned. Some, like alcohol, are banned only in-competition.
  - At the national level, there is the **National Anti-Doping Agency (NADA)**, an independent body under Union **Ministry of Sports.**
- **WADA monitors doping in sport based on the World Anti-Doping Code.** The Code provides a framework for anti-doping policies, rules, and regulations for sport organizations and public authorities.
  - Any sports person competing in national or international events can be asked to give his/her blood and/or urine samples at any point of time by anti-doping agency or sports events committee during the event. Testing can be conducted in-competition and out-of-competition.
- The **WADA doesn't directly conduct tests.** It gives accreditation to laboratories which adheres to the mandatory International Standard for Laboratories.
- In the latest report published by the **World Anti-Doping Agency, 152 (17% of the world total) Anti-doping Rule Violations (ADRVs) were reported in India in 2019.**
  - India ranks third in the list with the maximum dope offenders coming from bodybuilding (57).

### Reasons for high Doping cases in India



### Key features of the Bill

- **Prohibition of doping:** The Bill prohibits athletes, athlete support personnel and other persons from engaging in doping in sport.
  - Anti-doping rule violation by an individual athlete or athlete support personnel may result in:
    - ✓ Disqualification of results including forfeiture of medals, points, and prizes
    - ✓ Ineligibility to participate in a competition or event for a prescribed period
    - ✓ Financial sanctions
    - ✓ Consequences for team sports will be specified by regulations.
    - ✓ Consequences for a violation will be determined by the National Anti-Doping Disciplinary Panel after a hearing.
  - Exemptions: If any athlete requires a prohibited substance or method due to a medical condition, they may apply to the National Anti-Doping Agency for a therapeutic use exemption.



- **National Anti-Doping Agency:** Bill seeks to provide statutory framework for the functioning of the **National Anti-Doping Agency (NADA)**, empowering it to conduct raids besides strengthening measures to tackle drug abuse in Indian sports.
  - NADA established as societies under Societies Registration Act, will be dissolved and reconstituted. It will be **headed by a Director General appointed by the central government.**
  - The **functions of the agency** include:
    - ✓ planning, implementing, and monitoring anti-doping activities
    - ✓ investigating anti-doping rule violations
    - ✓ promoting anti-doping research
- **National Board for Anti-Doping in Sports:** The Bill establishes a **National Board for Anti-Doping in Sports** to make recommendations to the government on anti-doping regulation and compliance of international commitments on anti-doping.
  - The Board will **oversee the activities of the Agency and issue directions to it.**
  - The Board will **consist of a Chairperson and two members appointed by the central government.**
- **Disciplinary and Appeal Panels:** The Board will constitute a **National Anti-Doping Disciplinary Panel for determining consequences of Anti-Doping Rule Violations.** This Panel will consist of a **Chairperson and four Vice-Chairpersons (all legal experts), and ten members (medical practitioners and retired eminent athletes).**
- **Dope Testing Laboratories:** The existing **National Dope Testing Laboratory (NDTL) will be deemed to be the principal dope testing laboratory.** The Union Government may establish more National Dope Testing Laboratories.
  - **Recently,** NDTL has regained the WADA accreditation which was suspended on 20 August 2019, based on non-compliances which were observed during on-site assessment of the Laboratory held in September 2018.

#### National Dope Testing Laboratory (NDTL)

- NDTL has regained the **World Anti-Doping Agency (WADA) accreditation.**
  - The restoration of accreditation is a boost to India's efforts to achieve the **highest global standards of excellence in sport.**
- NDTL was established with an aim to **get permanently accredited by International Olympic Committee (IOC) and WADA** to do the testing for the banned drugs in human sports.
- WADA is an **international independent agency** composed and funded equally by the sport movement and governments of the world.
  - Its key activities include **scientific research, education, development of anti-doping capacities.**

#### Significance of the Bill

- **Strengthen doping control programme:** It helps to strengthen the framework and mechanisms for carrying out the **doping control programme** in sports to ensure dope-free sport in India.
  - Currently, NADA had no authority to conduct raids and its anti-doping appeal panel has held the same.
- **Technological and Medical Expertise:** It also **provides for the establishment of the NDTL and other dope testing laboratories.** Such laboratories will strengthen the capability for testing a greater number of samples considering the sizable population and growing number of sportspersons in the country. These will also **facilitate India to host mega sports events in the country.**
- **Legal Backing:** If passed by the Parliament, **it will give legislative backing to anti-doping norms in the country.**
- **Adherence to international norms:** It will also give **effect to United Nations Educational, Scientific and Cultural Organisation (UNESCO) International Convention against Doping in Sport.**
  - The Convention **aims to promote the prevention of, and the fight against, doping in sport for its elimination.**
  - India signed the convention in 2005 and ratified it in November 2007.

#### Conclusion

National Anti-Doping Bill 2021 is another step in India's quest to become a sporting powerhouse. Along with this, measures have to be taken to ensure the safety and long-term health of the sportspersons as well as participate in the sports ethically. Goodwill ambassadors, clean sporting icons and media can help reach the aspiring athletes and propagate healthy participation into the sports hence, achieving athletes' full potential.

## 7.7. WORLD MALARIA REPORT 2021

### Why in news?

Recently, the **World Health Organization (WHO)** has released the **World Malaria Report 2021** edition that assess the actions taken by states in response to Malaria in the backdrop of COVID 19 pandemic.

### Key findings of the report

- **Malaria cases and deaths**
  - An estimated **241 million malaria cases** were reported in **2020** in 85 malaria-endemic countries, increasing from 227 million in 2019.
  - **Sub-Saharan Africa** continues to carry the **heaviest malaria burden**, accounting for about 95% of all cases and 96% of deaths in 2020.
  - **Malaria deaths increased by 12% globally** in 2020 compared with 2019.
- **India related findings**
  - India accounted for **83% of cases** in the **WHO South-East Asia Region**.
  - **India was the only high-burden country to record progress** by sustaining a reduction in malaria burden between 2019 and 2020.
- **Globally, 40 countries and territories** have now been granted a **malaria-free certification from WHO** – including, most recently, China, El Salvador, Argentina and Uzbekistan.

### About Malaria

- It is a life-threatening **mosquito borne blood disease** caused by **plasmodium parasites**, and spread through the bites of infected **female Anopheles mosquitoes**.
- There are **5 parasite species** that cause malaria in humans, and 2 of these species – **P. falciparum** (African continent) and **P. vivax** (outside of sub-Saharan Africa) – pose the greatest threat.
- It is **preventable as well as curable**.
- **Malaria Vaccine**
  - WHO has recommended broad use of the **RTS,S/AS01 (RTS,S) malaria vaccine** among children living in regions with moderate to high P. falciparum malaria transmission.
  - Known by its **brand name Mosquirix**, this recombinant protein vaccine has been shown to significantly **reduce malaria, and deadly severe malaria** among young children, and also reduced the overall hospital admissions.

### Measures taken to eliminate Malaria

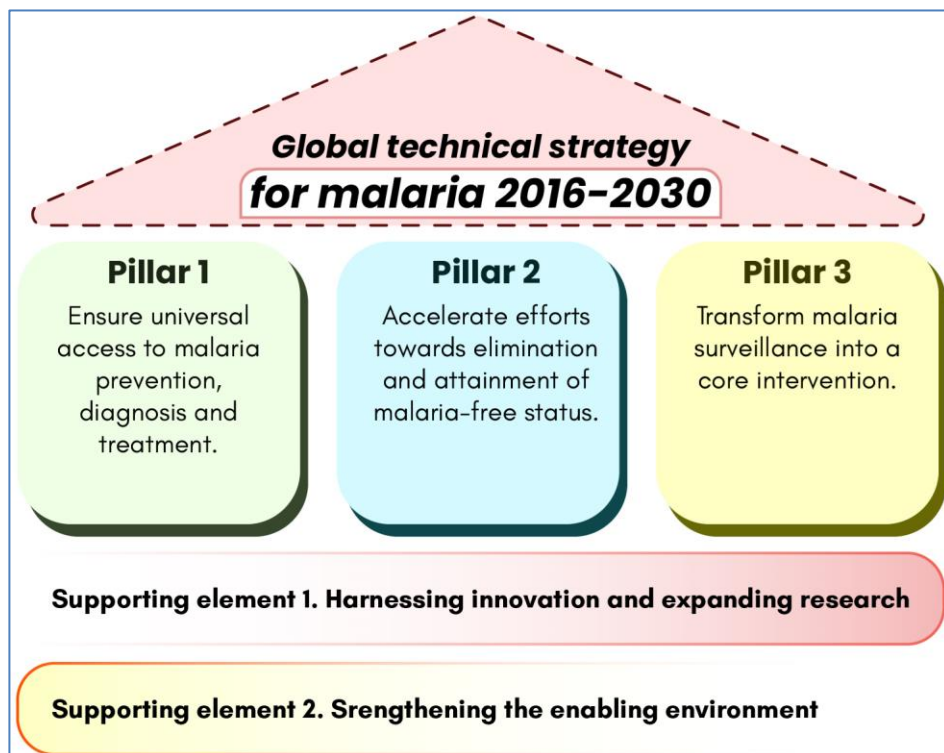
- **WHO Global Malaria Programme (GMP)**: It is responsible for coordinating WHO's global efforts to control and eliminate malaria. Its work is guided by the **Global technical strategy (GTS) for malaria 2016–2030** adopted by the World Health Assembly in May 2015 and updated in 2021.

## Goals, milestones and targets for the Global technical strategy for malaria 2016-2030

GOALS	MILESTONES		TARGETS
	2020	2025	2030
1.Reduce malaria mortality rates globally compared with 2015	At least 40% <b>18% reduction achieved</b> <b>22% off track</b>	At least 75%	At least 90%
2. Reduce malaria case incidence globally compared with 2015	At least 40% <b>3% reduction achieved</b> <b>37% off track</b>	At least 75%	At least 90%
3. Eliminate malaria from countries in which malaria was transmitted in 2015	At least 10 countries <b>On track</b>	At least 20 countries	At least 35 countries
4. Prevent re-establishment of malaria in all countries that ore malaria- free	Re-establishment prevented <b>On track</b>	Re-establishment prevented	Re-establishment prevented

- **Malaria Elimination Research Alliance (MERA)- India**: Its purpose is to identify, articulate, prioritise and respond to the research needs of the country in a coordinated and combinatorial way to eliminate malaria from India by 2030.
- **E-2025 initiative**: Under this, WHO has identified group of 25 countries with the potential to eradicate malaria by 2025.
- **High Burden to High Impact (HBHI) initiative**: In 2019, WHO has initiated the HBHI initiative in 11 high malaria burden countries, including **India** (West Bengal and Jharkhand, Chhattisgarh and Madhya Pradesh).

- **National Strategic Plan for Malaria Elimination (2017-22):** It gives year wise elimination targets in various parts of the country depending upon the endemicity of malaria in the next 5 years.
- **Ministerial Declaration on Accelerating and Sustaining Malaria Elimination in South-East Asia Region (SEAR):** India is a signatory to it, which was signed in New Delhi by health ministers of countries of the WHO- SEAR.
- **National Task Force on Malaria Elimination:** It was formed to promote intersectoral cooperation and engagement of all stakeholders.
- **Parliamentary and Legislative Forum on Malaria Elimination** was formed.



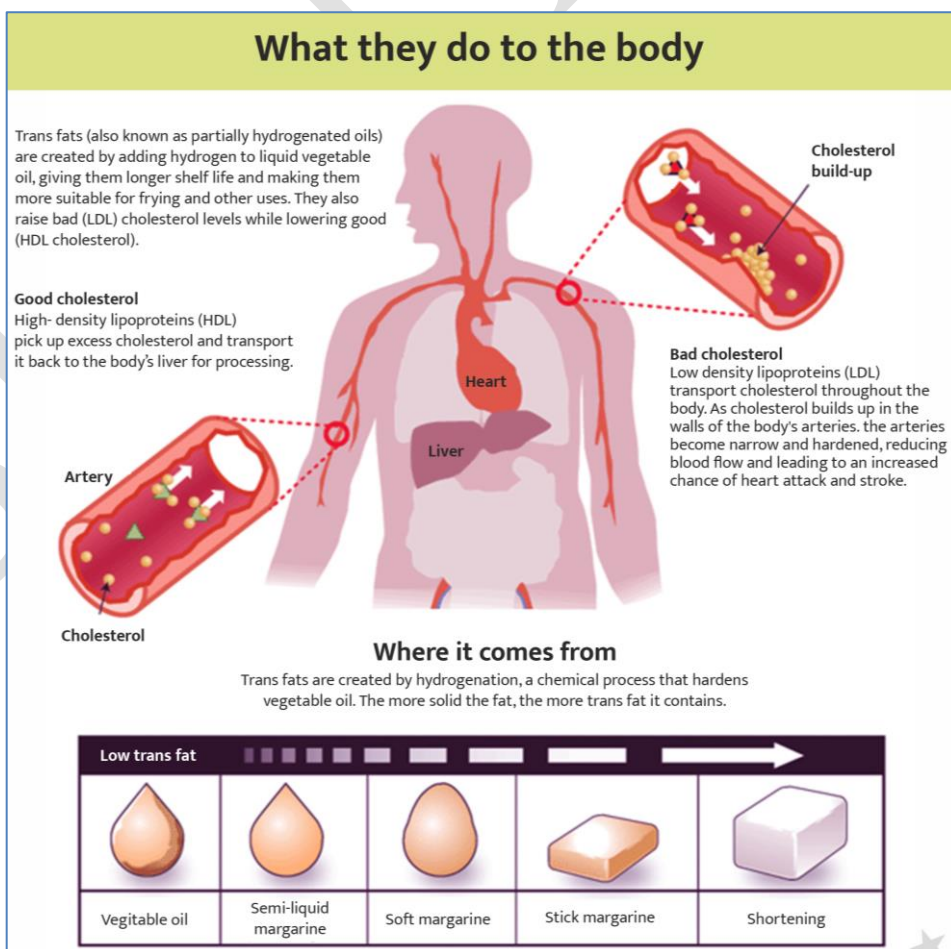
## 7.8. TRANS FATS

### Why in news?

World Health Organisation (WHO) released the third progress report on Global trans-fat elimination 2021 titled 'Countdown to 2023'.

### Key highlights of the report

- **Progress in efforts worldwide:** Since may 2020, there has been significant progress in TFA elimination around the world.
  - Mandatory Trans Fatty Acids (TFA) elimination policies are currently in effect in 57 countries; of these, 40 countries (mostly among the high income countries) have best-practice policies in effect, covering 1.4 billion people (18% of the global population).
- **Best performers:** India and the Philippines became the first and second lower-middle-income countries to pass a best-practice policy.
- **Challenges to TFA policy-making** faced by countries over the past year were resource and capacity constraints due to the COVID-19 pandemic.





## About Trans Fatty Acid (TFA)

- Trans fat, or trans-fatty acids, are **unsaturated fatty acids** that come from either natural or industrial sources:
  - **Naturally occurring trans-fat** come from ruminants (cows and sheep).
  - **Industrially produced trans-fat** are found in hardened vegetable fats such as margarine and are often present in snack foods, baked goods and fried foods.
    - ✓ Industrially produced trans-fats are **formed in a process that adds hydrogen to vegetable oil converting the liquid into a solid**, resulting in “partially hydrogenated” oil (PHO).
    - ✓ Manufacturers often use them as they **have a longer shelf life and are cheaper** than other fats.
- **Health Impacts:** Intake of TFA is associated with **increased risk of heart attacks and death from coronary heart disease**.
  - Approximately **540,000 deaths each year globally and 60,000 in India** can be attributed to intake of industrially produced trans fatty acids.
  - People living with cardiovascular disease, are especially **at risk of serious illness and death from COVID-19**.

### Steps taken by WHO to eliminate Trans Fats from food supplies

WHO identified **TFA elimination as one of the priority targets** in its 13th General Programme of Work (GPW13). In 2018, WHO called for the **global elimination of industrially produced TFA by 2023**.

- **REPLACE action framework:** It provides a roadmap for countries to eliminate industrially produced TFA from their food supplies.
  - WHO recommends that **trans-fat intake be limited to less than 1% of total energy intake** i.e., less than 2.2 g/day with a 2,000-calorie diet.
- **Additional resources to support country actions:** This include six REPLACE implementation modules and a live policy tracking map – the **TFA Country Score Card**– to monitor global progress towards the 2023 target.
- **TFA indicator** that records whether countries have adopted WHO best-practice policies for eliminating industrially produced TFA.
  - This is one of the indicators in the WHO Triple Billion Indicators, an ambitious initiative to improve the health of billions of people by 2023.
- **WHO Certification Programme for Trans Fat Elimination:** The programme aims to accelerate progress towards the 2023 goal for global elimination by recognizing countries that have eliminated industrially produced TFA from their national food supplies. It also establishes country accountability.
  - To qualify for certification, countries must demonstrate that a best- practice TFA policy has been implemented.

REPLACE					
REVIEW	PROMOTE	LEGISLATE	ASSESS	CREATE	ENFORCE
dietary sources of industrially-produced trans fats and the landscape for required policy change	the replacement of industrially-produced trans fats with healthier fats and oils	Or enact regulatory actions to eliminate industrially-produced trans fats	and monitor trans fat content in the food supply and changes in trans fat consumption in the population	awareness of the negative health impact of TFA among policy-makers, producers, suppliers, and the public	compliance with policies and regulations

## How is India progressing towards TFA elimination?

To eliminate industrially produced TFA in oils and foods, **FSSAI – the national food regulator**, within the Ministry of Health and Family Welfare – has adopted a **360-degree approach** which includes developing policies and regulations, capacity-building for laboratories and food businesses, increasing awareness, etc. Following steps have been taken in recent times:

- **Goal setting:** In 2018, India called for action **to make the country TFA free by 2022**, a year ahead of the WHO global target of 2023.
  - Target is to reduce TFA in all food products containing oils and fats to less than 2% in a phased manner: to not more than 3% from 1 January 2021 and not more than 2% from 1 January 2022.
- **Labelling of TFA:** Food establishments can display the **“Trans Fat Free” logo** in their outlets and on their food products if the food contains less than 0.2 g of TFA per 100 g or 100 mL and if edible oils or fats contain less than 1 g of TFA per 100 g or 100 mL.
- **Behaviour Change Communication:** Multilingual Mass media campaign, “Heart Attack Rewind” was launched to create a demand for healthier alternatives to Partially hydrogenated oils.
  - Other strategies include **celebrity endorsements for wider appeal and providing information** to consumers on strategies to eliminate TFA from their diets.
- **Technology adoption:** Nudging Food businesses to adopt technologies to eliminate TFA in the food chain.

- **Capacity Building** Strengthening Laboratories and Surveillance to provide a baseline so as to strategize the next steps for implementation of the regulation.

#### What more can be done in India?

- **Capacity building and additional technical assistance to Small and Medium Food enterprises** to develop their skills in reformulation to produce healthier and cost-effective alternatives to TFAs.
- **Mandatory labelling of TFA and saturated fat content** for all edible oils and food products should be implemented.
- For proper implementation in India, **FSSAI will need to pursue local governments to improve surveillance**, inspection of food premises, sampling of food products, regular training of officers, upgradation of food labs, etc.
- **Role of Civil Society:** Civil society organisations should play an important role in informing the public, providing support for draft legislation/ regulation and monitoring implementation.

#### Conclusion

As more and more countries regulate TFA, food manufacturers can reformulate products in for sale in multiple countries. This can reduce research and development costs, and allow easier trade between countries and within regions.

Taking action to prevent cardiovascular diseases will not only save lives, but will also support economic and health system recovery in the wake of the COVID-19 pandemic by making future generations healthier and more resilient to infectious disease.

#### What are fats and fatty acids?

Fats are a group of chemical compounds that contain fatty acids.

Fats are the **sources of energy and also act as main constituents of cellular membranes** assuring the fluidity, flexibility, permeability of the membrane.

The terms fat and fatty acids are frequently used interchangeably.

#### What are the different types of fatty acid?

There are two main types of fatty acids: **saturated and unsaturated**. All fatty acids are **chains of carbon atoms with hydrogen atoms** attached to the carbon atoms.

- **Saturated fatty acid** has the maximum possible number of hydrogen atoms attached to every carbon atom. It is therefore said to be "saturated" with hydrogen atoms, and all of the carbons are attached to each other with single bonds.
- **Unsaturated fatty acid:** If the carbon chain has fewer hydrogen atoms, it is said to be unsaturated. These are further divided into **monounsaturated and polyunsaturated** depending on the nature and number of bonds between carbon atoms.
  - **Omega 3 fatty acids** are polyunsaturated fatty acids (also termed as essential fatty acid) with a double bond at the third carbon atom from the end of the carbon chain. Marine algae and phytoplankton are primary sources of omega-3 fatty acids.

#### Are all food fats bad for the body?

- The fat in foods contains a mixture of saturated, monounsaturated and polyunsaturated fatty acids. In foods of animal origin, a large proportion of fatty acids are saturated. In contrast, in foods of plant origin and some seafood, a large proportion of the fatty acids are monounsaturated and polyunsaturated.
- Saturated and Trans fats raise LDL (or "bad") cholesterol levels in the blood, thereby increasing the risk of heart disease. Unsaturated fats, such as monounsaturated and polyunsaturated, do not raise LDL cholesterol and are beneficial when consumed in moderation.

SATURATED	UNSATURATED
$  \begin{array}{c}  H\ H \\     \\  -C-C- \\     \\  H\ H  \end{array}  $	$  \begin{array}{c}  H\ H \\     \\  -C-C-  \end{array}  $
Carbon-Carbon Single Bond	Carbon-Carbon Double Bond

## 7.9. NEWS IN SHORTS

### 7.9.1. WEB 3.0

- Recently, Indian venture capital firms are betting on Web 3.0 startups as they view such companies as developers of products for the next stage of the internet.
- **Web 3.0** is the next stage of the web evolution that would **make the internet more intelligent or process information with near-human-like intelligence**

through the power of AI systems that could run smart programs to assist users.

- The goal of Web 3.0 is to create more intelligent, connected, and open websites.
- **Web 1.0, also called the Static Web**, which started in the 1990s **enabled easy access to information**. However, the information was largely disorganised and difficult to navigate.
- **The Social Web, or Web 2.0**, made the internet a lot more interactive thanks to advancements in web technologies like Javascript, HTML5, CSS3, etc., which enabled startups **to build interactive web platforms such as YouTube, Facebook, Wikipedia and many more**.
- **Significance of Web 3.0**
  - **Data will be more relevant to each user:** Web 3.0 is being referred to by experts as the semantic web; semantic meaning data driven. The **data will come from the user and the web will essentially adjust to meet the needs of the user**. For example, if you do a lot of searching for ‘design blogs’, you’ll receive more advertisements related to design.
  - **Decentralised data networks:** In Web 3.0, data will be connected in a decentralized way, unlike generation 2.0 of the internet in which data is primarily stored in centralized storage locations. In Web 3.0, users will also be able to interact with data using AI and machine learning technology.
    - ✓ It will **open the internet to new search engines or social networks** with the control over content not restricted to just a few companies.
  - **Ensure data security and privacy:** Web 3.0 is believed to be more user-specific, which will ensure data security and privacy while avoiding the risk of Internet hacking.
  - **Economic growth:** It can help India contribute an additional \$1.1 trillion of economic growth to its GDP over the next 11 years.

Web 1.0	Web 2.0	Web 3.0
Users could only read content.	Users can read content and leave feedback.	Users can create and ‘share’ personalised content
Focus was only on website landing pages (static content)	Focus is on interaction-enable content platform (Blogs, Wikis, etc)	Focus on content aesthetic as well as user needs. (Livestreams)
Content was owned	Content is shared	Content will be collectively owned and shared
Content directories contained all the information.	Tagging on content pages has enabled information sharing with other users.	Custom content will be displayed for each user based on feedback.

### 7.9.2. OSCAR 1 (ORBITING SATELLITES CARRYING AMATEUR RADIO)

- It was launched **successfully in December, 1961, (60 years ago) and first non-governmental satellite** that was built by private citizens.
- It was the **first satellite to reach its own orbit after being ejected as a secondary payload** of another primary mission.
- It was **deployed in low-Earth orbit**, just above the atmosphere and its function post deployment was to transmit the letters “HI” in Morse code.
- Ever since the launch of OSCAR I in 1961, it has been traditional for amateur radio satellites to carry the name OSCAR, and 111 satellites have received the OSCAR designations so far.

### 7.9.3. IMAGING X-RAY POLARIMETRY EXPLORER (IXPE)

- IXPE observatory is a **joint effort of NASA and the Italian Space Agency**.
- Mission **will study the most extreme and mysterious objects in the universe** – supernova remnants, supermassive black holes, and dozens of other high-energy objects.
- Mission’s primary length is two years and the **observatory will be at 600 kilometers altitude, orbiting around Earth’s equator**.
- It will help in answering questions like **How do black holes spin, How do pulsars shine so brightly etc**.

### 7.9.4. SCIENTISTS TRACE FIRST CLUE TO UNDERSTAND TRANSIENT HIGH ENERGY PULSES FROM MAGNETARS

- **A magnetar is a type of neutron star**. In a typical neutron star, magnetic field is trillions of times that of the Earth’s magnetic field; however, in a magnetar, magnetic field is another 1000 times stronger.
  - Neutron stars are **formed when a massive star (with a core between 1 and 3 solar masses) runs out of fuel and collapses**, crushing together every proton and electron into a neutron.
  - **Stars with higher masses** will continue to **collapse into stellar-mass black holes**.
- **Magnetars suffer violent eruptions that are still little known** due to their unexpected nature and short duration, of barely tenths of a second.
- Recently, **Scientists have found the first clues** to understand these eruptions.
  - It is believed that **eruptions in magnetars may be due to instabilities in their magnetosphere or to a kind of earthquakes (starquakes)** produced in their crust.



- These triggers **create waves (called Alfvén waves)** in magnetosphere of the magnetars and while **interacting with each other waves dissipate energy.**

#### 7.9.5. NATIONAL OXYGEN STEWARDSHIP PROGRAMME

- Union government has launched an initiative to **train health care workers in rational utilisation of medical oxygen** to prevent wastage.
- **About National Oxygen Stewardship Programme**
  - As part of the programme, **at least one oxygen steward will be identified and trained in each district** across the country.
  - These trained professionals would be responsible for **leading the training on oxygen therapy and management** in their respective districts.
  - They will also support **audit of oxygen delivery and preparedness** for a surge scenario.

#### 7.9.6. GOVERNMENT PROHIBITS USE OF TB ANTIBIOTICS ON CROPS

- Recently, the **Union Ministry of Agriculture and Farmers Welfare notified the draft order on 'Prohibition of Streptomycin and Tetracycline in Agriculture'**.
  - The antibodies, Streptomycin and Tetracycline are important medicines used in the treatment of tuberculosis in human beings.
  - The **use of antibiotics leads directly to the development and spread of resistance.**
  - It was also observed that the **overutilization of the TB antibodies on crops is not healthy for human beings, plants, and the soil.**
- According to the draft Order
  - **No person shall import, manufacture, or formulate Streptomycin and Tetracycline for use in agriculture** in India with effect from February 1, 2022.
  - There will be a **complete ban on the use of Streptomycin and Tetracycline in agriculture from January 1, 2024.**
- The draft Order also stated that every **State government shall take all steps necessary for the execution of the Order in their State**, under the provisions of the Insecticides Act, 1968 and rules framed thereunder.
  - **The Insecticides Act, 1968 is to regulate the import, manufacture, sale, transport, distribution and use of insecticide** with a view to prevent risk to human beings or animals and for matters connected therewith.

#### 7.9.7. WORLD HEALTH ASSEMBLY

- World Health Assembly has **kickstarted global process to draft and negotiate a convention, agreement or other international instrument to protect the world from future infectious disease crises.**
- **Article 19 of the WHO Constitution** provides the World Health Assembly with the **authority to adopt conventions or agreements on any matter within WHO's competence.**
  - The sole instrument established to date is '**WHO Framework Convention on Tobacco Control**', which has made a significant contribution in protecting people from tobacco since it **came into force in 2005.**
- The Assembly adopted a **sole decision titled: "The World Together"** that **establishes an intergovernmental negotiating body (INB) to draft and negotiate the instrument on pandemic prevention, preparedness and response.**
  - The body will hold public hearings, deliver a **progress report to the 76th World Health Assembly in 2023** and **submit its outcome for consideration** by the **77th World Health Assembly in 2024.**

#### 7.9.8. GLOBAL HEALTH SECURITY INDEX (GHSI) 2021

- **GHSI measures capacities of 195 countries to prepare for epidemics and pandemics.**
  - It was jointly released by non-profits Nuclear Threat Initiative (NTI) and Johns Hopkins Center for Health Security.
- **Key Findings**
  - Countries across all income levels remain **dangerously unprepared to meet future epidemic and pandemic threats.**
  - **World's overall performance on GHSI score slipped to 38.9 (out of 100) in 2021 (40.2 in 2019).** India also slipped.
  - Most countries **have not made dedicated financial investments** in strengthening epidemic or pandemic preparedness.

#### 7.9.9. SCIENTISTS DEVELOPED FIRST LIVING ROBOTS THAT CAN REPRODUCE

- World's first living robots, called **Xenobots**, were **formed from the stem cells of the African clawed frog (Xenopus laevis)** from which it takes its name.
  - Xenobots are **less than a millimeter wide and could move, work together in groups** and self-heal.
  - Stem cells are **unspecialized cells that have the ability to develop into different cell types.**

- Now, scientists have **discovered an entirely new form of biological reproduction** different from any animal or plant to **create first-ever, self-replicating living robots**.
  - Researchers used **artificial intelligence (AI) to design a blueprint for organising xenobots** into a new type of organism.
    - ✓ **Unlike in cloning**, where DNA from one individual is used to grow identical copies of that individual, **these cells are harvested from different embryos**, and used to create organisms that don't resemble their parent species.
- **Potential applications of Xenobots**
  - **To clean up plastic pollution**, both in sea and on land.
  - If built with mammalian stem cells, **xenobots could be organised to form lenses** to restore vision.
- **To clean up plaque that causes heart blocks**, or brain damage.
- Could be **programmed to attack and remove cancer cells**.

### 7.9.10. GREEN HYDROGEN MICROGRID PROJECT

- Recently, NTPC awarded **India's first Green Hydrogen-based Microgrid Project at Simhadri**, Andhra Pradesh.
  - It would be a **precursor to large scale hydrogen energy storage projects**.
- Green hydrogen is **produced by splitting water into hydrogen and oxygen using an electrolyzer** powered by renewable energy sources such as wind and solar
- Project offers benefits of **decarbonising far-off regions** (e.g. Ladakh) and **meet the clean energy goals** because of its features like sustainability, easy to store etc.



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# 8. CULTURE

## 8.1. INDIAN INDEPENDENCE MOVEMENT & THE ROLE OF SCIENCE

### Why in news?

Recently, a two-day National Conference on 'Indian Independence Movement & the Role of Science' was organised.

### More on news

- This national conference was held as a part of the **75th year of India's independence celebrations**.
- Conference was organized by CSIR-National Institute of Science Communication & Policy Research (**CSIR-NIScPR**) in association with **Vigyan Prasar, Department of Science and Technology, Government of India and Vijnana Bharati (VIBHA)**.
- The conference was focused on **science as tool for subjugation and liberations**, the roles of scientists, institutions, movement, policy and planning and the vision of scientists were also discussed.

### Science as tool for subjugation

Strategy	Examples
Science as a Tool of British Exploitation of India	<b>Survey of India</b> (founded in 1767), <b>Great Trigonometrical Survey of India (GTS)</b> (established in 1818) & <b>Indian Railways</b> (established in 1853) all were established for exploration of rich metal areas and their transportation to the presidency towns of Calcutta, Bombay and Madras
Science 'Apartheid' in British Raj	<ul style="list-style-type: none"><li>• <b>Radhanath Sikdar</b> was the <b>first person to calculate the height</b> of the highest mountain the <b>Mount Everest</b>.</li><li>• <b>Kishori Mohan Bandhopadhyay</b> played vital role in discovery of malarial parasite for which Sir Ronald Ross received the Nobel Prize.</li><li>• <b>Seebchunder Nandy</b> and rendered excellent services to the British government during the <b>Mutiny of 1857</b> as the inspector. <b>However, none of them got their due credits</b> and were discriminated in terms of low salary, no promotion, etc.</li></ul>

### Science as tool for liberations

The opening of new educational institutions in Calcutta, Madras and Bombay by the British was in line with their intention to prepare a more skilled and learned workforce. The young brigade of scientists coming out of these institutions wanted to **break the shackles of the myth that Indians could not think scientifically**, did not have logical thinking, and could not do original research in the prevailing fields during those days. This led to birth of many scientific institution by Indians:

- **Indian Association for Cultivation of Science (IACS):** It was established by Dr Mahendralal Sircar with an objective to enable natives of India to cultivate science in all of its departments with a view to its advancement by original research. The IACS started with seven frontline areas of work viz. Physics, Chemistry, Astronomy, Systematic botany, Systematic zoology, Physiology, and Geology.
- **The Bengal Chemical and Pharmaceutical Workshop:** It was established by Acharya P. C. Ray in 1901. It was the foundation stone of indigenous industry in our country.
- **Indian Institute of Science (IISc):** It was established Sir Jamsetji Nusserwanji Tata in 1908 on the suggestions of Swami Vivekananda made during their voyage from Japan to Chicago in 1893.
- **Calcutta Mathematical Society:** It was established in **1908**, to generate opportunities and contribute to mathematics by Indian students.
- **Bose Research Institute:** It was established by Sir Jagadish Chandra Bose in 1917 who also dedicate this institute - not merely a laboratory but a temple which was later known as **Basu Vigyan Mandir**.
  - Bose was an extraordinary physicist, botanist and biologist of the time, demonstrated **wireless transmission of electromagnetic radiations**. Bose lived his life with the Indian philosophical thoughts of '**Vasudhaiva Kutumbakam**' by **not patenting his research in the interest of humanity**. A man of high calibre, his experiments discovered and proved the existence of life and sensitivity in plants through his innovative techniques and instruments.



- **Maharashtra Association for Cultivation of Science (MACS):** Inspired by Sircar’s IACS, MACS was established by Prof Shankar Purushottam Agharkar in Pune in 1946. The institute was named after him in 1992 as the Agharkar Research Institute.
  - He was an **Indian morphologist and an expert on the biodiversity of Western Ghats**, where he discovered the freshwater jellyfish, generally found in Africa.

### Conclusion

To conclude, we can infer that the establishments started by the British in India had the sheer aim to loot India and generate lower-income labour to increase their revenue. Therefore, the majority of institutions established by native Indians were highly spiritual in developing the Swadeshi spirit and nationalistic approach among the people of India.

## 8.2. SRI AUROBINDO

### Why in News?

Recently, the **High-Level Committee (HLC)** constituted to commemorate the **150<sup>th</sup> Birth Anniversary of Sri Aurobindo** held its **1<sup>st</sup> meeting** under the **chairmanship of PM**.

### About the High-Level Committee

- Constituted by the **Culture Ministry**, the HLC committee includes **53 members** from different walks of life such as politicians, governors, spiritual leaders, artists etc.
- **Purpose:** To provide policy direction and guidelines for the formulation of programmes for his birthday celebrations at the national and international level.
- **Celebration Period:** From **January 2022 to March 2024**.

### About Sri Aurobindo

- **Early Life:**
  - Born in **Calcutta** (now **Kolkata**) on **15 August 1872** as **Aurobindo Ghose**, he received his early education from a convent school in **Darjeeling**.
  - At the age of seven, he was taken to England along with his brothers. He studied at **St. Paul’s School London (1884)** and **King’s College in Cambridge in 1890**.
  - He scored **11<sup>th</sup>** rank in the **ICS examination** but didn’t clear the probation.
- **Part of the Freedom Struggle:**
  - He joined a secret society working for India’s freedom, sometimes known as **Lotus and Dagger**.
  - In **1893**, he joined the State Service of **Maharaja of Baroda** (Sayajirao Gaekwad III) and learnt about **Indian culture, languages** (e.g., Sanskrit) etc. during his work.
  - He joined the Indian freedom struggle in **1902** in indirect manner by inspiring revolutionaries through committees such as **Anushilan Samiti**.
  - After the **‘Partition of Bengal’** in 1905, he became active in the Indian political movement. He joined the **Indian National Congress (INC)** in **1906** and worked as principal of **Bengal National College**.
- **Spiritual Journey:** He remained active in Indian Freedom movement till **1910**, when he stopped political activities due to **spiritual awakening**. From 1910, he spent rest of his life at **Puducherry** (a **French Colony**) till his last breath on **05 December 1950**.

### Contributions of Sri Aurobindo

A **patriot, poet, educationist, philosopher and yogi**, he made significant contributions to Indian independence and its spiritual awakening through his works like-

<b>Indian Nationalism</b>	<ul style="list-style-type: none"> <li>• <b>‘New Lamps for Old’</b>, articles written by him in <b>InduPrakash</b> from 1893-94, criticizing moderate politics of Congress.</li> <li>• Started <b>Bande Mataram</b> (English Daily), <b>Karmayogin</b> (English newspaper) and <b>Dharma</b> (Bengali Weekly).</li> <li>• Wrote articles in <b>Jugantar Patrika</b> (Bengali revolutionary newspaper) to inspire revolutionaries and the <b>Bhawani Mandir</b>, a pamphlet published by the <b>Anushilan Samiti</b>.</li> </ul>
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	<ul style="list-style-type: none"> <li>• During the <b>Surat session of INC in 1907</b>, known for the <b>Surat Split</b>, he joined the <b>extremist</b> group led by <b>Bal Gangadhar Tilak</b> against the moderates.</li> <li>• In 1908, he was arrested in relation to <b>Alipore Bomb Case</b>, acquitted later.</li> <li>• On <b>15 August 1947</b>, in his message he wished the partition as temporary expedient and to be reversed. He shared his dreams (as given in image).</li> </ul>	
<b>Spiritual Philosophy</b>	<p>Inspired by philosophy of <b>Sat-Chit-Ananda</b> and <b>Yoga</b>, he focused on the <b>spiritual evolution of humanity</b> through inner knowledge or true nature of Human. His contribution can be seen through-</p> <ul style="list-style-type: none"> <li>• <b>The Life Divine</b> (1939) to transform man from mental to supramental beings.</li> <li>• <b>The Arya</b>, a philosophical monthly (1914).</li> <li>• <b>Other Books</b> compiled as poems, letters and essays such as <b>Essays on the Gita</b> (1922), <b>Collected Poems and Plays</b> (1942), <b>The Synthesis of Yoga</b> (1948), <b>The Human Cycle</b> (1949), <b>The Ideal of Human Unity</b> (1949), <b>Savitri: A Legend and a Symbol</b> (1950), etc.</li> <li>• In 1926 he established <b>Sri Aurobindo Ashram</b> with <b>Mirra Alfassa</b>. <ul style="list-style-type: none"> <li>○ Mirra Alfassa founded the <b>Auroville</b>, i.e. the <b>city of dawn</b>, a universal town for a <b>peaceful, progressive and harmonious existence</b>.</li> </ul> </li> </ul>	

### 8.3. SUN TEMPLE OF KONARK

#### Why in News?

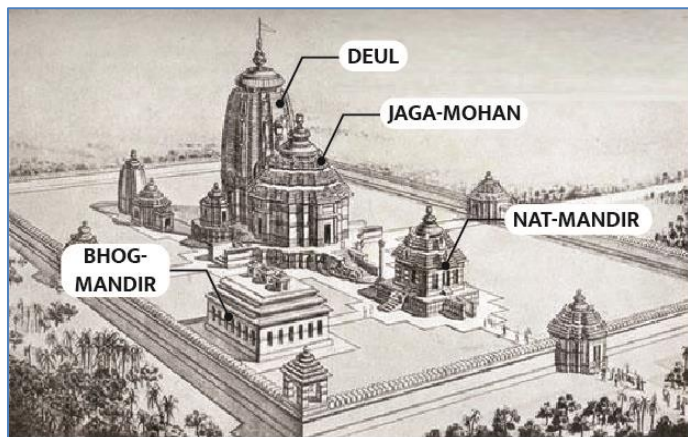
Recently, the **Archaeological Survey of India (ASI)** discussed ways to remove sand filled by the British from the **sealed assembly hall** (known as **Jagamohan**) of Konark Sun Temple.

#### More on News

- The **Jagamohana** was filled with sand by British to avoid damage. In 2019, it was found to be settled down, creating a 17 feet gap between sand and the structure.
- In **1984** it was included in **UNESCO World Heritage Site**.
- **Chandrabhaga**, its nearest beach, received **Blue Flag certification** for environmental cleanliness in **2018**.
- **Konark Dance Festival** and **Chandrabhaga Festival** are celebrated here.

#### About Sun Temple of Konark

- Dedicated to the **Sun God**, the temple is located on the shores of the **Bay of Bengal**.
- It was built by **King Narasimha Deva I** of the **Eastern Ganga dynasty** from **1238-1250 CE** (as per **Kenduli Copper plate inscription**).
  - The Old Legend links it to **Samba**, son of **Lord Krishna**, who built it.



- It is a **Kalinga architectural style temple**, a sub-style of **Nagara Temple Architecture**, with a:

- **Rekha Deula** or **Vimana** (principal sanctuary) with a Shikhara (Crowning cap);
- **Jagamohana** or **assembly hall**;
- **Natamandir** or **Dance hall**; and a number of other sub-structures.

- In its complete form, it represents an epic imagination of a celestial chariot carrying Sun, mounted on **24 intricately carved wheels, 12 each on North and South side**, with nearly **3 m diameter** drawn by **seven horses**, with:

- Set of wheels representing 12 months of a year and the eight spokes as 8 prahar and symbolic motifs on cycle of seasons and months.
- The 7 horses as the 7 days of week.

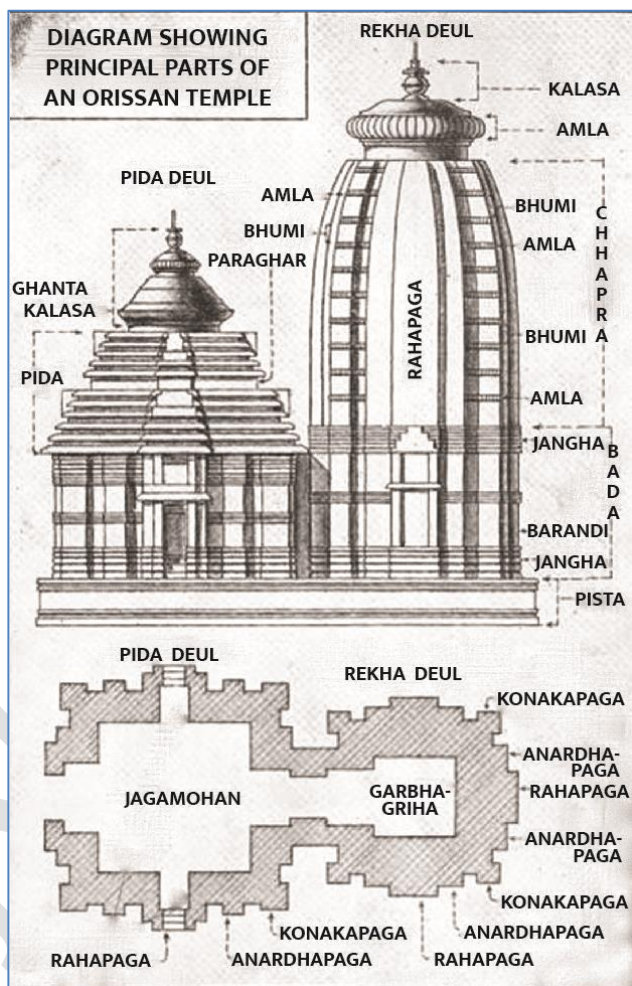
- Decorative features on Wall/Pillars:** Lions, musicians and dancers etc.

- Also, the wheels of temple are depicted on reverse side of **10 rupee note**.

- Stones used in the temple:** **Chlorite, Laterite** and the greenish **Khondalite**. Because of the color of its stone, it is also known as **Black Pagoda**.

- Temple Destruction:** No fixed reason but due to any or a mix of the following reasons, most of the structure collapsed in **1837** with only **Jagamohan** remaining fully intact.

- **Reasons:** Islamic invasion, structural flaws, stones unsuitability or weathering, removal of its magnets etc.



### About Kalinga Architectural Style

- Flourished in the ancient **Kalinga** region, lying between the **Mahanadi** and **Godavari** rivers (present day West Bengal, Odisha and northern Andhra Pradesh).
- A sub-style of Nagara Temples, the **Kalinga temples** are further classified into **three distinct** types of temples: **Rekha Deula, Pidha Deula** and **Khakhara Deula**.
  - **Rekha-deula** is a square plan topped with a curvilinear tower. The parts of the temple align along the same (east-west) line or axis. Dedicated to Vishnu, Shiva and Sun, it is the most common temple form.
  - **Pidha-deula** is also a square plan but topped with a pyramidal tower composed of horizontal tiers or platforms, usually arranged in three tiers. Dedicated to Vishnu, Shiva and Sun, it is mainly used for halls.
  - **Khakhara deula** are the **barrel-shaped** (vault-shape) tower over a rectangular plan with an elongated roof, similar to **Dravida Gopuram** design. Dedicated to female deities (e.g. Chamunda and Durga), it is a rare form but used as sanctum sanctorum to house deity.

Phases of Temple Evolution	Major Dynasty	Main Temples
Formative Phase (6 <sup>th</sup> -9 <sup>th</sup> CE)	Bhaumakaras	Parasurameswara Temple, Vaital Deula.
Transitional Phase (9 <sup>th</sup> -11 <sup>th</sup> CE)	Somvanshi	Mukteswara Temple (known as Gem of Kalinga Architecture), Rajarani Temple, Lingaraj Temple.
Mature Phase (11 <sup>th</sup> -13 <sup>th</sup> CE)	Eastern Ganga	Jagannath Temple (known as White Pagoda), Konark Sun Temple.
Decline Phase (14 <sup>th</sup> -16 <sup>th</sup> CE)	Gajapatis	Decline of temple architecture with focus on culture and literature.

## 8.4. DURGA PUJA

### Why in news?

UNESCO's Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage, recently, put "Durga Puja in Kolkata" on the **Representative List of the Intangible Cultural Heritage of Humanity**.



## More on news

- This inscription will offer **encouragement to the local communities** that celebrate Durga Puja, including all the traditional craftspeople, designers, artists, and organisers of large-scale cultural events, as well as tourists and visitors.
- **Cultural heritage**
  - According to UNESCO, “cultural heritage does not end at **monuments and collections of objects**”, but “also includes **traditions or living expressions inherited** from our ancestors and **passed on to our descendants**, such as **oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature** and the **universe or the knowledge and skills to produce traditional crafts**”.
- **Intangible Cultural Heritage (ICH)**
  - ICH, according to UNESCO, is “**traditional, contemporary and living at the same time**”, “**inclusive**”, “**representative**”, and “**community-based**”.
  - It is “an important factor in maintaining **cultural diversity** in the face of growing **globalisation**” — and “an understanding of the ICH of different communities helps with **intercultural dialogue, and encourages mutual respect** for other ways of life”.
- **On the list:** The Representative List of the Intangible Cultural Heritage of Humanity currently has 492 elements.

The List of the ICH elements from the UNESCO website includes 14 entries from India		
	ICH element	Year of Recognition
1.	Durga Puja of West Bengal	2021
2.	Kumbh Mela	2017
3.	Yoga	2016
4.	Nowruz	2016
5.	Traditional Brass and Copper Utensil making among the Thatheras of Jandiala Guru, Punjab	2014
6.	Sankirtana of Manipur	2013
7.	Buddhist Chanting of Ladakh	2012
8.	Chhau Dance of Seraikella, Purulia and Mayurbhanj	2010
9.	Kalbélia dance of Rajasthan	2010
10.	Mudiyettu of Kerala	2010
11.	Ramman festival of Garhwal, Uttarakhand	2009
12.	Kutiyattam Sanskrit theatre of Kerala	2008
13.	Ramlila	2008
14.	Vedic Chanting	2008

## 8.5. NEWS IN SHORTS

### 8.5.1. NIZAMUDDIN BASTI

- The conservation initiative at Delhi’s Nizamuddin Basti bagged the **UNESCO’s Award under 2 categories ‘Award of Excellence 2021’ and ‘Special Recognition for Sustainable Development Award’**.
  - Project restored over 20 historic monuments clustered around the **14th century mausoleum of Sufi saint Hazrat Nizamuddin Auliya**.
- The award recognizes:
  - **outstanding achievement in placing heritage at the heart of the sustainable development agenda.**
  - **overcoming major socio-economic challenges and improved health, education and well-being, particularly for women and youth** through an innovative **People-Public-Private partnership** model.

### 8.5.2. RAMNA KALI TEMPLE

- President of India inaugurated the **renovated Sri Ramna Kali Mandir in Dhaka (Bangladesh)**.
  - Revived shrine is considered a **symbol of the spiritual and cultural bond** among the people of India and Bangladesh.
- The temple was **destroyed by Pakistani forces during their Operation Searchlight** in March 1971, the brutal crackdown that led to the **Bangladesh War of Liberation**.
- The original **RamnaKalibari** was built during the **medieval era** and was famous for its tall structure.
- In 1929, the temple complex acquired an **additional building** for the devotees of the famous **saint Anandamayee**.

### 8.5.3. TAI KHAMTI MUTINY OF 1839

- In 1839, Tai Khamti people resisted British colonisation which resulted in killing of 80 British soldiers.
- **About Tai Khamti**
  - One of the major tribe of Arunachal Pradesh, they inhabits the district of Namsai.
  - The word 'Khampti' means 'a land full of gold'
  - They follow Theravada Buddhism and have their own script which the people call it Tai script (Lik-Tai).
  - Khampti dance is also known as ka pung (ka implies dance and pung means story).

### 8.5.4. APATANI TEXTILES

- Recently, GI tag application has been filed for the Arunachal Pradesh Apatani textile product.
  - Woven fabric by the Apatani tribe is known for its geometric and zigzag patterns.
  - They predominantly weaves shawls known as jig-jiro and jilan or jackets called supuntarii.
- **Apatani Tribe:**
  - They are settled in the village of Ziro (Arunachal Pradesh).
  - They are known for their fish and paddy culture, along with cane and bamboo crafts
  - They speak a local language called Tani and worship the sun and the moon.
  - **Important festival:** Dree and Myoko festivals.



### 8.5.5. KAAVI ART

- Kaavi, a form of wall art introduced by Portuguese, is done in bright red and white shades.
- It is done on wet plaster in a manner similar to frescoes (technique of mural painting executed upon freshly laid lime plaster).
- It gets its name from kaav, a red pigment found in laterite soil that is used to create images on white background of plaster.
  - Red is the only colour used in kaavi art.
- It is found in the Konkan region, especially in temples of Goa, Maharashtra and Karnataka.



### 8.5.6. DECLINE IN IMPORTS OF TOYS INTO INDIAN MARKET

- FY 20-21 saw 53.58% decrease in import of toys classified under HSN Code 9503 compared to FY19-20. Similarly, decrease in imports of toys classified as HSN Code 9505 was 37.61% in the same period.
  - HSN (Harmonised System of Nomenclature) code was introduced by the World Customs Organization for a systematic classification of goods both national and international.
- **Need for promoting local toy industry**
  - India imported around \$1.5 billion worth toys in 2020, with China and Taiwan accounting for around 90% of domestic toy market.
  - Study by Quality Council of India (QCI) had revealed that 67% of imported toys failed a testing survey, prompting an aggressive effort to produce safe toys locally.
  - Currently toy industry in India is primarily unorganised.
- Steps taken by government to promote toy industry -
  - **Approval to eight toy manufacturing clusters.**
  - **National Action Plan for Indian Toy Story** to boost local manufacturing.
  - **Need-based interventions** for toy industry in 13 identified handicrafts toy clusters
  - **National Toy Fair** is planned in February 2021.
  - Under **National Education Policy 2020** toy-making will be introduced to students from the sixth standard onwards.

Traditional Toys	State
Channapatna toy, Kinnal toys	Karnataka
Etikoppaka Toys, Kondapalli toys	Andhra Pradesh
Nirmal toys	Telangana
ThanjavurGolu Dolls, Choppusaman	Tamil Nadu
Laiphadibi	Manipur
Asharikandi Terracotta Toys	Assam
Sambalpur toys and paper mache and stone toy	Odisha
Chankana (a toy with a whistle), ghuggu (rattle box for babies), lattoo (spinning top), handwai (kitchen sets)	Punjab
Thigdadhingla	Gujarat

### 8.5.7. VERNACULAR INNOVATION PROGRAM (VIP)

- It was launched by the NITI Aayog, under 'Atal Innovation Mission (AIM), to **Empower Innovators, Entrepreneurs in 22 Mother Tongues.**
- To build the necessary capacity for the VIP, AIM has identified and will be training, in collaboration with IIT Delhi, a **Vernacular Task Force (VTF) in each of the 22 scheduled languages.**
  - Each task force comprises vernacular **language teachers, subject experts, technical writers, and the leadership** of regional Atal Incubation Centers (AICs).

### 8.5.8. PRADHAN MANTRI YUVA (YOUNG, UPCOMING AND VERSATILE AUTHORS) SCHEME

- National Book Trust, under Ministry of Education (MoE), announced **selection of 75 authors under PM YUVA.**
- YUVA is a part of India@75 Project (Azadi Ka Amrit Mahotsav) to **bring to the fore perspectives of young generation of writers** on themes like Unsung Heroes, Freedom Fighters etc.
- It is **aimed at training 75 aspiring writers below 30 years**, who are ready to express themselves and project India and its culture and literature globally.

- A consolidated **scholarship of Rs 50,000 per month for a period of six months per author** will be paid under the mentorship scheme.

### 8.5.9. SAHITYA AKADEMI AWARDS (SAA)

- **Sahitya Akademi announced SAA in 20 languages.**
  - Awards in Gujarati, Maithili, Manipuri and Urdu languages will be announced later.
- It is a **literary honour, conferred annually on writers of most outstanding books** of literary merit published in any of the **major Indian languages.**
  - Besides 22 languages enumerated in Constitution, **English and Rajasthani language are also recognised.**
  - Award includes a **casket containing an engraved copper-plaque, a shawl and an amount of Rs. 1,00,000/-.**
- Sahitya Akademi **functions as an autonomous organisation.** It is registered as a society under Societies Registration Act, 1860.

### 8.5.10. ORDER OF THE DRUK GYALPO

- It is **Bhutan highest civilian award.**
- The award was **honoured upon the Indian Prime Minister on the occasion of the Bhutan's National Day.**
  - It was awarded in recognition of a lifetime of service to the people and Kingdom of Bhutan.



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# 9. ETHICS

## 9.1. MOB VIOLENCE AND LYNCHING

### Introduction

Mob Violence or Lynching is one of the major challenges to State authority. Though it can be done by group of people in rage, typically it involves **vigilante group**, i.e. **self-appointed doer of justice**, who keep watch over people and punish them in their own way (**Vigilantism**).

In both forms, it goes against the **rule of law** and notion of a **civilized society** due to the **destructive expression of emotions** in it for **immediate gratification**.

### About Mob Violence/Lynching

- **Mob Violence or Mob Lynching** is defined as **targeted homicidal aggression**, including killing, against a person/s by a **group of people or mob** to-
  - Punish for a crime actually committed or mere suspicion based on allegations or misinformation,
  - The targeting can be for a serious crime in the eyes of law or merely to suppress the tendency of deviance from the ideology of the mob.
- Fundamentally, it is seen in two ways as-
  - **Defence of society**, i.e. protest against anarchy, due to failure of law enforcement agencies in curbing the issues of cow theft, kidnapping, crimes etc. or
  - **Offence against society**, i.e. return of anarchy, as it goes against the **fundamental principle of law**, i.e. what the law provides must be taken by lawful means. Self-appointed people holds no right to undertake law enforcement
- Ethically, it goes against the moral principles like fairness and reasonableness. If it is not controlled, it may give **rise to social hatred** with increased **tendency of mass criminal outburst**, ultimately leading to a **state of anarchy**.

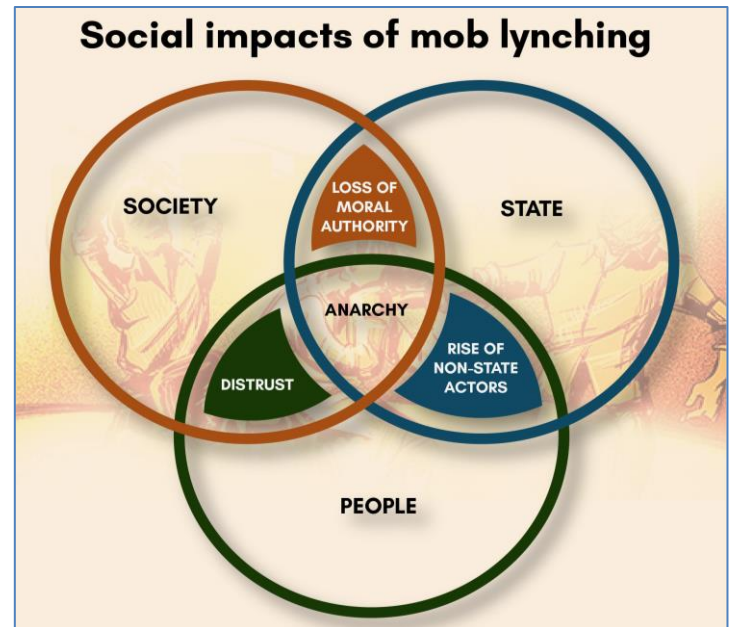
### Reasons behind Lynching

- **Religious Beliefs or Principles:** Being a multi-religious and pluralistic society, the religious beliefs or principles play an important role with imposition of one's beliefs on others. E.g. The recent killings in Punjab over sacrilege issue or bovine-related mob-lynching.
- **Socio-cultural Influences:** This includes the historical socio-cultural norms or moral principles which govern a person's behaviour or attitude towards an action. E.g. From 2000-2012, nearly 2,097 lynching due to witchcraft were reported from 12 states of India.
- **Feelings of Fear or Hate:** Often, the rumors of being kidnapers or actual action of person/s give rise to lynching. E.g. the killing of Sadhus in Palghar on rumor. Similarly, in Dimapur (2015) an angry mob lynched a rape accused by breaking into the prison.
- **Lack of trust in the efficacy of laws:** Either due to dissatisfaction from implementation of laws or judicial delays, mob justice is seen by non-state actors as a discharge of public duty.

**Note:** Due to lack of definition and unreliable data, **National Crime Records Bureau (NCRB)** stopped collecting data on mob lynching, cow vigilantism and other such crimes after 2017.

### What are the ethical issues it creates?

- **Dehumanization of the victim:** Lynching incidents lead to **dehumanisation of individuals or groups** leading to ghettoization and hate crimes.
- **Denial of Justice:** Lynching goes against the rule of law and the extra-judicial elements or non-state actors' award punishment beyond what is deserved under laws.



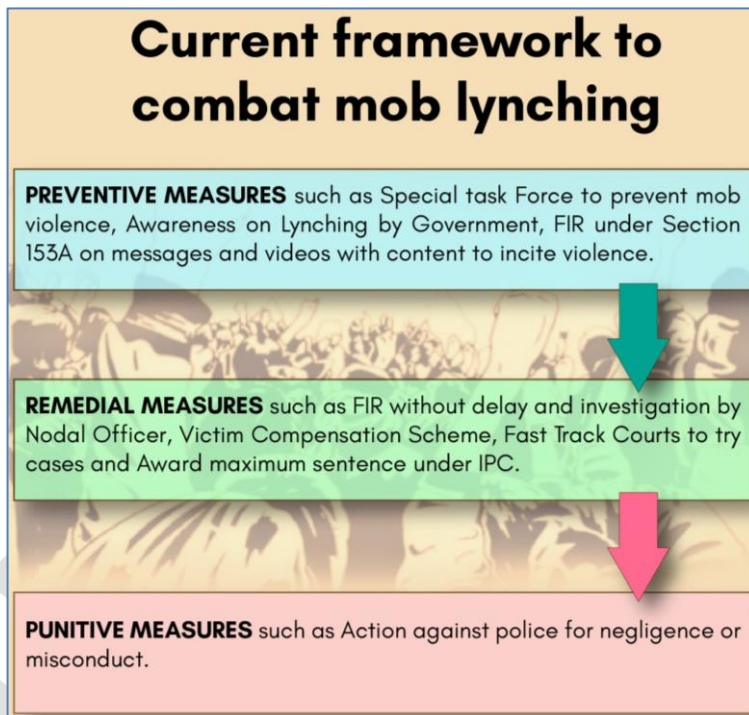
- **Otherization of the Society:** Lynching leads to higher distrust among people and society becomes more **mechanical** rather than **organic**, i.e. homogeneity based integration. Being a nation with large diversity, it can create challenges to the unity of nation.
- **Creation of an atmosphere of fear:** The level of intolerance and private security need rises in society as more people start taking law into their own hands for justice.
- **Encourages use of violence:** If not resolved, lynching boosts confidence of non-state actors and violence gains acceptance. If not controlled, it can be used over non-agreement and becomes a threat to **individual liberty, rationality and logical discussion.**

### Solution to Lynching: Current Framework and Other steps needed to stop Lynching

With growing use of social media by non-state actors to gain public attraction, mobilise people and target individuals through false allegations, solution to lynching is essential not only for sustenance of law and order but for nation building as well.

#### Current Framework

- With police and public order being part of state subjects, India lacks a single law to specifically deal with mob lynching.
- In **Tehseen Poonawalla vs UOI (2018)**, Supreme Court issued preventive, remedial and punitive guidelines to deal with mob violence and lynching
- Calling it a “horrendous act of mobocracy”, the Supreme Court also asked Parliament to establish lynching as a separate offence with punishment.
- Presently, it is mainly dealt under various sections of IPC with a handful of states taking legal initiatives. This includes- Manipur, West Bengal, Rajasthan and recently, by the Jharkhand assembly.



#### Other Steps Needed

- **Societal Approach:** With involvement of beliefs and emotions, regulation of social behavior is first step to stop mob violence and protect rights conferred to the citizens. This includes-
  - **Respect for Law:** Law is the **mightiest sovereign** of a civilized society. Efforts should be made to increase the feeling of **law being sacred** in society.
  - **Culture of duty:** Efforts should be made to universalize the basic duties such as- **Duty of Justice, Duty of nonmaleficence** etc. as part of social norms or actions.
- **Governmental Approach:** Apart from bringing laws and guiding society on social behavior, the government should apply **emotional intelligence** to handle conflicts with **equal condemnation of social and political violence** to avoid revenge tendencies.
- **People-centric Approach:** As society and government are made by the people, it is vital that people should seek **true freedom** through a life based on **reason** (objectivity or rational will), **self-control** and virtues of **empathy, compassion, and humanity**. As Thiruvalluvar, well-known poet and philosopher of ancient India, said

The first and most important thing a man should keep away from is not doing harm of any kind knowingly to anyone, at any time.

# Guiding Principles: Addressing Mob Lynching



## ETHICAL SKILLSET

### EMOTIONAL INTELLIGENCE



The act of mob violence or mob lynching is generally undertaken by emotionally charged crowds. A civil servant needs to understand, appreciate and take into account these emotions while resolving the situation.

### OBJECTIVITY



It is important that the civil servant evaluates the situation objectively and does not get swayed by the opinion and perspective held by the mob.

### IMPARTIALITY



The civil servant needs to remain impartial i.e., s/he should neither favour the victim nor the group of people behaving as a mob.

### COMPASSION TOWARDS WEAKER SECTIONS



A large number of victims of mob violence belong to weaker sections. The civil servant should keep in mind the prevalent power asymmetry between the weaker and popular sections of the population while charting a course of action.



## APPRECIATION OF THE LAW AND THE CONSTITUTION

### CONSTITUTION

**FUNDAMENTAL RIGHTS:** The issue of mob lynching abuses a whole spectrum of fundamental rights and in particular the **Right to Life and Right to Fair Trial.**



### IMPORTANT JUDGEMENTS

In **TEHSEEN S. PONAWALLA V. UNION OF INDIA & OTHERS**, SC said no individual in his individual capacity or a part of a particular group can take the law of land into his/their hands and give punishment which they are not bound to give.



### Laws

**INDIAN PENAL CODE:** A bouquet of provisions collectively apply in the case of mob violence-

- Section 302 and 304 for murder and culpable homicide.
- Section 325 for causing grievous hurt.
- Section 120B for criminal conspiracy.





# 10. SCHEMES IN NEWS

## 10.1. DEENDAYAL ANTYODAYA YOJANA - NATIONAL RURAL LIVELIHOODS MISSION (DAY-NRLM)

### Why in news?

Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) has launched a **facility for overdraft (OD) of Rs. 5,000/- to verified SHG members** having accounts under the Prime Minister Jan Dhan Yojana with Banks.

### About DAY-NRLM

Objectives	Details of scheme
<ul style="list-style-type: none"> <li>To reduce poverty by enabling the poor households to <b>access gainful self-employment and skilled wage employment opportunities.</b></li> <li>To mobilize <b>about 9-10 crore rural poor households into Self Help Groups (SHGs)</b> in a phased manner and provide them long-term support.</li> </ul>	<ul style="list-style-type: none"> <li><b>Genesis</b> <ul style="list-style-type: none"> <li><b>Swarnjayanti Gram Swarozgar Yojana (SGSY)</b>, started in 1999 was <b>restructured in FY 2010-11</b> for implementation as the <b>National Rural Livelihoods Mission</b> to provide a sharper and greater focus as well as momentum for poverty reduction.</li> <li>In 2015, the program was <b>renamed Deendayal Antayodaya Yojana (DAY-NRLM).</b></li> </ul> </li> <li><b>Ministry:</b> Ministry of Rural Development (MoRD)</li> <li>DAY- NRLM is a <b>Centrally Sponsored Schemes.</b></li> <li><b>Key Features</b> <ul style="list-style-type: none"> <li><b>Universal social mobilization:</b> At least <b>one woman member from each identified rural poor household</b>, is to be brought under the Self Help Group (SHG) network in a time bound manner. Special emphasis is particularly on <b>vulnerable communities.</b></li> <li><b>Participatory identification of poor:</b> The inclusion of the target group under NRLM is determined by a <b>well-defined, transparent and equitable process</b> of participatory identification of poor, at the level of the community. All households identified as poor through the PIP process is the <b>NRLM Target Group and is eligible for all the benefits</b> under the programme.</li> <li><b>Community funds as resources in perpetuity:</b> NRLM provides <b>Revolving Fund (RF) and Community Investment Fund (CIF)</b> as resources in perpetuity to the institutions of the poor, to strengthen their <b>institutional and financial management capacity.</b></li> <li><b>Financial inclusion:</b> On the demand side, it promotes <b>financial literacy</b> among the poor and provides <b>catalytic capital</b> to the SHGs and their federations. On the supply side, the Mission <b>coordinates with the financial sector</b> and encourages use of Information, Communication &amp; Technology (ICT) based financial technologies, <b>business correspondents</b> and community facilitators like '<b>Bank Mitras</b>'.</li> <li><b>Livelihoods:</b> NRLM focuses on <b>stabilizing and promoting existing livelihood portfolio</b> of the poor through 'vulnerability reduction', 'livelihoods enhancement', tapping new opportunities in farm and non-farm sectors, building skills and <b>nurturing self-employed and entrepreneurs.</b></li> <li><b>Other features:</b> <ul style="list-style-type: none"> <li>✓ High emphasis on <b>convergence with other programmes</b> of the MoRD and other Central Ministries.</li> <li>✓ Proactively seeking <b>partnerships with Non-Government Organizations (NGOs) and other Civil Society Organizations (CSOs)</b>, at two levels - strategic and implementation.</li> </ul> </li> </ul> </li> <li><b>National Rural Livelihoods Project (NRLP)</b> has been designed as a <b>sub-set of NRLM</b> to create 'proof of concept', <b>build capacities</b> of the Centre and States and create an <b>enabling environment</b> to facilitate all States and Union Territories to transit to the NRLM.</li> <li><b>Core values</b> <ul style="list-style-type: none"> <li><b>Inclusion of the poorest</b>, and meaningful role to the poorest in all the processes;</li> <li><b>Transparency and accountability</b> of all processes and institutions;</li> <li><b>Ownership and key role of the poor</b> and their institutions in all stages – planning, implementation, and, monitoring;</li> <li>Community <b>self-reliance and self-dependence.</b></li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Achievements</b> <ul style="list-style-type: none"> <li>○ It has mobilised a total of <b>8.01 Crore women</b> from poor and vulnerable communities into <b>73.19 lakhs SHGs</b>.</li> <li>○ In the <b>current year</b>, 248 blocks have been covered with the mobilization of <b>41.02 lakh households into 3.81 lakh SHGs</b>.</li> <li>○ Around <b>3.5 lakhs community resource persons (CRPs) have been developed</b> for providing capacity building and technical support to community institutions.</li> <li>○ Scheme has been able to facilitate a <b>total of Rs. 4.35 lakh crore of Bank Loan</b> to the SHGs from 2013 to 2021.</li> <li>○ The <b>Non-performing Assets (NPA) is just 2.57%</b> which shows the remarkable repayments culture in the SHG members under DAY-NRLM.</li> </ul> </li> </ul>
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## 10.2. PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)

### Why in news?

The Union government has approved extension of the **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) till 2026**.

### About PMKSY

Objectives	Key Features
<ul style="list-style-type: none"> <li>• Achieve <b>convergence of investments in irrigation</b> at the field level (preparation of district level and, if required, sub district level water use plans).</li> <li>• Enhance the <b>physical access of water on the farm and expand cultivable area</b> under assured irrigation (<b>Har Khet ko pani</b>).</li> <li>• Integration of water source, distribution and its efficient use, to <b>make best use of water through appropriate technologies</b> and practices.</li> <li>• Improve <b>on-farm water use efficiency</b> to reduce wastage and increase availability both in duration and extent.</li> <li>• Enhance the <b>adoption of precision irrigation</b> and other water saving technologies (<b>More crop per drop</b>).</li> <li>• Enhance <b>recharge of aquifers</b> and introduce <b>sustainable water conservation practices</b>.</li> <li>• Ensure the <b>integrated development of rain-fed areas</b> using <b>watershed approach</b> towards soil and water conservation, regeneration of ground</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Ministry:</b> Ministry of Agriculture and Farmers welfare.</li> <li>• It is a <b>Centrally Sponsored Scheme</b>.</li> <li>• It is an <b>inter-ministerial Scheme</b> that has been formulated amalgamating ongoing schemes viz. <b>Accelerated Irrigation Benefit Programme (AIBP); Integrated Watershed Management Programme (IWMP); and On Farm Water Management (OFWM)</b> component of <b>National Mission on Sustainable Agriculture (NMSA)</b>.</li> <li>• <b>Water budgeting</b> is done for all sectors namely, <b>household, agriculture and industries</b>.</li> <li>• <b>Long Term Irrigation Fund (LTIF)</b> has been instituted under PMKSY in <b>NABARD</b> for <b>funding</b> and fast tracking the implementation of incomplete major and medium irrigation projects.</li> <li>• A dedicated <b>Micro Irrigation Fund (MIF)</b> with National Bank for Agriculture and Rural Development (NABARD) under PMKSY has been set up to <b>provide states financial assistance</b> on concessional rate of interest.</li> <li>• <b>National Steering Committee (NSC) under PM</b> with Union Ministers of all concerned Ministries supervises and monitors the scheme.</li> <li>• <b>National Executive Committee (NEC)</b> under the Chairmanship of the <b>Vice Chairman, NITI Aayog</b> oversees the implementation of the scheme.</li> </ul> <p><b>Components of PMKSY</b></p> <ul style="list-style-type: none"> <li>• <b>Accelerated Irrigation Benefit Programme(AIBP):</b> To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.</li> <li>• <b>PMKSY (Har Khet ko Pani)</b> <ul style="list-style-type: none"> <li>○ Repair, restore water bodies; strengthen carrying capacity of traditional water sources, construction of rain water harvesting structures (<b>Jal Sanchay</b>).</li> <li>○ Creation of new water sources through Minor Irrigation.</li> <li>○ Ground water development in the areas where it is abundant, so that sink is created to store runoff/ flood water.</li> <li>○ Diversion of water from source of different location where it is plenty to nearby water scarce areas, lift irrigation from water bodies/rivers at lower elevation.</li> <li>○ Creating and rejuvenating traditional water storage systems like <b>Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.)</b> etc. at feasible locations.</li> </ul> </li> <li>• <b>PMKSY (Per Drop More Crop)</b> <ul style="list-style-type: none"> <li>○ Promoting efficient water conveyance and precision <b>water application devices</b> like drips, sprinklers, pivots, rain-guns in the <b>farm (Jal Sinchan)</b>.</li> <li>○ <b>Construction of micro irrigation structures</b> to supplement source creation activities including tube wells and dug wells (in areas where ground water is available and not under semi critical /critical /over exploited category of development).</li> </ul> </li> </ul>



water, arresting runoff, providing livelihood options and other activities.

- **Secondary storage structures** at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources for use during dry periods.
- Extension activities for promotion of **scientific moisture conservation and agronomic measures** including cropping alignment to maximise use of available water.
- **Water lifting devices** like diesel/ electric/ solar pump-sets.
- **PMKSY (Watershed Development)**
  - Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line, treatment, rain water harvesting, in-situ moisture conservation and other allied activities on watershed basis.
  - Converging with MGNREGS for creation of water source to full potential in identified backward rain-fed blocks including renovation of traditional water bodies.

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## Places in News: India

### DELHI

- Nizamuddin Basti bagged the UNESCO's Award.

### PUNJAB

- Gharials were reintroduced in the Beas Conservation Reserve.

### MADHYA PRADESH

- Cabinet approved implementation of Ken-Betwa river linking project.

### GUJARAT

- Seaplane operations between Sabarmati River Front & Statue of Unity.

### TELANGANA

- Albino Indian Flapshell turtle spotted in Sirnapally Forest.

### KERALA

- Kerala government has raised concerns over Tamil Nadu releasing water from the Mullaperiyar Dam.
- Protests against Silver Line railway Project.

### UTTAR PRADESH

- Haiderpur wetland designated as the country's 47th Ramsar site.
- Cabinet approved the funding and implementation of Ken-Betwa river linking project.
- Kashi Vishwanath Dham Corridor inaugurated.

### ARUNACHAL PRADESH

- China issues 'official' names for 15 places.

### NAGALAND

- Hornbill festival celebrated.
- Killings of civilians in Mon district in an army operation.

### WEST BENGAL

- Tiger spotted in Buxa tiger reserve after at least 23 years.
- Durga Puja inscribed on Representative List of ICH of Humanity

### ODISHA

- Cyclone Jawad struck Odisha and Andhra Pradesh coasts.

### ANDHRA PRADESH

- Polavaram Dam project has raised concern of development induced displacement.
- Rare black rock art depictions found at Kurnool district.

### TAMIL NADU

- Government declared Kazhuveli wetland as Kazhuveli Bird Sanctuary.
- Construction began of unit 6 of Kudankulam Nuclear Power Plant.

## Places in News: World

### RUSSIA

38 degrees Celsius reading certified in the Russian town of Verkhoyansk.

### PAKISTAN

Gwadar Port witnessing protests in the backdrop of China Pakistan Economic Corridor (CPEC).

### CENTRAL ASIA

3<sup>rd</sup> India-Central Asia Dialogue held.

### ISRAEL

Israel approved a plan to double the Jewish settler population in Golan Heights.

### SLOVENIA

India-Slovenia held 8<sup>th</sup> Foreign Office Consultations.

### BANGLADESH

President of India inaugurated renovated Sri Ramna Kali Mandir in Dhaka.

### SYRIA

An Israeli air strike hit Syria's Latakia port.

### SEA OF JAPAN (EAST SEA)

Russian submarine launched a cruise missile.

### NORTH KOREA

End of Korean War agreed.

### BARBADOS

Became the world's newest republic.

### SOUTH KOREA

End of Korean War agreed.

### NICARAGUA

Cut diplomatic ties with Taiwan.

### SOMALIA

President suspended its Prime Minister.

### INDONESIA

Mount Semeru, the highest volcano of Java Island, erupted.

### CHILE

Gabriel Boric became Chile's youngest ever president.

### PHILIPPINES

Typhoon Rai hit Philippines.

### SRI LANKA

▪ Sri Lanka detains Indian fisherman.  
▪ India & Sri Lanka will jointly develop the Trincomalee oil tank farms.







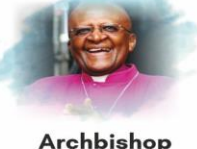

### NEW CALEDONIA

French island territory of New Caledonia chose to stay part of France.

### ANTARCTICA

Antarctica experienced a total solar eclipse.

## Personalities in News

Personality	About	Ethical Values Exhibited by the personality
 <b>St. Francis Xavier</b>	<ul style="list-style-type: none"> <li>The PM has greeted the people of Goa on the day of the Feast of St. Francis Xavier.</li> <li>He was one of the <b>founders of the Society of Jesus</b>, who arrived in Goa in 1542.</li> <li><b>Personality Traits:</b> Religious Philosophy, service of God and humankind, spirit of harmony and brotherhood.</li> <li>Xavier established a <b>network of Jesuit mission centres</b>.</li> <li>3rd December marks the anniversary of St Francis Xavier's death.</li> <li>At the Basilica of Bom Jesus church, mortal remains of St Francis Xavier still exist.</li> </ul>	<ul style="list-style-type: none"> <li><b>Faith and Commitment</b> <ul style="list-style-type: none"> <li>He strongly believed in goodness of his religious ideas and worked passionately to popularize them among the masses.</li> </ul> </li> </ul>
 <b>Dara Shikoh</b>	<ul style="list-style-type: none"> <li>He was <b>eldest son of Shah Jahan</b> and was <b>executed after losing the war of succession</b> against his brother Aurangzeb.</li> <li>He is <b>described as a "liberal Muslim"</b> who tried to find commonalities between Hindu and Islamic traditions.</li> <li>He <b>translated into Persian the Bhagavad Gita as well as 52 Upanishads</b>, which were earlier known only to a few upper caste Hindus.</li> <li>He showed keen <b>interest in Sufi mysticism</b> and was <b>initiated</b> into the <b>Kadiri order of Sufis</b>.</li> </ul>	<ul style="list-style-type: none"> <li><b>Assimilation and Harmony</b> <ul style="list-style-type: none"> <li>He developed a deep understanding and knowledge of major religions, particularly Islam and Hinduism, is known as a pioneer of the academic movement for interfaith understanding in India.</li> <li>He not only discovered commonalities but even said that the foundation of the two religions is the same, which is the belief, <b>"One Reality and One God"</b>.</li> </ul> </li> </ul>
 <b>Srinivasa Ramanujan</b>	<ul style="list-style-type: none"> <li>His birth anniversary on <b>22 December is celebrated as National Mathematics Day</b>.</li> <li>Ramanujan was one of the youngest members of Britain's Royal Society and the <b>first Indian to be elected a Fellow of Trinity College</b>, Cambridge University.</li> <li><b>Mathematical Contributions:</b> Analytical theory of numbers, elliptic functions, continued fractions, infinite series etc. <ul style="list-style-type: none"> <li>One of his most treasured findings was his <b>infinite series for pi</b>, which forms the basis of many algorithms we use today.</li> </ul> </li> <li>His life was portrayed in the 2015 film <b>'The Man Who Knew Infinity'</b>.</li> </ul>	<ul style="list-style-type: none"> <li><b>Scientific aptitude and Knowledge</b> <ul style="list-style-type: none"> <li>His work significantly contributed in the field of number theory.</li> <li>His discoveries have been applied to physics such as string theory.</li> </ul> </li> </ul>
 <b>P.N. Panicker</b>	<ul style="list-style-type: none"> <li>Panicker was a school teacher and is considered as the <b>father of the Library and Literacy Movement in Kerala</b>.</li> <li>His death anniversary is celebrated as <b>'Reading Day'</b>.</li> <li><b>Contribution:</b> <ul style="list-style-type: none"> <li>Laid the <b>foundation of the holistic approach to human resources development</b>. His message was "VayichuValaruka" (<b>"Read and Grow"</b>).</li> <li>Gave a <b>major push to the Kerala State Literacy Mission</b> through Kerala Association for Non-Formal Education and Development (KANFED).</li> <li>Initiated the <b>Travancore Library Association</b>.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Leadership and Conviction</b> <ul style="list-style-type: none"> <li>He made libraries and literacy a movement of the people.</li> <li>He gave a major push to the Literacy, which ultimately led to universal literacy in the state of Kerala.</li> </ul> </li> </ul>
 <b>Sarada Menon</b>	<ul style="list-style-type: none"> <li>She was the <b>first woman psychiatrist of India and the recipient of Padma Bhushan award</b>.</li> <li><b>Significant Contributions:</b> <ul style="list-style-type: none"> <li><b>Changed perspectives on mental health</b> by removing old taboos</li> <li><b>Rehabilitation of mentally challenged people</b> through participation of social organisations in rehabilitation.</li> <li>Working towards removing stigmas attached to mental health.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Indomitable spirit and Courage</b> <ul style="list-style-type: none"> <li>Throughout her life, she gave dignity to the mentally sick by raising awareness about the problem at a period when mental health issues were seldom acknowledged.</li> <li>Her significant quality traits include <b>selfless service, devotion, courage, team building and motivation</b>.</li> </ul> </li> </ul>
 <b>Maulana Wahiduddin Khan</b>	<ul style="list-style-type: none"> <li>Khan, an <b>Islamic scholar, spiritual leader and peace activist</b>, is among the Padma Vibhushan awardees for 2021.</li> <li><b>Significant Contribution</b> <ul style="list-style-type: none"> <li><b>Authored over 200 books</b> dealing with Islam's spiritual wisdom, religion's relation to modernity and other contemporary issues.</li> <li><b>Started Ar-risala</b> (The Message) magazine in 1976.</li> <li>Founder of <b>Centre for Peace and Spirituality</b>.</li> <li>Received <b>Demiurgus Peace International Award, Padma Bhushan, Rajiv Gandhi National Sadbhavana Award and National Citizen's Award</b>.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Inter-faith harmony and personal integrity</b> <ul style="list-style-type: none"> <li>He believed in the power of dialogue and mutual respect.</li> <li>He has remained committed to and implemented in his life the Gandhian philosophy of non-violence.</li> </ul> </li> </ul>
 <b>Archbishop Desmond Tutu</b>	<ul style="list-style-type: none"> <li>He was a <b>veteran anti-apartheid activist and peace campaigner</b> widely regarded as <b>'South Africa's moral conscience'</b>.</li> <li><b>Significant contribution:</b> <ul style="list-style-type: none"> <li>Spoke <b>against oppression of black people</b> during the the apartheid system.</li> <li><b>Important role in the Truth and Reconciliation Commission Hearings</b> (set up to investigate crimes committed during the apartheid era).</li> <li><b>Credited with coining the term 'Rainbow Nation'</b> to describe the ethnic mix of post-apartheid South Africa</li> </ul> </li> <li>Awarded the <b>Nobel Peace price in 1984</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Human Dignity and Equality</b> <ul style="list-style-type: none"> <li>He strongly believed in a democratic and just society without racial divisions.</li> <li>He played a significant role as a unifying leading figure in the non-violent campaign to resolve the problem of apartheid in South Africa.</li> </ul> </li> </ul>
 <b>General Bipin Rawat</b>	<ul style="list-style-type: none"> <li>He joined the army in 1978 and went on to <b>become General of Indian Army in 2016 and first Chief of Defence Staff (CDS) in 2019</b>.</li> <li>CDS is in the rank of a four-star General to <b>provide "effective leadership at the top level"</b> to the three wings of the armed forces</li> <li>His contributions include the <b>modernisations of the armed forces, controlling insurgency in the north east, leading a United nations peacekeeping mission</b>.</li> </ul>	<ul style="list-style-type: none"> <li><b>Professional Integrity and Valour</b> <ul style="list-style-type: none"> <li>An outstanding soldier, showed exemplary record of honest and determination through his life.</li> <li>He initiated the much-needed military reforms related to tri-service integration and coordination, and equipment acquisition.</li> </ul> </li> </ul>









# WEEKLY FOCUS: EDUCATION SERIES

*“Education breeds confidence. Confidence breeds hope. Hope breeds peace.” – Confucius*

National Education Policy (NEP) 2020 is India’s first education policy of the 21st century that proposes the revision and revamping of all aspects of the present education structure in order to address the existing and emerging developmental imperatives of our country.

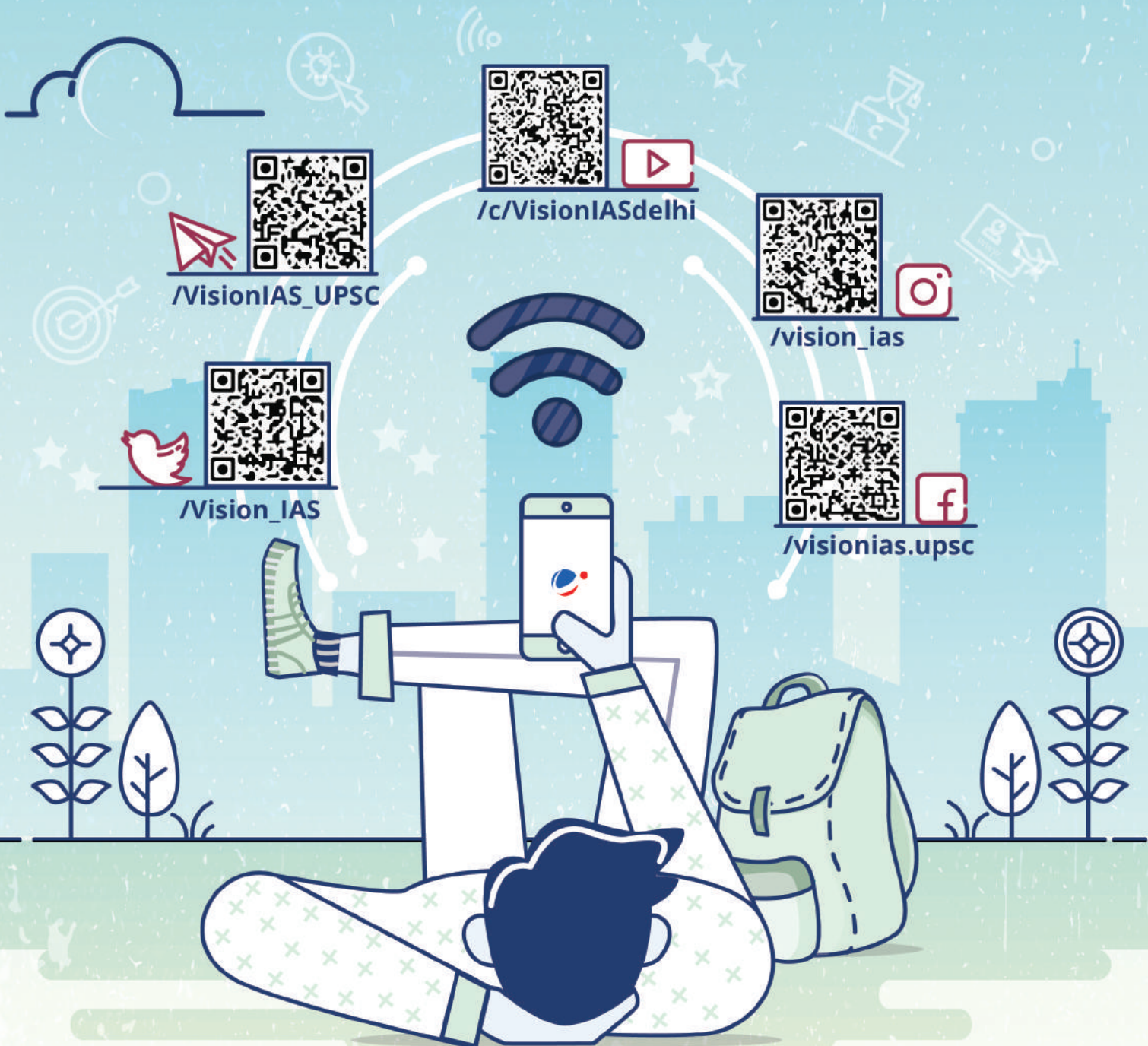
Education Series is a **three document series** starting with Basics of education to understanding the criticality of School education to exploring the world of Higher education where we will learn about the entire spectrum of India’s Education system. This aims to facilitate better understanding of the need, purpose and goals of NEP 2020.

DOCUMENT	DESCRIPTION	LEARN MORE
 <b>Philosophical Foundations of Education</b>	<p>In today’s world, science and technology are exploding but wisdom is imploding. Knowledge is expanding but personality is shrinking. This scenario is leading to gradual decline in society’s and humankind’s morals and values. This calls for reviewing our understanding of what we call as “Education”! Is Education just a tool to earn money or is it more than that? Through this document we will understand the true meaning of education through various philosophies and to what extent our education system actually provides us the needed Education.</p>	
 <b>School Education: Mind is a Tabula Rasa</b>	<p>Foundational learning forms the basis of all future learning. Just as we would not build a house without solid foundations, we cannot expect a child to thrive without solid foundational skills. Yet today, most of these foundations of learning are not strong enough. This document analyses what India has achieved in terms of improving the quality and accessibility of school education and how NEP 2020 envisions to fill the gaps.</p>	
 <b>Higher Education in India: The Cornerstone of our future</b>	<p>Throughout history, universities have brought a lot of benefits to the individuals as well as the society in general. In the 21st century, as new discoveries keep appearing coupled with constant technological innovation, higher education has never been more beneficial to the individual and the society. But as several recent studies have revealed the overall state of Indian higher education is dismal and therefore poses a severe constraint on the supply of qualified manpower. The document digs deep into this issue and suggests ways and means to implement the fundamental principles, vision and goals of NEP 2020 so as to improve the quality and relevance of higher education in India.</p>	



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**DELHI**

**HEAD OFFICE** Apsara Arcade, 1/8-B, 1<sup>st</sup> Floor,  
Near Gate 6, Karol Bagh Metro Station  
**+91 8468022022, +91 9019066066**  
**Mukherjee Nagar Centre**  
635, Opp. Signature View Apartments,  
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