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This Document was prepared under the supervision of Mr. Pramod Singh, Director, IAS Edge.

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## 1. Polity and Governance

#### 1.1 Quasi federalism

#### Quasi federalism

Federal theorist K.C. Wheare has argued that the nature of Indian Constitution is quasi-federal in nature.

The SC in Sat Pal v State of Punjab and Ors (1969) held that the Constitution of India is more Quasi-federal than federal or unitary.

#### What is Quasi-federalism?

Quasi-federalism means an intermediate form of state between a unitary state and a federation. It combines the features of a federal government and the features of a unitary government.

#### Why India opted for Quasi Federalism/centralized federalism

- First was the partition of India and the immediate concerns.
- The second reason was the reconstitution of social relations in a highly hierarchical and discriminatory society towards forging a national civic identity
- The third reason concerns the objective of building a welfare state and
- The final reason was to alleviate inter-regional economic inequality.
- To achieve the above mentioned objectives, centralized federalism was essential

#### What are the Quasi federal features of Indian State?

- Article 3 Destructible nature of states, unlike in other federations, the states in India have no right to territorial integrity. The parliament can change the area, boundaries, or name of any state.
- Single Constitution, it is applicable to both the Union as a whole and the Stares. In a true federation, there are separate constitutions for the union and the States.
- In Rajya Sabha, the States do not have equal representation. The populous States have more representatives in the Rajya Sabha than the less populous States.
- The emergency provisions are contained in Part XVIII of the Constitution of India, from Articles 352 to 360.
   In the emergency provisions, the central government becomes all-powerful and the states go into total control of the Centre.
- All India Services violate the principle of federalism under the constitution.
- The governor is appointed by the president. He also acts as an agent of the Centre. Through him, the Centre exercises control over the states.
- India has a unified or integrated judicial system. The High Court's which work in the States are under the Supreme Court of India.
- Union veto over State Bills: The governor has the authority to hold certain sorts of laws passed by the state legislature for presidential consideration.

#### **Advantages of Quasi Federal System**

- National Integration With the various provisions like Article 356, separatist tendency can be tackled
- Cooperation and Coordination: A Quasi Federal structure allows Centre to coordinate National level programmes. For instance, Canter and State collaborated in their against pandemic



• Resolving Inter State Conflicts: A quasi federal structure allows centre to act as an arbiter in case of Inter State dispute. For example Border dispute and River Water dispute

#### **Challenges**

- Abuse of Power by Centre: The federal provisions of the Constitution can only be amended with consent of the States. But Center often violates this provision. For instance, the recent Farm Laws.
- Misuse of Governor Office: imposition of constitutional Emergency in a state, reserving bills for President assents etc
- Other problems: delayed disbursal of resources and tax proceeds, bias towards electorally unfavorable States, evasion of accountability, blurring spheres of authority, weakening institutions etc
- All these signal towards the diminishing of India's plurality or regionalization of the nation a process that is highly antithetical to the forging of a supra-local and secular national identity that preserves and promotes pluralism.

#### **Way Forward**

- Reforms at the institutional and political level can deepen the roots of federalism in India.
- Democratic Decentralization of administration and strengthening governments at all levels in true spirit.
- Proper utilization of the institutional mechanism of the Inter-State Council must be ensured to develop political goodwill between the Centre and the states

#### 1.2 Article 161

Tamil Nadu Governor has made a reference (mercy petition) under Article 161 to the President

#### Article 161

- Article 161 provides that the Governor of a State shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence against any law relating to a matter to which the executive power of the State extends.
- It is on lines with Article 72 conferred upon President of India

#### **Article 72:** provides the pardoning power to the President of India, it says:

- The President shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence-
- In all cases where the punishment or sentence is by a Court-martial;
- In all cases where the punishment or sentence for an offence against any law relating to a matter to which the executive power of the Union extends;
- In all cases where the sentence is a sentence of death

#### Supreme Court has noted that

- The President has to act on the advice of the Council of Ministers while deciding mercy pleas
- The sovereign power of a Governor to pardon a prisoner under Article 161 is actually exercised by the State government and not the Governor on his own.
- The advice of the appropriate government binds the Head of the State.



#### What Happened?

- Tamil Nadu state governor has referred the mercy petition under Article 161 to the President for his consideration
- The state government stand is that the Governor has not only obstructed the implementation of the
  decision of the Council of Ministers, which had the unanimous backing of the Legislature, but he also
  proceeded to refer the matter to the President for his consideration which violates the principles of
  constitution.

#### 1.3 Delhi – Centre Power Tussle

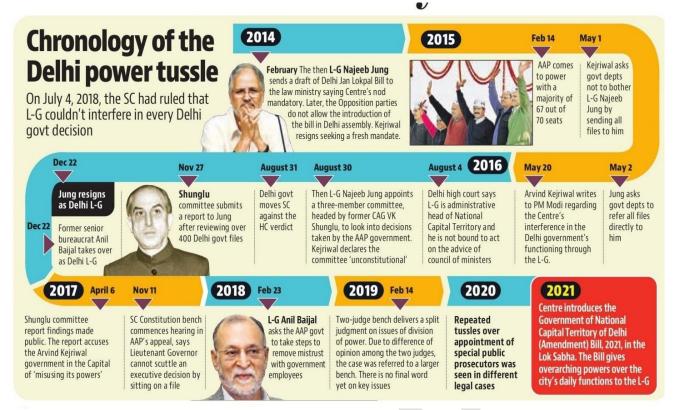
The Supreme Court has started hearing the dispute between the Delhi government and the Centre over the control of administrative services in the national capital.

- The case concerned an important question of law dealing with governance and administration of the capital.
- The reference to a larger Bench dates back to February 14, 2019, when a Division Bench of Justices A.K. Sikri and Ashok Bhushan (both retired) gave a split opinion on the question of 'services'.

#### How has the legal status of Delhi evolved in last one century?

- Before Independence, Delhi was a part of the province of Punjab, and was annexed to it under the Government of India Act, 1858.
- In 1911, Delhi not only became the capital of India, and the Delhi tehsil was separated from Punjab, and became a Chief Commissioner's Province.
- The first specific law to govern Delhi came into the picture in 1912, where the Delhi Laws Act came into
  force, and as an effect, the Chief Commissioner was empowered to determine application of laws by
  issuing appropriate notifications.
- With the Government of India Act, 1919, and Government of India Act, 1935, Delhi was retained as a centrally administered territory.
- The 1935 Act, however, did attempt to decentralise powers to a federation but given that the decentralisation was still subject to the final consent of the Viceroy it was rejected by the Indian National Congress as a form of unacceptable diarchy.
- Just before the country gained independence, the Pattabhi Sitaramiyya Committee gave its report about the required changes in the administrative set up of Chief Commissioners' Province in the Constitution. With specification to Delhi, it was suggested that
- Delhi would not be fragmented into Old and New Delhi, but kept intact with Central Government enjoying certain special powers.
- The High Court for Delhi was recommended to exercise both original, and appellate jurisdiction.
- For the governance arrangement, Delhi, along with Coorg, and Ajmer-Merwara, was suggested to function under a Lieutenant Governor, to be appointed by the President, but along with the administration by a Council of Ministers, responsible to the elected Legislature,





- In 1950, when the Constitution of India came into force, all the provinces of Chief Commissioners became Part C states. With the enactment of the Government of Part C States Act, 1951, the Legislative Assemblies in these states was empowered to make laws on all matters except, public order, police, constitution.
- In 1952, the legislative assembly of Delhi came into existence. The structure of this assembly was directly elected unicameral legislature with reservation of seats for scheduled castes
- With the passing of the State Reorganisation Act, 1956, the Indian states were limited to being "States and Union Territories", eliminating the previous system of system of Part A, B, C, and D States.
- While States were governed by a Council of Ministers appointed through elected representatives from the Legislative Assemblies; Delhi, like other Union Territories had an "Administrator" appointed by the President.
- Delhi Administration Act, 1966 was especially enacted for to provide it with limited representative government through metropolitan Council, comprising of 56 elected members and five nominated members.

#### What is the present status of Delhi?

- The Government of India appointed on 24-12-1987 a Committee headed by Balakrishnan to go into the various issues connected with the administration of Delhi and to recommend measures inter alia for the streamlining of the administrative set-up.
- After such detailed inquiry and examination, it Balakrishnan recommended that
- Delhi should continue to be a Union territory and provided with a Legislative Assembly and a Council of Ministers responsible to such Assembly with appropriate powers to deal with matters of concern to the common man.
- To ensure stability and permanence the arrangements should be incorporated in the Constitution to give the National Capital a special status among the Union territories.
- Reasoning for suggesting legislative assembly for Delhi is as follows



- With the population influx in the capital city, it was pointed out that an effective representative democratic system needs to be implemented to safeguard the rights of a large population.
- The absence of a fully empowered Legislative Assembly, entrenches an unaccountable form of government for the citizens residing in the capital city.
- Article 239 AA was inserted in the Constitution by The Constitution (69th Amendment) Act, 1991 to give Special Status to Delhi.
- With this, Delhi was constitutionally given the title of "National Capital Territory of Delhi" and would be administered by a Lieutenant Governor (LG) who was to be appointed by the President.
- It says that the NCT of Delhi will have Legislative Assembly.
- Legislative assembly has the power to make laws on state list and concurrent list except on the subject of police, public order, and land.
- Laws cleared by the Delhi assembly are routed to the President for his assent through the office of the L-G.
- Subjects under the Delhi's government's jurisdiction include education, health care, fire services, public buses, water supply, electricity and social welfare.
- Article 239AA(4) provided a mechanism for referring the matter to the President in case of a difference of opinion between the Lt. Governor and the Council of Ministers.
- Currently, Delhi has a 70-member assembly whose members are elected by the residents of the city. The political party with majority in the assembly forms the local government.
- Similarly, there are civic agencies which are independent of the city government. They include the three
  municipal corporations in the city in which leaders are elected through separate elections, a cantonment
  board and a municipal council that is in charge of the central area that houses the Parliament and Union
  government offices.
- There are two things that make Delhi distinct from a state.
- One, the excluded items under State list, i.e. item 1 (Public Order) ,2 (Police), and 18 (Land), on which the Delhi Legislative Assembly cannot make laws, are not restricted in states.
- Two, Parliament has concurrent legislative power over other items in the State list for the territory of Delhi as well.

#### What is the current dispute between Delhi government & Centre?

- The first arises from a reference made by a two-judge Bench in 2019 over who will have control over the administrative services
- The Bench also has before it the Delhi government's petition challenging the constitutional validity of the Government of National Capital Territory of Delhi (Amendment) Act 2021.
- The act provided that the term "government" referred to in any law made by the Legislative Assembly of Delhi will imply the Lieutenant Governor (L-G).
- While the AAP (ruling party of Delhi government) asserts that the new Bill of the central government essentially overturns the Supreme Court judgment, the BJP (ruling party of Centre) claims it is aimed at bringing more clarity in Delhi's administration.

#### What is the way forward?

- Having a powerful local government in a national capital is not incompatible with the national interest. It is a question of political culture.
- In Washington DC and Australian Capital Territory of Canberra, sub-national powers are indeed curtailed. But there are clear structures in place.
- What Delhi needs is more clarity (here comes the significance of the Judiciary).



• Its chief minister is a visible leader. It comes down to whether the national government and political parties have the maturity to be comfortable with federalism generally, and with strong local leadership in the national capital, in particular.

#### 1.4 Appointment of Judges

Collegium recommends two names for Supreme Court

#### **Appointment of Judges**

#### **Constitutional Provisions**

- Article 124(2) of the Indian Constitution provides that the Judges of the SC are appointed by the President after consultation with such a number of the Judges of the SC and of the High Courts in the States as the President may deem necessary for the purpose.
- Article 217 of the Indian Constitution states that the Judge of a High Court shall be appointed by the
  President consultation with the Chief Justice of India, the Governor of the State, and, in the case of
  appointment of a Judge other than the Chief Justice, the Chief Justice of the High Court.
- The Supreme Court has offered diverse meanings of the phrase "consultation"

#### **Evolution of Collegium System**

Collegium System: It is the system of appointment and transfer of judges that has evolved through judgments of the SC

**First Judges Case (1981):** The Supreme Court judgment held that consultation does not mean concurrence and it only implies an exchange of views.

**Second Judges Case (1993):** SC introduced the Collegium system, holding that "consultation" really meant "concurrence".

It added that it was not the CJI's individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the SC.

**Third Judges Case (1998):** The Court opined that the consultation process to be adopted by the Chief Justice of India requires 'consultation of plurality judges'.

- The sole opinion of the CJI does not constitute the consultation process.
- He should consult a collegium of four senior-most judges of the Supreme Court and even if two judges give an adverse opinion, he should not send the recommendation to the government.
- The court held that the recommendation made by the chief justice of India without complying with the norms and requirements of the consultation process is not binding on the government.
- Judges of the higher judiciary are appointed only through the collegium system and the government has a role only after names have been decided by the collegium.
- The government's role is limited to getting an inquiry conducted by the Intelligence Bureau (IB) if a lawyer is to be elevated as a judge in a High Court or the Supreme Court.

#### **Criticism of the Collegium System:**

- Opaqueness and a lack of transparency
- Scope for nepotism



- Embroilment in public controversies
- Overlooks several talented junior judges and advocates

#### Attempts to reform judicial appointments

- The attempt made to replace Collegium System by a 'National Judicial Appointments Commission' (through Ninety-ninth Amendment Act, 2014) was struck down by the court in 2015 on the ground that it posed a threat to the independence of the judiciary.
- Judiciary is one of the most important pillars of the democracy, thus making the appointments continuous and collaborative process involving the executive and the judiciary, hence it is time to think of a permanent, independent body to institutionalize the process with adequate safeguards to preserve the judiciary's independence guaranteeing judicial primacy.

#### 1.5 Foreign Contribution Regulation Act (FCRA)

Recently, CBI has arrested officials of FCRA division of Ministry of Home Affairs on the charge of corruption The officials were charged for allegedly helping NGOs get Foreign Contribution Regulation Act (FCRA) clearance illegally.

#### Foreign Contribution (Regulation) Act (FCRA), 2010

- Foreign funding of voluntary organizations in India is regulated under FCRA act which is implemented by the Ministry of Home Affairs.
- The Acts ensures that the recipients of foreign contributions adhere to the stated purpose for which such contribution has been obtained.
- Under the Act, organizations are required to register themselves every five years.
- Registered NGOs can receive foreign contributions for five purposes: Social, educational, religious, economic and cultural.

#### Foreign Contribution (Regulation) Amendment Act, 2020:

- Prohibition to accept foreign contribution: The Act bars public servants from receiving foreign contributions.
- Public servant includes any person who is in service or paid by the government, or remunerated by the government for the performance of any public duty.
- Transfer of foreign contribution: The Act prohibits the transfer of foreign contribution to any other person not registered to accept foreign contributions.
- Aadhaar for registration: The Act makes Aadhaar number mandatory for all office bearers, directors or key functionaries of a person receiving foreign contribution, as an identification document.
- FCRA account: The Act states that foreign contributions must be received only in an account designated by the bank as FCRA account in such branches of the State Bank of India, New Delhi.
- Reduction in use of foreign contribution for administrative purposes: The Act proposes that not more than 20% of the total foreign funds received could be defrayed for administrative expenses. In FCRA 2010 the limit was 50%.
- Surrender of certificate: The Act allows the central government to permit a person to surrender their registration certificate
- If an NGO fails to comply with the above mentioned criteria its license will not be renewed by MHA



• Recently the Union Ministry of Home Affairs (MHA) has cancelled the Foreign Contribution (Regulation) Act (FCRA), 2010 registration of various non-governmental organizations (NGOs) that are non compliant with the rules.

#### 1.6 Disqualifivation of MPs & MLAs

The Election Commission (EC) has sent a notice to Jharkhand Chief Minister over an office-of-profit charge against him for allotment of a mining lease in his name

Under Section 9A of the Representation of the People Act, 1951 CM face disqualification for entering into a government contract

#### Key Provisions of RPA, 1951

- It regulates the actual conduct of elections and by-elections.
- It provides administrative machinery for conducting elections.
- It deals with the registration of political parties.
- It specifies the qualifications and disqualifications for membership of the Houses.
- It provides provisions to curb corrupt practices and other offences.
- It lays down the procedure for settling doubts and disputes arising out of elections.

#### Disqualifications

- Is found guilty of certain election offences or corrupt practices in the elections
- Is convicted for any offence resulting in imprisonment for two or more years (except for the detention under a preventive detention law)
- Has failed to lodge an account of his/her election expenses within the time
- Has any interest in government contracts, works or services.
- Is a director or managing agent or holds an office of profit in a corporation in which the government has at least 25% share.
- Has been dismissed from government service for corruption or disloyalty to the State
- Has been convicted for promoting enmity between different groups or for the offence of bribery
- Has been punished for preaching and practicing social crimes such as untouchability, dowry and sati.

#### 1.7 Lokpal

- Lokpal to get permanent office at World Trade Centre in Delhi
- The Lokpal and Lokayukta Act, 2013 provided for the establishment of Lokpal for the Union and Lokayukta for States
- They perform the function of an "ombudsman" and inquire into allegations of corruption against certain public functionaries and for related matters.

#### Structure of Lokpal

- Lokpal is a multi-member body that consists of one chairperson and a maximum of 8 members.
- Chairperson of the Lokpal should be either the former Chief Justice of India or the former Judge of Supreme Court or an eminent person with impeccable integrity and outstanding ability, having special



- knowledge and expertise of minimum 25 years in the matters relating to anti-corruption policy, public administration, vigilance, finance including insurance and banking, law and management.
- Out of the maximum eight members, half will be judicial members and minimum 50% of the Members will be from SC/ ST/ OBC/ Minorities and women.
- The judicial member of the Lokpal should be either a former Judge of the Supreme Court or a former Chief Justice of a High Court
- The non-judicial member should be an eminent person with impeccable integrity and outstanding ability, having special knowledge and expertise of minimum 25 years in the matters relating to anti-corruption policy, public administration, vigilance, finance including insurance and banking, law and management.
- The term of office for Lokpal Chairman and Members is 5 years or till the age of 70 years.
- The members are appointed by the president on the recommendation of a Selection Committee.
- The selection committee is composed of the Prime Minister who is the Chairperson; Speaker of Lok Sabha, Leader of Opposition in Lok Sabha, Chief Justice of India or a Judge nominated by him/her and One eminent jurist.
- For selecting the chairperson and the members, the selection committee constitutes a search panel of at least eight persons.
- In 2019, Pinaki Chandra Ghose was appointed as chairperson of Lokpal

#### **Lokpal Jurisdiction and Powers**

- Jurisdiction of Lokpal includes Prime Minister, Ministers, members of Parliament, Groups A, B, C and D officers and officials of Central Government.
- Its jurisdiction also includes any person who is or has been in charge of anybody/ society set up by central act or any other body financed/ controlled by central government and any other person involved in act of abetting, bribe giving or bribe-taking.
- The Lokpal Act mandates that all public officials should furnish the assets and liabilities of themselves as well as their respective dependents.
- It has the powers to superintendence over, and to give direction to CBI
- The Inquiry Wing of the Lokpal has been vested with the powers of a civil court.
- Lokpal has the power to recommend transfer or suspension of public servant connected with allegation of corruption.
- Lokpal has the power to give directions to prevent the destruction of records during the preliminary inquiry.
- Lokpal has powers of confiscation of assets, proceeds, receipts and benefits arisen or procured by means of corruption in special circumstances.

#### 1.8 Delimitation Panel

Jammu and Kashmir Delimitation Commission released its final order The delimitation exercise had started in June 2021 in the state.

#### **Key takeaways**

- The panel has recommended seven additional constituencies six for Jammu and one for Kashmir taking the total number of seats in the UT to 90 from 83 earlier
- It has reorganised of the Parliamentary constituencies such that the five Lok Sabha seats now are made up



- of exactly 18 Assembly constituencies each, taking the total number to 90
- It has reserved nine Assembly seats for Scheduled Tribes six in Jammu and three in Kashmir
- It has removed the regional distinction between Jammu and Kashmir by treating it as one, as is reflected in the combining of Anantnag region in Kashmir with Rajouri and Poonch in Jammu to carve out Anantnag-Rajouri as a Parliamentary constituency.

#### What is delimitation?

- Delimitation is the act of fixing or redrawing the limits or boundaries of territorial constituencies of Assembly or Lok Sabha seats in a country
- The delimitation exercise is carried out by an independent high-powered panel known as the Delimitation Commission
- The redrawing of the constituencies is done based on its population size based on its last census
- The process may also result in change in the number of seats in a state.
- This exercise also involves reservation of Assembly seats for SC & ST in accordance with the Constitution.
- The Commissions orders have the force of law and cannot be questioned by any court.

#### **Constitutional Provisions**

- Under Article 82, the Parliament enacts a Delimitation Act after every Census.
- Under Article 170, States also get divided into territorial constituencies as per Delimitation Act after every Census.
- Once the Act is in force, the Union government sets up a Delimitation Commission
- Delimitation Commissions had been set up four times 1952, 1963, 1973 and 2002 under the Acts of 1952, 1962, 1972 and 2002.

#### **Composition of Delimitation Commission**

The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India

#### **Composition:**

- Retired Supreme Court judge
- Chief Election Commissioner
- Respective State Election Commissioners

#### 1.9 MPLADS

- The Union Finance Ministry has ordered revised rules for the scheme, under which the interest that the fund accrues will be deposited in the Consolidated Fund of India
- So far, the interest accrued on the fund used to be added to the MPLADS account and could be used for the development projects.

#### Member of Parliament Local Area Development Scheme (MPLADS)

- It is a Central Sector Scheme which was announced in December 1993.
- To enable MPs to recommend works of developmental nature with emphasis on the creation of durable community assets primarily in their Constituencies



#### **Implementation**

- The process under MPLADS starts with the Members of Parliament recommending works to the Nodal District Authority.
- The Nodal District concerned is responsible for implementing the eligible works

#### **Funding**

- Each year, MPs receive Rs. 5 crore in two installments of Rs. 2.5 crore each.
- Funds under MPLADS are non-lapsable.
- Lok Sabha MPs have to recommend the district authorities projects in their Lok Sabha constituencies, while Rajya Sabha MPs have to spend it in the state that has elected them to the House.
- Nominated Members of both the Rajya Sabha and Lok Sabha can recommend works anywhere in the country.

#### **Guidelines for MPLADS implementation**

- The document 'Guidelines on MPLADS' was published by the Ministry of Statistics and Programme Implementation in June 2016
- It recommended MPs to recommend works in the area with at least 15 per cent of their entitlement for the year for areas inhabited by Scheduled Caste population and 7.5 per cent for areas inhabited by ST population.
- According to the Guidelines MPLAD funds can also be used for implementation of the schemes such as Swachh Bharat Abhiyan, Accessible India Campaign (Sugamya Bharat Abhiyan), conservation of water through rain water harvesting and Sansad Aadarsh Gram Yojana, etc.
- The district authority must inspect at least 10% of all works under implementation every year.

#### 1.10 Rights of Crime Victims

- Supreme Court has stated that victim of a crime ought to be heard at all stages of a trial
- In Jagjeet Singh v. Ashish Mishra (2022), SC has made sharp remarks legitimizing the claims of victim to participate in the criminal justice process.
- The court observed that our criminal justice system conflates (combine) the presence of the state with the presence of the victim.
- Such conflation is attributable to the traditional understanding of the criminal process wherein the trial is a contest between the state and the accused only.
- The court also observed that the victim cannot be asked to wait till the commencement of the trial to assert their right to participate in the proceeding.
- The victim has a legally vested right to be heard at every step post the occurrence of the offence

#### **Impact**

- The victim as defined in Code of Criminal Procedure (CrPC) becomes a victim only after an accused has been charged with the offence.
- The judgment overcomes this bar to provide the victim with the right to be recognised as a victim immediately after the occurrence of the offence.
- Second, a victim, not being a complainant, has been deterred from several substantive pre-trial rights



under the CrPC including the right to approach the superior police officer in case of a refusal to register an FIR, the right to be informed about the progress etc –

• Thus the judgment states that the victim has 'unbridled participatory rights' right from the stage of the investigation.

#### **Challenges**

- While the judgment grants participatory rights to victims at all stages of the criminal process, it remains to be seen how the judgment is interpreted in the future and which rights are consequently identified
- A second challenge is that at the moment, there are several provisions and judicial precedents which stand in the way of a comprehensive guarantee of such rights to the victims.
- For instance, Section 301 limits the right of the victim's participation at the trial in a court of session to submission of written arguments after evidence is closed in the matter.

#### What can be done?

- Provide legislative recognition to the principle of participation which has received the judicial stamp of approval.
- Amend the CrPC in order to facilitate the recognition of victim rights
- Such legislative incorporation can grant recognition to the rights of victims as well as secure their implementation by the lower judiciary as well as the functionaries of the criminal justice system.

#### 1.11 Minority status in India

Supreme Court expressed displeasure over the Centre changing its stand on a plea that sought minority status for Hindus where their numbers have gone below other communities

#### What Happened?

- In the earlier (March) affidavit, the Centre had sought to shift the onus of granting minority status on states, stating centre and state have concurrent powers to do so
- However, in a fresh affidavit it said "the power is vested with the Centre to notify minorities"

#### **Background**

#### What is the case?

- The plea contended that Hindus are in a 'minority' in six states and three Union Territories of India but was allegedly not able to avail themselves of the benefits of schemes meant for minorities.
- Plea Showed as per 2011 census Hindus have become a minority in Lakshadweep (2.5%), Mizoram (2.75%), Nagaland (8.75%), Meghalaya (11.53%), J&K (28.44%), Arunachal Pradesh (29%), Manipur (31.39%), and Punjab (38.40%).
- They should be given minority status in these states in accordance with the principle laid down by the SC in its 2002 TMA Pai Foundation and 2005 Bal Patil Case ruling.
- The petition also argued that NCMEI (National Commission for Minority Education Institution) Act 2004 gives unbridled power to the Centre and is "manifestly arbitrary, irrational, and offending".
- Section 2(f) of NCMEI Act 2004 confers power to the Centre to identify and notify minority communities in India



#### TMA Pai Case:

The SC had said that for the purposes of Article 30 that deals with the rights of minorities to establish and administer educational institutions, religious and linguistic minorities have to be considered state-wise.

#### **Bal Patil Case:**

In 2005, the SC in its judgement in 'Bal Patil' referred to the TMA Pai ruling.

The legal position clarifies that henceforth the unit for determining status of both linguistic and religious minorities would be 'state'.

#### What was the Centre's stand (earlier)?

- Earlier centre stated that Parliament and State legislatures have concurrent powers to enact law to provide for the protection of minorities and their interests.
- States can also "certify institutions as being minority institutions" as per the rules of the said state.
- The Centre pointed out that Maharashtra had notified Jews as a minority community in 2016 and Karnataka had notified Urdu, Telugu, Tamil, Malayalam, Marathi, Tulu, Lamani, Hindi, Konkani and Gujarati as minority languages.
- But now in a fresh it contended that "the power is vested with the Centre to notify minorities"

#### How is a community notified as a minority?

Under Section 2(c) of the National Commission for Minorities Act of 1992 central government has the power to notify a community as a minority

#### **Notified Minorities in India**

- Currently, only those communities notified under section 2(c) of the NCM Act, 1992, by the central government are regarded as minority.
- In 1993, the first Statutory National Commission was set up and five religious communities viz. The Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) were notified as minority communities.
- In 2014, Jains were also notified as a minority community.

#### **National Commission for Minorities (NCM)**

In 1992, with the enactment of the NCM Act, 1992, the Minority Commission became a statutory body and was renamed as the NCM

#### Composition:

- NCM consists of a Chairperson, a Vice-Chairperson and five members and all of them shall be from amongst the minority communities.
- Total of 7 persons to be nominated by the Central Government should be from amongst persons of eminence, ability and integrity.
- Tenure: Each Member holds office for a period of three years from the date of assumption of office.

#### **Functions:**

- Evaluation of the progress of the development of minorities under the Union and States
- Monitoring of the working of the safeguards for minorities provided in the Constitution and in laws enacted by Parliament and the state legislatures
- Making recommendations for the effective implementation of safeguards for the protection of the



interests of minorities by the central or state governments

- Investigates matters of communal conflict and riots
- Looking into specific complaints regarding deprivation of rights and safeguards of minorities

#### **Constitutional Provisions for Minorities**

#### Article 29

It provides that any section of the citizens residing in any part of India having a distinct language, script or culture of its own, shall have the right to conserve the same.

It grants protection to both religious minorities as well as linguistic minorities

#### Article 30:

All minorities shall have the right to establish and administer educational institutions of their choice.

The protection under Article 30 is confined only to minorities (religious or linguistic) and does not extend to any section of citizens (as under Article 29).

#### Article 350-B:

The 7th Constitutional (Amendment) Act 1956 inserted this article which provides for a Special Officer for Linguistic Minorities appointed by the President of India.

It would be the duty of the Special Officer to investigate all matters relating to the safeguards provided for linguistic minorities under the Constitution.

#### 1.12 Marital Rape

- A two-judge Bench of the Delhi High Court has delivered a split verdict in a batch of petitions challenging the exception provided to marital rape in the Indian Penal Code
- The court was hearing a clutch of four petitions challenging the constitutionality of the exception to Section 375
- While one judge held that the exception under Section 375 of the IPC is unconstitutional, the other judge held that the provision is valid.

#### What is the marital rape exemption?

- Section 375 defines rape and lists seven notions of consent which, if vitiated (violated), would constitute the offence of rape by a man.
- The provision contains a crucial exemption: "Sexual intercourse by a man with his own wife, the wife not being under eighteen years of age, is not rape."
- This exemption essentially allows a marital right to a husband who can with legal sanction exercise his right to consensual or non-consensual sex with his wife.

#### What happens when there is a spilt verdict?

- In case of a split verdict, the case is heard by a larger Bench.
- The larger Bench to which a split verdict goes can be a three-judge Bench of the High Court, or an appeal can be preferred before the Supreme Court.



#### **Arguments for criminalizing Marital Rape**

- A marriage should not be viewed as a license for a husband to forcibly rape his wife with impunity.
- The doctrine of Coverture: The marital exception to the IPC's definition of rape was drafted based on Victorian patriarchal norms
- The doctrine of Coverture It did not allow married women to own property, and merged the identities of husband and wife
- Against Basic Rights of Women Indian women deserve to be treated equally under Article 14
- Bodily Integrity is intrinsic to Article 21: A woman is entitled to refuse sexual relations with her husband as the right to bodily integrity and privacy is an intrinsic part of Article 21 of the Constitution
- The Justice Verma committee set up in the Nirbhaya gang-rape case and the UN Committee on Elimination of Discrimination Against Women (CEDAW) in 2013 had recommended that the Indian government should criminalize marital rape
- Rape is rape, irrespective of the identity of the perpetrator, and the age of the survivor.

#### **Arguments against criminalizing Marital Rape**

- Destabilize marriage as an institution It will create anarchy in families and destabilize the institution of marriage
- Misuse of law It may become an easy tool for harassing the husbands by misusing the law similar to misuse of Section 498A (harassment caused to a married woman by her husband and in-laws) of IPC and the Protection of Women from Domestic Violence Act, 2005.
- Diversity in Cultures of the states Criminal law is in the Concurrent List and implemented by the states and there is a vast diversity in the cultures of these states

#### Way forward

- The legislature should take cognizance of this legal infirmity and bring marital rape within the purview of rape laws by eliminating Section 375 (Exception) of IPC
- Adopt multi-stakeholder approach while deciding the sentencing
- Bringing behavioral changes awareness campaigns sensitizing the public regarding the importance of consent, medical care and rehabilitation

#### 1.13 Misuse of Position & Power

An IAS couple is transferred after dog-walking incident on the tracks of Thyagraj Stadium, Delhi at a time when young athletes should have been practising on it.

#### What rules govern the behaviour of high officials of the government?

- The three All India Services (IAS, IPS, Indian Forest Service) are governed by the All India Service Conduct Rules, 1968. There are 23 Rules in all
- The other civil services are governed by the Central Civil Services (CCS) Conduct Rules, 1964, which comprise 25 Rules
- By an amendment in August 2014, several points were added that may be seen as having a bearing on the conduct of the IAS officers in the recent cases. These include:
- Every member of the Service shall commit himself to and uphold the supremacy of the Constitution and democratic values;



- not misuse his position as civil servant and not take decisions in order to derive financial or material benefits for himself, his family or his friends;
- act with fairness and impartiality and not discriminate against anyone, particularly the poor and the under-privileged sections of society;
- Refrain from doing anything which is or may be contrary to any law, rules, regulations and established practices, among others things.
- The overarching Rule for civil servants is: Every member of the Service shall at all times maintain absolute integrity and devotion to duty and shall do nothing which is unbecoming of a member of the Service.
- "They shall maintain high ethical standards, integrity and honesty; political neutrality; accountability and transparency; responsiveness to the public, particularly to the weaker section; courtesy and good behaviour with the public."

#### Importance of values and ethics to Public Servant

Public service values or civil service values are those values and ethics should be followed while carrying out their duties.

#### Values to be followed

- Adhere to the Values such as Integrity, Honesty, Objectivity, Non-partisanship, Impartiality, Empathy, Compassion, Conflict of interest etc
- Patriotism and upholding national pride
- Allegiance to the Constitution and the law of the nation
- Objectivity, honesty, care and diligence, courtesy and transparency
- Maintain absolute integrity.
- Discharge official duties with competence and accountability; without discrimination and in accordance with the law.
- Ensure effective management, professional growth and leadership development.
- Avoid misuse of official position or information and using the public moneys with utmost care and economy.

Function with the objective serving public.

Public Servants are to serve as instruments of good governance and to provide services for the betterment of the public at large.

Foster socio-economic development, with due regard to the diversity of the nation

These values ensure an effective civil service which functions honestly, impartially and efficiently.

These values empower the administrator to fill the gaps of trust deficit between the citizens and the Government.

These foundational values provide lawfulness to the behavior of an administrator and make it more effective.

Since civil servants have discretionary powers the values are important to give them certain guidance to prevent abuse of power.

### 1.14 The Places of Worship (Special Provisions) Act, 1991

The ongoing row over the Gyanvapi Masjid that is situated adjacent to the Kashi Vishwanath Temple in Varanasi, Uttar Pradesh, has again brought to the fore the controversy around The Places Of Worship (Special Provisions) Act, 1991.



#### Background - Gyanvapi Masjid Row

- 1991: A group of priests in Varanasi petitioned in court, seeking permission to worship on the Gyanvapi premises.
- 2019: The Allahabad High Court ordered a stay on an ASI survey that was requested by the petitioners.
- 2022 (current): Five Hindu women sought to routinely worship Shringar Gauri and other idols within the Gyanvapi mosque complex (behind the western wall of the premises).
- A videographed survey of the Gyanvapi Masjid complex was ordered by Varanasi court report was to be submitted in May but got delayed.
- The order was challenged by Uttar Pradesh Sunni Central Waqf Board and the mosque committee.
- Turning down the plea, the Varanasi court said: "In any case, the survey work won't be stopped whether parties cooperate or don't."

#### The Gyanvapi Masjid Survey 2022

- Hindu Side: Claimed that a 'Shivling' was found inside a reservoir on the mosque complex
- Muslim side: Dismissed the claim and said it was only a fountain.
- The mosque committee's plea argued that the fresh suits filed in 2021 citing the "right to Worship" were "barred by The Places of Worship Act, 1991," and were an attempt to revive the dispute which had been put to rest by this law.

#### Let's discuss the Places of Worship Act, 1991

- Seeks to prohibit the conversion of a place of worship and maintain its religious character as was at the time of India's Independence on August 15, 1947.
- In force: Since July 11, 1991
- If any suit, appeal, or other proceedings concerning the conversion of the religious traits of any place of worship, existing on August 15, 1947, is pending before any court, tribunal or other authority, the same shall abate. It further stipulates that no fresh proceedings on such matters shall be initiated.
- The Act prohibits conversion of a religious place in any manner, even to cater to a particular section of the religion.
- The Act exempts any place of worship, which is "an ancient and historical monument or an archaeological site or remains covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958 (24 of 1958) or any other law for the time being in force".
- Penal Provision: Anyone contravening the prohibition on converting the status of a place of worship is liable to be imprisoned for up to three years, and a fine. Those abetting or participating in a criminal conspiracy to commit this offence will also get the same punishment.

#### Why Was the Act Introduced?

- Brought about by a Bill introduced by the erstwhile Union Home Minister in the PV Narasimha Rao Cabinet, Shankarrao Bhavrao Chavan.
- The Act was passed when BJP leader LK Advani's Rath Yatra for the Ram Janmabhoomi movement had gained massive support.
- In the wake of Advani's arrest in Bihar and the shooting of kar sevaks in Uttar Pradesh ordered by the Mulayam Singh government Chavan sought to prevent incidents of communal unrest through the Bill.

#### **Challenge to the Places of Worship Act**

• Challenged by: BJP leader and lawyer Ashwini Kumar Upadhyay challenged the Places of Worship Act,



1991, last year in the Supreme Court.

- Argument: The law was a contravention of the principle of secularism as laid down by the Constitution of India.
- The Centre has barred remedies against illegal encroachment on places of worship and pilgrimages and now Hindus, Jains, Buddhists, Sikhs cannot file a suit or approach a high court under Article 226.
- Therefore, they won't be able to restore their places of worship and pilgrimage including temple endowments in the spirit of Articles 25-26 and the illegal barbarian acts of invaders will continue in perpetuity.
- Pertained to: A legal battle before a trial court over "reclaiming the birthplace of Lord Krishna in Mathura", which was directly affected by the restrictions under the 1991 Act.

#### What are the exception under the act?

- An exception was made to keep the Babri Masjid-Ramjanmabhoomi dispute out of its ambit as the structure was then the subject of litigation.
- The 1991 Act will not apply to ancient and historical monuments and archaeological sites and remains that are covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958.
- It will also not apply to any suit that has been finally settled or disposed of, any dispute that has been settled by the parties before the 1991 Act came into force, or to the conversion of any place that took place by acquiescence.

#### What are the grounds of challenge?

- Constrains Judicial Remedy: The act amounts to taking away the right of the people to seek justice through the courts and obtain a judicial remedy. The petitioner argues that the Act takes away the rights of communities such as Hindus, Sikhs, Buddhists and Jains to reclaim the sites of their places of worship through legal proceedings.
- Contention on Cut-off date: The petitioner also contends that the cut-off date of August 15, 1947, is arbitrary and irrational.
- Issue of Exemption: The petition contends that the legislation legalises the actions of invaders in the past who demolished places of worship. It wonders how the law could exempt the birthplace of Ram, but not that of Krishna.
- Restriction on Fundamental Right to Practise Religion: The petition also said the law violates the right to practise and propagate religion, as well as the right to manage and administer places of worship.
- Not in spirit of Secularism: Further, petition has argued that that act goes against the principle of secularism and the state's duty to preserve and protect religious and cultural heritage.

#### What has the SC said on the status freeze?

- In its final verdict on the Ayodhya dispute, the Supreme Court had observed that the Act "imposes a non-derogable obligation towards enforcing our commitment to secularism".
- The court went on to say: "Non-retrogression is a foundational feature of the fundamental constitutional principles, of which secularism is a core component."
- The court described the law as one that preserved secularism by not permitting the status of a place of worship to be altered after Independence.
- In words of caution against further attempts to change the character of a place of worship, the five-judge Bench said, "Historical wrongs cannot be remedied by the people taking the law in their own hands. In preserving the character of places of public worship, Parliament has mandated in no uncertain terms that



history and its wrongs shall not be used as instruments to oppress the present and the future."

#### What are the implications of the case?

- Contentious Places: Some Hindu organisations have been laying claim to the Gyanvapi mosque in Varanasi and the Shahi Idgah in Mathura.
- Controversy in Mathura: Civil suits have been filed in a Mathura court seeking the shifting of the 17th-century mosque from the spot that some claim is the birthplace of Lord Krishna.
- Dilution of 1991 law impacts outcome: Any order that strikes down or dilutes the 1991 law on the status of places of worship is likely to influence the outcome of such proceedings.

#### **1.15 LGBTIQ+**

International Labour Organisation (ILO) released a document "Inclusion of lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ+) persons in the world of work"

#### Recommendations

- Report recommended member countries, employers' organisations and representatives of workers to launch social protection programmes to remove barriers that LGBTIQ+ persons face in society
- The ILO document said discrimination has an economic cost not just to LGBTIQ+ persons and their families but also to enterprises and national economies.
- The ILO added that around the world, LGBTIQ+ persons face harassment, violence and discrimination on the basis of sexual orientation, gender identity, gender expression and sex characteristics.
- It said a national policy and labour law review will allow governments to assess their country's work policy environment for LGBTIQ+ persons – This will allow the identification of concrete steps for improving the legal and policy environment, ending discrimination and exclusions, and complying with international instruments
- The ILO said consultation with LGBTIQ+ communities and social dialogue with employers' and workers' organisations are key This will allow the identification of barriers faced by LGBTIQ+ persons when entering the labour market and accessing government schemes
- Studies have shown that diversity in the workplace, including LGBTIQ+ persons, is better for business.
- It signals a creative environment that creates the right conditions for economic growth

#### **Challenges Faced by LGBTIQ+ Community**

- Family: The problem of sexual orientation and gender identity leads to fighting and family disruption.
- Lack of communication and misunderstanding between parents and their LGBTQ children increases family conflict.
- Discrimination at Work Place: LGBTQ suffers from the socio-economic inequalities in large part due to discrimination in the workplace.
- Health Issues: Criminalisation of homosexuality leads to discrimination and results in LGBTQ people getting poor or inadequate access to services within the health system.
- Drug Abuse: They gradually develop low self-esteem and low self-confidence and become isolated from friends and family.
- These people mostly get addicted to drugs and alcohol



#### Status of LGBTIQ+ Rights in India

- National Legal Services Authority Vs. Union of India (2014): The SC observed that "recognition of transgenders as a third gender is not a social or medical issue, but a human rights issue".
- Navtej Singh Johar vs. Union Of India (2018): The SC decriminalised homosexuality by striking off parts of Section 377 of the Indian Penal Code (IPC) which were held violative of Fundamental Rights of LGBTQ Community.
- The SC held that Article 14 of the Constitution guarantees equality before law and this applies to all classes of citizens therby restoring 'inclusiveness' of LGBTQ Community.
- Transgender Persons (Protection of Rights) Act, 2019:
- The Parliament has enacted the Transgender Persons (Protection of Rights) Act, 2019, to prohibit discrimination against Transgender persons
- Same Sex Marraiges: In Shafin Jahan v. Asokan K.M. and others (2018) case, the SC observed that choice of a partner is a person's fundamental right and it can be a same-sex partner.
- However, in February, 2021, the Central Government opposed same-sex marriage in Delhi High Court stating that a marriage in India can be recognised only if it is between a "biological man" and a "biological woman" capable of producing children.

#### **Way Forward**

• It is time to recognize the rights of LGBTIQ+ community through anti-discrimination law that empowers them to build productive lives and relationships irrespective of gender identity or sexual orientation and place the onus to change on state and society and not the individual.

#### 1.16 Prostitution in India

The apex court in its order stated that sex workers are entitled to dignity and equal protection under the law. A long-standing demand of sex workers that their work be decriminalised has been partially fulfilled with the Supreme Court.

#### What was the case about?

- In 2010, an appeal was filed in the SC against a 2007 order of the Calcutta High Court which upheld the life imprisonment imposed on a man named Budhadev Karmaskar, found guilty of murdering a sex worker in Kolkata's red light area in September 1999.
- The court suo motu converted the case into a PIL to address the problems of sex workers.
- The court held that the Central and the State Governments should prepare schemes for rehabilitation for physically and sexually abused women commonly known as prostitutes through Social Welfare Boards.
- The Court had ruled in Budhadev Karmaskar (2011), that sex workers are also entitled to a "life of dignity" under Article 21 of the Constitution
- The SC also appointed a panel to make suitable suggestions on prevention of trafficking and rehabilitation of sex workers who wish to leave sex work.

#### What did the panel say in its report?

- In its final report submitted in 2016, the panel noted that sex workers
- Found it difficult to acquire proofs of identity such as ration cards or voter cards because they lacked a proof of residence



- District authorities did not recognise the identities of sex workers and their children
- No access to schemes meant for their rehabilitation
- No access to credit offered by states, because the lack of documents prevented them from opening bank accounts
- The committee recommended that amendments should be made to The Immoral Traffic (Prevention) Act, 1956.
- Centre's response- In 2020, the government informed the SC that a Group of Ministers has been
  constituted to examine the two draft legislations and the SC panel report shall be taken into consideration
  by the Group of Ministers.

#### What is the recent court ruling?

- In 2020, the SC directed States and Union Territories to provide dry rations to sex workers identified by National Aids Control Organization (NACO) without insisting on proof of identity.
- Recently, the court noted that despite its assurances, the Centre was still to bring a law on the subject.
- The court used its extraordinary powers under Article 142 and directed that the recommendations in respect of sex workers and other connected issues be implemented by states and UTs.
- Recommendations to be implemented- The order listed 10 recommendations of the panel, and directed that six of them should be implemented.
- provision for immediate medical assistance for any sex worker who is a victim of sexual assault
- direction to states to do a survey of all Immoral Trafficking (Prevention) Act Protective Homes
- sensitising police and other law enforcement agencies to the rights of sex workers and to ensure that police treat them with dignity and should not abuse them verbally and physically
- ask the Press Council of India to issue appropriate guidelines for the media to take utmost care not to reveal the identities of sex workers
- measures that sex workers employ for their health and safety must neither be construed as offences nor seen as evidence of commission of an offence

#### **Prostitution in India**

- It is said that prostitution is the oldest profession in the world.
- In India, their presence can be dated back to ancient times with scriptures mentioning the presence of three kinds of women — those who were chaste and devoted to a single man (even if the man had many wives).
- The second were women who kept away from men and lived as nuns.
- The third kind were women who had multiple lovers and were attached to no single man.
- In later times, such women were considered the wives of a temple deity or a Devdasi, who saw their god in all their lovers.
- This last kind of women has often been described in modern literature as ancient sex workers or prostitutes or sacred concubines.

#### Laws around prostitution in India

- While the profession has long been prevalent in India, its legal status has always been under a cloud and many have over the years demanded that it be legalised.
- Currently, as per the Indian Penal Code (IPC), prostitution is not in a broad sense illegal, but several activities under prostitution are punishable by law.
- As per the Immoral Traffic (Prevention) Act, 1986, sex workers can practice their profession but activities,



including pimping and running a brothel are considered a punishable offence.

- It is illegal to procure, induce, or abduct a person for prostitution.
- The law further mentions that the practice cannot take place within a 200-metre radius of any public place. To participate in prostitution lawfully, sex-worker must choose an isolated location.
- This clearly puts the legality of profession of prostitution in ambiguity.
- While the legality of sex work is vague in India, until now, other countries across the world have legalised the profession, granting sex workers equal rights and protection.
- Across Europe, countries such as Germany, Netherlands, France, Greece have legalised the profession.

#### How significant is the court order?

- By holding that basic protection of human decency and dignity extends to sex workers and their children, the Court has struck a blow for the rights of an exploited, vulnerable section.
- It has asked State governments to do a survey of protective homes to review the cases of adult women detained there and process their release in a time-bound manner.
- The Court's observations shall help sensitise the police, media and society toward sex workers.

#### 1.17 Article 311

Three government employees were terminated by the J&K Government under Article 311 2(c)

#### Article 311:

- Article 311 (1) says that no government employee either of an all India service or a state government shall be dismissed or removed by an authority subordinate to the one that appointed him/her.
- Article 311 (2) says that no civil servant shall be dismissed or removed or reduced in rank except after an inquiry in which s/he has been informed of the charges and given a reasonable opportunity of being heard in respect of those charges.

#### People Protected under Article 311: The members of

- Civil service of the Union,
- All India Service, and
- Civil service of any State,
- People who hold a civil post under the Union or any State.
- The protective safeguards given under Article 311 are applicable only to civil servants, i.e. public officers. They are not available to defence personnel.

#### Exceptions to Article 311 (2):

- 2 (a) Where a person is dismissed or removed or reduced in rank on the ground of conduct which has led to his conviction on a criminal charge; or
- 2 (b) Where the authority empowered to dismiss or remove a person or to reduce him in rank is satisfied that for some reason, to be recorded by that authority in writing, it is not reasonably practicable to hold such inquiry; or
- 2 (c) Where the President or the Governor, as the case may be, is satisfied that in the interest of the security of the State, it is not expedient to hold such inquiry



#### 2. International Relations

#### 2.1 India Nordic summit

- Prime Minister of India participated in the 2nd India-Nordic Summit on May 04, 2022
- The summit is being hosted by Denmark
- Prime Ministers of Denmark, Iceland, Finland, Sweden and Norway have also participated in the summit.

#### **Background**

- The 1st India-Nordic Summit took place in 2018 in Stockholm
- The 2018 India-Nordic Summit reiterated the six countries' commitment to global security, economic growth, innovation and climate change.

#### **Key Discussions**

- It primarily focused on post-pandemic economic recovery, climate change, renewable energy and the evolving global security scenario.
- The issue of Indo-Pacific too was discussed at the meeting
- The Prime Minister also held separate bilateral meetings with his counterparts of nordic countries
- With Finland the discussion focused on to expand cooperation in the fields of new and emerging technologies like AI, quantum computing, future mobile technologies, clean technologies and smart grids
- With Norway the discussion was to deepen engagement in areas like blue economy, renewable energy, and green hydrogen, solar and wind projects, green shipping, fisheries, water management, rainwater harvesting, space cooperation, long-term infrastructure investment, health and culture.
- Both Indian and Sweden PMs expressed satisfaction at the progress made by the Lead IT initiative.
- This was a India-Sweden joint global initiative to set up a Leadership Group on Industry Transition (LeadIT) in September 2019 at the UN Climate Action Summit to help guide the world's heaviest greenhouse gas (GHG) emitting industries towards the low-carbon economy. Its membership has now grown to 35 with 16 countries and 19 companies
- With Iceland leaders discussed ways to further strengthen economic cooperation, especially in the sectors
  of geothermal energy, blue economy, Arctic, renewable energy, fisheries, food processing, education
  including digital universities, and culture



#### **About Nordic Countries**



- The Nordic Countries are a group of countries in northern Europe.
- There are 5 Nordic countries, Denmark, Sweden, Norway, Finland, and Iceland.
- Denmark, Sweden, and Norway are constitutional monarchies and parliamentary democracies. Finland and Iceland are democratic republics.

#### **Importance of Nordic Countries to India**

- Nordic countries collectively represent an economy of more than \$1.6 trillion.
- Total bilateral trade in goods and services between India and the Nordic countries is \$13 billion.
- All these countries figure among the top achievers in several areas of human endeavour, particularly innovation, clean energy, green technologies, and education.

#### **Importance of India to Nordic Countries**

- India is the third-largest global economy at \$9 trillion in purchasing power parity terms.
- It is also the fastest-growing major economy with annual GDP growth of 7.4% in 2022-23.
- India presents an ideal opportunity to these countries because of its large market as also its youth dividend.
- Maintaining peace, ensuring security and promoting sustainable economic development of the Arctic Region is another area which presents immense possibilities to strengthen the bilateral partnership.

#### **Significance of Nordic Summit for India**

- The significance of the event for India can be accessed from the fact that the US is the only other country with which the Nordic states have an engagement at the summit level.
- India Nordic Summit helps in expanding India's multifaceted cooperation with the Nordic region.
- · Nordic countries are important partners for India in sustainability, renewable energy, digitisation and



innovation. These present enormous opportunities for India to plug into the strengths of these countries to mutual benefit.

#### 2.2 Donbas and Luhansk

- Ukrainian President said the Incessant bombardment has turned Ukraine's Donbas region into hell
- Ukrainian government received a fresh boost as the U.S. Congress approved a \$40 billion aid package, including funds to enhance Ukraine's armoured vehicle fleet and air defence system.
- Russian Defence Minister said Moscow was nearing full control of Ukraine's eastern separatist region of Luhansk
- Russian military sent troops to Ukraine on February 24 under the guise of protecting the Russian-speaking population there, especially in the breakaway regions of Luhansk and Donetsk
- Russia recognised the independence of the separatist republics shortly before launching the military action.
- Russia claimed control of the strategic city in southeastern Ukraine in late April, keeping the remaining Ukrainian forces blocked inside the giant steel plant.
- Ukrainian authorities in early May attempted to retake the strategic Snake Island in the Black Sea that was seized by Russian troops early in the conflict

#### **Donbas and Luhansk**

The Donbass region, comprising the Donetsk and Luhansk oblasts of Ukraine, has been at the centre of the conflict since March 2014 when Moscow (Russia) invaded and annexed the Crimean Peninsula.



#### 2.3 North Atlantic Treaty Organization (NATO)

- Finland and Sweden have applied for membership of NATO.
- Finland and Sweden have formally applied for membership of the North Atlantic Treaty Organization (NATO), the US-led security alliance forged during the Cold War to defend its members from Soviet expansion.
- Transforming Europe



- The war in Ukraine has already changed the geopolitics of Europe and the world.
- The admission of Finland and Sweden to NATO would bring about a transformation in the continent's security map by giving NATO a contiguous long frontier in western Russia —Finland and Russia share a 1,300-km border and doubling it from the present 1,200 km, parts of it in northern Norway, Latvia and Estonia, and Poland and Lithuania.
- In addition, Sweden's island of Gotland in the middle of the Baltic Sea would give NATO a strategic advantage.
- Furthermore, when Sweden and Finland join NATO, the Baltic Sea Russia's gateway to the North Sea and the Atlantic Ocean would be ringed entirely by members of the western security alliance Finland, Estonia, Latvia, Lithuania, Poland, Germany, Denmark and Sweden.

#### **Neutrality history**

• In seeking NATO membership, Sweden and Finland have abandoned their long history of neutrality, when their foreign policy and security priority was to stay out of superpower rivalry during the Cold War, and maintain cordial ties with both blocs.

#### Opposition

- At the moment the main obstacle to their applications is Turkey, a member since 1952 and which has NATO's second largest army after the US.
- Turkey's president has objected to their applications on the ground that the two countries had provided safe haven to the leaders of the Kurdish group PKK, an armed movement fighting for a separate Kurdistan, comprising Kurdish areas in Turkey, Iraq, Iran and Syria.
- Membership of NATO is open to all European nations that fulfil certain criteria that include "a functioning democratic political system based on a market economy; fair treatment of minority populations; a commitment to resolve conflicts peacefully; an ability and willingness to make a military contribution to NATO operations; and a commitment to democratic civil-military relations and institutions".
- New members are admitted with the unanimous consent of all members.

#### What is NATO?

- North Atlantic Treaty Organization (NATO) is a military alliance established by the North Atlantic Treaty
  (also called the Washington Treaty) of April, 1949, by the United States, Canada, and several Western
  European nations to provide collective security against the Soviet Union.
- There are currently 30 member states.
- Its original members were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- Joining the original signatories were Greece and Turkey (1952), West Germany (1955, from 1990 as Germany), Spain (1982), the Czech Republic, Hungary, and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017), and North Macedonia (2020).
- Headquarters: Brussels, Belgium.
- Headquarters of Allied Command Operations: Mons, Belgium.

#### What are the Objectives of NATO?

- NATO's essential and enduring purpose is to safeguard the freedom and security of all its members by political and military means.
- Political objectives: NATO promotes democratic values and enables members to consult and cooperate on defense and security-related issues to solve problems, build trust and, in the long run, prevent conflict.
- Military Objectives: NATO is committed to the peaceful resolution of disputes. If diplomatic efforts fail, it has the military power to undertake crisis-management operations.
- These are carried out under the collective defence clause of NATO's founding treaty Article 5 of the Washington Treaty or under a United Nations mandate, alone or in cooperation with other countries and international organisations.



• NATO has only once invoked Article 5, on September 12, 2001 following the 9/11 attacks on the World Trade Center in the US.

#### **How does NATO Function?**

- NATO has an integrated military command structure but very few forces or assets are exclusively its own.
- Most forces remain under full national command and control until member countries agree to undertake NATO-related tasks.
- All 30 allies have an equal say, the Alliance's decisions must be unanimous and consensual, and its
  members must respect the basic values that underpin the Alliance, namely democracy, individual liberty
  and the rule of law.
- NATO's protection does not extend to members' civil wars or internal coups.
- NATO is funded by its members. The U.S. contributes roughly three-fourths of NATO's budget.

#### 2.4 Indo-Pacific Economic Framework (IPEF)

- India and 12 countries led by the US launched the Indo-Pacific Economic Framework (IPEF)
- The framework aims to strengthen economic partnership among participating countries to enhance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness in the Indo-Pacific region.
- Indian Prime Minister said "The Indo-Pacific Economic Framework is a declaration of our collective will to make the region an engine of global economic growth."
- Leaders and officials joined in virtually from Australia, Brunei, Indonesia, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam.
- A joint statement said that the countries share a commitment to a free, open, fair, inclusive, interconnected, resilient, secure, and prosperous Indo-Pacific region that has the potential to achieve sustainable and inclusive economic growth.
- The joint statement said that they are launching collective discussions toward future negotiations, and identified four pillars under the IPEF.
- Trade: To build high-standard, inclusive, free, and fair trade commitments and develop new and creative
  approaches in trade and technology policy that advance a broad set of objectives that fuels economic
  activity and investment, promotes sustainable and inclusive economic growth, and benefits workers and
  consumers
- Supply Chains: Committed to improving transparency, diversity, security, and sustainability in supply chains to make them more resilient and well-integrated.
- Clean Energy, Decarbonization, and Infrastructure: In line with Paris Agreement goals and efforts to support the livelihood of peoples and workers, the framework plan to accelerate the development and deployment of clean energy technologies to decarbonize economies and build resilience to climate impacts.
- Tax and Anti-Corruption: Committed to promoting fair competition by enacting and enforcing effective and robust tax, anti-money laundering, and anti-bribery regimes in line with existing multilateral obligations, standards, and agreements to curb tax evasion and corruption in the Indo-Pacific region.

#### **Indo Pacific**

- The Indo-Pacific is a geopolitical construct that has emerged as a substitute to the long-prevalent "Asia-Pacific", which represented the eastwards shift of global developments from Euro-Atlantic dimension
- It is an integrated theatre that combines the Indian Ocean and the Pacific Ocean, and the land masses that



surround them.

- One of the reasons behind the popularity of this term is an understanding that the Indian Ocean and the Pacific are a linked strategic theater.
- Also, the centre of gravity has shifted to Asia. The reason being maritime routes, the Indian Ocean and the Pacific provide the sea lanes.



#### The term 'Indo-Pacific' is interpreted differently by different stakeholders.

- India considers the region as an inclusive, open, integrated and balanced space. India continuously emphasizes on strategic inter-connections, common challenges and opportunities between the Indian Ocean and the Pacific.
- The S. considers it to be a free and open Indo-Pacific, highlighting the importance of rules or norms of conduct in the region, thus trying to contain the role of China in the region.
- The ASEAN countries look at Indo-Pacific as a consociational model, thus bringing in China not only for the sake of giving it some stakeholdership but looking for ways to cooperate with it in the region.

#### Factors driving the global shift towards the Indo-pacific

- Important Sea Lines of Communication presence of key choke points, from the Mozambique Channel and Bab-el-Mandeb in the west to Lombok Strait in the east
- Flourishing Trade and Economy The Indo-Pacific Region shares 44% of the world surface area; includes 65% of the world population; accounts for 62% of the world GDP
- Natural resources: The expanse of Indian and Pacific Ocean combined has vast reserves of marine resources including- Offshore Hydrocarbons, Methane hydrates, Sea Bed minerals, Rare earth metals, fisheries etc
- China factor China's aggressive foreign policy, rapid economic expansion, military modernization and power projection has raised several red flags among regional and extra-regional countries



• Increasing Militarization of Indian Ocean Region (IOR) – China has established commercial ports across the Indo Pacific, such as Gwadar port (Pakistan), port in Hambantota (Sri Lanka) etc., in addition to its overseas naval base in Djibouti.

#### India's interest in the region

- Peace and security in the Indian Ocean: Nearly 50% of India's trade is centered in the Indo-Pacific Region and the Indian Ocean carries 90% of India's trade and its energy sources. India wants to assure freedom of navigation, secure choke points, resolve conflicts peacefully and address non-traditional security threats in the Indian Ocean Region (IOR).
- Geo-political aspirations: To expand its own presence in the region
- Countering China: Ensuring that China does not gain a significant strategic foothold in the region
- Enhancing Trade and Investment Cooperation: by encouraging greater flow of goods, services, investment and technology between India and other countries in the region.
- Promoting sustainable development in the region, combating marine pollution, Regulating illegal fishing etc

#### Challenges faced by India in the region

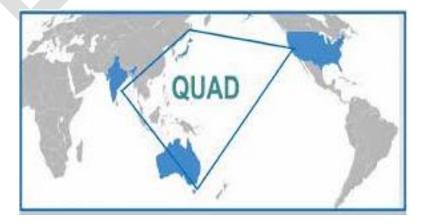
- Limited Naval Capacity and Lack of military bases
- Poor infrastructure connectivity
- Countering China China has established commercial ports across the Indo Pacific, such as Gwadar port (Pakistan), port in Hambantota (Sri Lanka) etc India lacks resources for such major projects

#### Way forward

- It is important to establish connectivity in the region based on respect for sovereignty and territorial integrity, consultation, good governance, transparency, viability and sustainability.
- The countries in the region should have equal access as a right under international law to the use of common spaces on sea and in the air that would require freedom of navigation, unimpeded commerce and peaceful settlement of disputes in accordance with international law.
- Strong naval capabilities, multilateral diplomacy, economic integration in the region is the need of the hour

#### 2.5 Quad Summit

The fourth Quad summit was held in Japan





- There were divergences among the leaders of Australia, India, Japan and US on the war in Europe(Ukraine crisis) but unanimity in their response to China's belligerence as they strongly opposed "any coercive, provocative or unilateral actions that seek to change the status quo" in the Indo-Pacific.
- While Washington and Tokyo were vocal in their criticism of Moscow in their public statements India and Australia did not do so in their opening statements at the summit.
- Apart from the Ukraine crisis, the leaders also took note of the post-coup crackdown in Myanmar called for the release of "all political detainees, including foreigners" and called for "swift restoration of democracy".
- The summit condemned "unequivocally terrorism and violent extremism in all its forms and manifestations" and condemned the 26/11 Mumbai and 2016 Pathankot attacks.

#### The event witnessed the launch of several initiatives

- Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)
- The leaders of the Quad countries announced the formation of the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA) which will build a "faster, wider, and more accurate maritime picture of near-real-time activities in partners' waters."
- The IPMDA is said to be a satellite-based maritime security system aiming for a "fundamental requirement for peace, stability, and prosperity" in the Indo-Pacific region.
- The initiative will integrate three critical regions of the Pacific Islands Southeast Asia, and the Indian Ocean region and allow tracking of "dark shipping" and other "tactical activities".
- "Dark ships" are vessels with their Automatic Identification System (AIS) a transponder system switched off so as not to be detectable.
- The new maritime initiative will enable these countries to monitor illegal fishing even when the boats have turned off the transponders which are typically used to track vessels.
- The maritime system will also improve the partners' ability to respond to climate and humanitarian events and protect their fisheries a vital need for many Indo-Pacific economies.

#### **Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP)**

- The members also launched the "Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP) with "mitigation" and "adaptation" as its two pillars.
- The initiative will help green shipping and foster the idea of a "shared green corridor"
- Quad Partnership on Humanitarian Assistance and Disaster Relief (HADR)
- As part of the plan to increase the humanitarian footprint in the region, the leaders announced the establishment of the Quad Partnership on Humanitarian Assistance and Disaster Relief (HADR) in the Indo-Pacific region.
- The grouping also decided to enhance sharing of data as part of the "Quad Satellite Data Portal" that will enhance cooperation among the satellites of the member countries.
- The Tokyo summit witnessed the launch of the Quad Fellowship which will intensify people-to-people contact and foster academic exchanges. Under the scheme, 100 students from the member countries will travel to the US each year to pursue graduate studies in STEM fields.

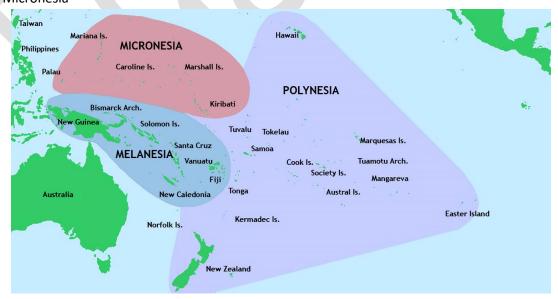


#### 2.6 Common Development Vision

- China wants 10 Pacific nations to endorse sweeping agreement
- China's move comes as its Foreign Minister and a 20-strong delegation begin a visit to the region (Pacific islands) this week.

#### **Common Development Vision**

- It is a draft agreement
- China wants 10 small Pacific nations to endorse a sweeping agreement covering everything from security to fisheries
- A draft of the agreement shows that China wants to train Pacific police officers, team up on "traditional and non-traditional security" and expand law enforcement cooperation.
- China also wants to jointly develop a marine plan for fisheries which would include the Pacific's lucrative tuna catch – increase cooperation on running the region's internet networks, and set up cultural Confucius Institutes and classrooms.
- The agreement would also see the nations "expand exchanges between governments, legislatures and political parties."
- The agreement says that China and the Pacific countries would jointly formulate a marine spatial plan "to
  optimize the layout of the marine economy, and develop and utilize marine resources rationally, so as to
  promote a sustainable development of blue economy."
- It also outlines immediate incentives that China is offering to the Pacific nations China says it will fully implement 2,500 government scholarships through 2025; it will build criminal investigation laboratories as needed by the Pacific nations that can be used for fingerprint testing, forensic autopsies, and electronic forensics etc
- The draft agreement also stipulates that the Pacific countries "firmly abide" by the one-China principle, under which Taiwan, a self-ruled island democracy, is considered by Beijing to be part of China.
- It would also uphold the "non-interference" principle that China often cites as a deterrent to other nations speaking out about its human rights record.
- The countries China hopes will endorse the "Common Development Vision" the Solomon Islands, Kiribati, Samoa, Fiji, Tonga, Vanuatu, Papua New Guinea, the Cook Islands, Niue and the Federated States of Micronesia





## 3. Economics

## 3.1 National Research Foundation (NRF)

- Stats: India's funding for R&D
- It has remained static and hovers between 0.6 to 0.8% of GDP over a decade.
- While India's global R&D expenditure remains static at 1-3% of the global total, the U.S. and China accounted for 25% and 23%, respectively.
- The World Bank statistics indicate that India had 255 researchers per million people in 2017.
- In contrast to 8,342 per million in Israel, 7,597 in Sweden and 7,498 in South Korea. Compared to 111 in the U.S. and 423 in China, India has only 15 researchers per 1,00,000 population.

#### **National Research Foundation (NRF)**

- The 2021-22 budget offered ₹10,000 crores (\$1.37 billion) every year starting from 2021, over the next five years, for a new funding agency called the National Research Foundation (NRF).
- This newly proposed idea is also in tune with what is being stated in the National Education Policy 2020
- The National Research Foundation (NRF) will be functioning as a structure that will connect the industry, academia and the R&D of the country.
- The NRF will provide a reliable base of merit-based but equitable peer-reviewed research funding, helping
  to develop a culture of research in the country through suitable incentives for and recognition of
  outstanding research.

## 3.2 e – shram portal

Union Labour and Employment Ministry said that the Ministry was working on a mechanism to process accident insurance claims by unorganised workers registered on the e-Shram portal

## E- shram portal

- The portal was launched with the aim of creating a national database of unorganised workers (NDUW)
- Ministry of Labour & Employment is responsible for the implementation
- E-Shram Card: Workers will be provided with an e-SHRAM card which will have a 12 digit unique number.
- The details of workers will also be shared by the state government and departments.
- Single window: This will be a single-point reference to help authorities reach out to and track workers in the informal sector, and offer welfare in times of crisis.
- Who all are included: The database will include construction workers, migrant workers, gig and platform workers, street vendors, domestic workers, agriculture workers, migrant workers and similar other subgroups of unorganised workers.
- Self enrolment: It will be available in public for open access where workers can self-enroll through Aadhaar and mobile numbers.
- Important Provision: Accidental insurance After registering, he/she will get an Accidental Insurance cover of 2 Lakh
- The scheme would allow the workers to get the direct benefit transfer (DBT) through the e-Shram unique ID number



#### Stats:

- Till October 2021, 15 crore registrations are made
- Men to women ratio:02% of the registered workers were women and the remaining 49.98% were men.
- Age Group: Around 65.68% of these registered workers are in the age group of 16-40 years and 34.32% are in the age group of 40 years and above
- Dominant Sector: The largest number of workers registered are from agriculture and construction, given the sheer volume of these two sectors in employment generation in India

## 3.3. Foreign Contribution Regulation Act (FCRA)

Recently, CBI has arrested officials of FCRA division of Ministry of Home Affairs on the charge of corruption The officials were charged for allegedly helping NGOs get Foreign Contribution Regulation Act (FCRA) clearance illegally.

#### Foreign Contribution (Regulation) Act (FCRA), 2010

- Foreign funding of voluntary organizations in India is regulated under FCRA act which is implemented by the Ministry of Home Affairs.
- The Acts ensures that the recipients of foreign contributions adhere to the stated purpose for which such contribution has been obtained.
- Under the Act, organizations are required to register themselves every five years.
- Registered NGOs can receive foreign contributions for five purposes: Social, educational, religious, economic and cultural.

#### Foreign Contribution (Regulation) Amendment Act, 2020:

- Prohibition to accept foreign contribution: The Act bars public servants from receiving foreign contributions.
- Public servant includes any person who is in service or paid by the government, or remunerated by the government for the performance of any public duty.
- Transfer of foreign contribution: The Act prohibits the transfer of foreign contribution to any other person not registered to accept foreign contributions.
- Aadhaar for registration: The Act makes Aadhaar number mandatory for all office bearers, directors or key functionaries of a person receiving foreign contribution, as an identification document.
- FCRA account: The Act states that foreign contributions must be received only in an account designated by the bank as FCRA account in such branches of the State Bank of India, New Delhi.
- Reduction in use of foreign contribution for administrative purposes: The Act proposes that not more than 20% of the total foreign funds received could be defrayed for administrative expenses. In FCRA 2010 the limit was 50%.
- Surrender of certificate: The Act allows the central government to permit a person to surrender their registration certificate
- If an NGO fails to comply with the above mentioned criteria its license will not be renewed by MHA
- Recently the Union Ministry of Home Affairs (MHA) has cancelled the Foreign Contribution (Regulation)
   Act (FCRA), 2010 registration of various non-governmental organizations (NGOs) that are non compliant
   with the rules



## 3.4 CRR & Repo Rate

The delimitation exercise had started in June 2021 in the state.

RBI raised key policy rates to fight inflation

RBI raised the repo rate by 40 basis points and CRR by 50 basis points

#### What is inflation?

Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc.

#### **Types of Inflation**

#### 1) Demand-Pull Inflation

This type of inflation is caused due to an increase in aggregate demand in the economy.

Causes of Demand-Pull Inflation:

A growing economy or increase in the supply of money – When consumers feel confident, they spend more and take on more debt.

Deficit financing by the government, Increased borrowing etc causes demand pull inflation

#### 2) Cost-Push Inflation

- This type of inflation is caused due to various reasons such as:
- Increase in price of inputs, hoarding and Speculation of commodities, defective Supply chain, increase in indirect taxes, depreciation of Currency, crude oil price fluctuation, defective food supply chain, interest rates increased by RBI etc
- Cost pull inflation is considered bad among the two types of inflation. Because the National Income is reduced along with the reduction in supply in the Cost-push type of inflation
- Indices used to measure inflation are Wholesale Price Index (WPI) and Consumer Price Index (CPI)
- RBI is mandated by the Government of India under the Reserve Bank of India Act, 1924 to maintain the inflation target of 4%, with a tolerance band of +/- 2 percentage points
- Thus RBI Monetary Policy tools to control inflation

#### **Monetary Policy Measures**

- Monetary policy refers to the policy of the central Bank with regard to use of monetary instruments under its control to manage money supply and interest rates.
- In 2016, the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.
- Under amended RBI Act, 1934, the central government is empowered to constitute a six-member Monetary Policy Committee (MPC).

#### Composition: the MPC shall consist of 6 members:

- RBI Governor as its ex officio chairperson,
- Deputy Governor in charge of monetary policy,
- An officer of the Bank to be nominated by the Central Board,
- Three persons to be appointed by the central government



Tools	Features
Cash Reserve Ratio (CRR)	The average daily balance that a bank is <b>required to maintain with the Reserve Bank</b> as a share of such per cent of its <b>Net demand and time liabilities (NDTL)</b> that the Reserve Bank may notify from time to time.
Statutory Liquidity Ratio (SLR)	The <b>share of NDTL</b> that a bank is required to maintain <b>in safe and liquid assets</b> , such as, government securities, cash and gold.
Repo Rate	The <b>interest rate</b> at which the Reserve Bank provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF).
Reverse Repo Rate	The <b>interest rate</b> at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the collateral of eligible government securities under the LAF.
Marginal Standing facility (MSF)	It is the rate at which Banks can borrow short term funds from RBI. Under MSF, banks can borrow funds from the RBI by pledging government securities within the limits of the SLR.
Open Market Operations (OMOs)	These include both, <b>outright purchase and sale of government securities</b> , for injection and absorption of durable liquidity, respectively.
Market Stabilisation Scheme (MSS)	It is a monetary policy intervention by the RBI to withdraw excess liquidity (or money supply) by selling government securities in the economy, the mobilised cash is held in a separate government account with the Reserve Bank.

- Note: The Policy Corridor in monetary policy of the RBI refers to the area between the reverse reportate and the MSF rate
- MSF is upper band of the Policy Corridor (lower band being the Reverse Repo rate). Thus value of MSF is tied with the value of Repo Rate. Usually RBI changes Repo rate and MSF changes automatically.
- With this Quantitative Tools RBI also uses Qualitative Tools like fixing margin requirement, moral Suasion and selective credit control to fight inflation

#### 3.5 NFHS-5

The national report of the NFHS-5, released by the Union Health Ministry.

#### Highlights

### **Total Fertility Rate:**

- The Total Fertility Rate (TFR), the average number of children per woman, has further declined from 2.2 to 2.0 at the national level between National Family Health Survey (NFHS) 4 and 5.
- There are only five States Bihar (2.98), Meghalaya (2.91), Uttar Pradesh (2.35), Jharkhand (2.26) Manipur (2.17) in India which are above the replacement level of fertility of 2.1
- Institutional Births
- Institutional births increased from 79% to 89% across India and in rural areas around 87% of births being delivered in institutions and the same is 94% in urban areas.

#### **Under Age Marriage**

- While the national average of underage marriages has come down, the rate has increased in Punjab, West Bengal, Manipur, Tripura, and Assam
- 3% of women surveyed got married before attaining the legal age of 18 years, down from 26.8% reported



- in NFHS-4. The figure for underage marriage among men is 17.7% (NFHS-5) and 20.3% (NFHS-4)
- Tripura has seen the largest jump in marriages under the legal age of 18 years for women from 33.1% (NHFS-4, conducted 2015-1) to 40.1%, and from 16.2% to 20.4% among men.
- Underage marriages are lowest in J&K, Lakshadweep, Ladakh, Himachal Pradesh, Goa, Nagaland, Kerala, Puducherry and Tamil Nadu
- Teenage pregnancies, the Survey reports, is down from 7.9% to 6.8%
- According to NFHS-5, women who are employed are more likely to use modern contraception. The data says 66.3% of women who are employed use a modern contraceptive method, compared with 53.4% of women who are not employed.

#### **Immunization**

More than three-fourths (77%) of children aged between 12 and 23 months were fully immunized, compared with 62% in NFHS-4.

#### **Stunting**

The level of stunting among children less than five years has marginally declined from 38% to 36% in the country since the last four years. Stunting is higher among children in rural areas (37%) than urban areas (30%) in 2019-21.

#### **Women Empowerment**

Decision Making: The extent to which married women usually participate in three household decisions (about health care for herself; making major household purchases; visit to her family or relatives) indicates that their participation in decision-making is high, ranging from 80% in Ladakh to 99% in Nagaland and Mizoram. Rural (77%) and urban (81%) differences are found to be marginal.

**Financial Inclusion**: The prevalence of women having a bank or savings account has increased from 53% to 79% in the last four years.

Domestic violence has come down marginally from 31.2% in 2015-16 to 29.3% in 2019-21

#### Obesity

Compared with NFHS-4, the prevalence of overweight or obesity has increased in most States/UTs in NFHS-5. At the national level, it increased from 21% to 24% among women and 19% to 23% among men. More than a third of women in Kerala, Andaman and Nicobar Islands, Andhra Pradesh, Goa, Sikkim, Manipur, Delhi, Tamil Nadu, Puducherry, Punjab, Chandigarh and Lakshadweep (34-46%) are overweight or obese.

#### **National Family Health Survey (NFHS):**

The NFHS is a large-scale, multi-round survey conducted in a representative sample of households throughout India.

#### **Conducted By:**

The Ministry of Health and Family Welfare (MoHFW) has designated the International Institute for Population Sciences (IIPS) Mumbai, as the nodal agency for providing coordination and technical guidance for the survey. IIPS collaborates with a number of Field Organizations (FO) for survey implementation

#### **Funding:**

The funding for different rounds of NFHS has been provided by USAID, the Bill and Melinda Gates Foundation,



UNICEF, UNFPA, and MoHFW (Government of India).

#### **History of NFHS**

Objective: The main objective of each successive round of the NFHS has been to provide high-quality data on health and family welfare and emerging issues in this area.

- The NFHS-1 was conducted in 1992-93.
- The NFHS-2 was conducted in 1998-99 in all 26 states of India.
- The NFHS-3 was carried out in 2005-2006
- The NFHS-4 in 2014-2015

## 3.6 Bond yield

Government said to urge Reserve Bank to help push bond yields lower

#### **Bond**

A bond is a debt investment.

Corporates or governments issue bonds directly to investors, instead of obtaining loans from a bank.

This is to raise money and finance a variety of projects and activities.

#### **Bond Yield**

- Yield In simple terms, yield is the amount of return that an investor will realize on a bond.
- If the investor holds the bond to maturity, s/he will be guaranteed to get the principal amount back plus the interest.
- However, a bond does not necessarily have to be held to maturity by the investors.
- Instead, investors may sell them for a higher or lower price to other investors.
- The bond prices and yields generally move in opposite directions.
- This is because, as a bond's price increases, its yield to maturity falls.
- Current Status: The yields have hit their highest since 2019, as inflation risks push foreign investors to sell bonds

### How RBI controls bond yield?

- The RBI aims to keep yields lower as that reduces borrowing costs for the government while preventing any upward movement in lending rates in the market.
- Thus it controls bond yields either by buying back government bonds or conduct open market operations to cool yields.

## 3.7 Front running

- Axis Asset Management Company, which manages assets worth Rs 259,818 crore, suspended two fund managers for various irregularities, including front-running the AMC's transactions on their personal accounts.
- Front-running, which is illegal in India, involves purchasing a stock based on advance non-public information regarding an expected large transaction that will affect the price of the share.
- When mutual funds make a big order, some fund managers buy the same shares in their personal



- accounts before executing the MFs' order. When MFs purchase in huge quantities, the price of the share is expected to go up.
- SEBI has categorised front running as a form of market manipulation and insider trading because a person who commits a front running activity expects security's price movements based on the non-public information.

#### Securities and Exchange Board of India (SEBI)

- SEBI is a statutory body established in 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992.
- The basic functions of the Securities and Exchange Board of India is to protect the interests of investors in securities and to promote and regulate the securities market.

#### Structure

- SEBI Board consists of a Chairman and several other whole time and part time members.
- A Securities Appellate Tribunal (SAT) has been constituted to protect the interest of entities that feel aggrieved by SEBI's decision.

#### **Powers and Functions of SEBI**

- SEBI is a quasi-legislative and quasi-judicial body which can draft regulations, conduct inquiries, pass rulings and impose penalties.
- It functions to fulfill the requirements of three categories –
- Issuers By providing a marketplace in which the issuers can increase their finance
- Investors By ensuring safety and supply of precise and accurate information
- Intermediaries By enabling a competitive professional market for intermediaries
- By Securities Laws (Amendment) Act, 2014, SEBI is now able to regulate any money pooling scheme worth Rs. 100 cr. or more and attach assets in cases of non-compliance.
- SEBI Chairman has the authority to order "search and seizure operations".

#### **Securities Appellate Tribunal (SAT)**

- SAT is a statutory body established under the provisions of the Securities and Exchange Board of India Act,
- SAT consists of a Presiding Officer and two other Members.
- It has the same powers as vested in a civil court. Further, if any person feels aggrieved by SAT's decision or order can appeal to the Supreme Court.

#### 3.8 Exchange rate

The rupee fell to an all-time low and is currently at 77.20 to the American dollar

#### What does exchange rate signify?

- The rupee's exchange rate vis-a-vis a particular currency tells us how many rupees are required to buy that particular currency
- If the rupee's exchange rate "falls", it implies that buying American goods would become costlier.
- At the same time, Indian exporters may benefit because their goods now are more attractive (cheaper) to



the American customers.

#### How is the exchange rate determined?

- In a free-market economy, the exchange rate is decided by the supply and demand for rupees and dollars.
- However, in India, the exchange rate is not fully determined by the market.
- From time to time, the RBI intervenes in the foreign exchange (forex) market to ensure that the rupee "price" does not fluctuate too much or that it doesn't rise or fall too much all at once

#### What determines the rupee's demand and supply vis-a-vis other currencies?

• The Balance of Payment is essentially the overall ledger of how much rupee was demanded by the rest of the world and how much foreign currency (that is, currencies of all countries) was demanded by Indians.

#### **BoP**

- Balance of Payment (BoP) of a country can be defined as a systematic statement of all economic transactions of a country with the rest of the world during a specific period usually one year.
- It indicates whether the country has a surplus or a deficit on trade.
- When exports exceed imports, there is a trade surplus and when imports exceed exports there is a trade deficit.

#### Components of BoP:

• For preparing BoP accounts, economic transactions between a country and rest of the world are grouped under — Current account, Capital account and Errors and Omissions. It also shows changes in Foreign Exchange Reserves.

#### **Current Account:**

- It shows export and import of visibles (also called merchandise or goods represent trade balance) and invisibles (also called non-merchandise).
- Invisibles include services, transfers and income.

#### **Capital Account:**

- It shows a capital expenditure and income for a country.
- It gives a summary of the net flow of both private and public investment into an economy

#### Foreign Exchange Reserves -

- Overall the BoP account can be a surplus or a deficit.
- If there is a deficit then it can be bridged by taking money from the Foreign Exchange (Forex) Account.
- If the reserves in the forex account are falling short then this scenario is referred to as BoP crisis.
- Thus BoP can be used as an indicator to determine whether the country's currency value is appreciating or depreciating.

#### How does the rupee's exchange rate fluctuate?

- Exports and imports affect exchange rate as exports earn of foreign currency while imports require payments in foreign currency.
- Interest rate on government securities and bonds, corporate securities etc affect the outflow and inflow of foreign currency; the US central bank raises its interest rates and looks set to raise them further in the



#### future

- Intervention of the Reserve Bank of India
- Inflation (crude oil prices go up sharply)

#### What is the RBI's role in this?

- To soften the rupee's fall, the RBI would sell in the market some of the dollars it has in its forex reserves.
- This will soak up a lot of rupees from the market, thus moderating the demand-supply gap between rupee and dollars.
- The eventual impact of a fall depends on several factors. For instance, a fall can help India's exporters unless they importing raw materials, which would become costlier.

## 3.9 Repo rate in India

- May 4, the Reserve Bank of India, in a surprise move, announced that the bank's Monetary Policy Committee (MPC) had held an 'off-cycle' meeting at which it had decided unanimously to raise the "policy repo rate by 40 basis points to 4.40%, with immediate effect".
- The MPC had judged that the inflation outlook warranted an appropriate and timely response through resolute and calibrated steps to ensure that the second-round effects of supply side shocks on the economy were contained and long-term inflation expectations were kept firmly anchored.
- RBI's monetary policy response would help preserve macro-financial stability amid increasing volatility in financial markets.

#### What is the repo rate?

- One of several direct and indirect instruments that are used by the RBI for implementing monetary policy.
- The RBI defines the repo rate as the fixed interest rate at which it provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF).
- In other words, when banks have short-term requirements for funds, they can place government securities that they hold with the central bank and borrow money against these securities at the reporate.
- Since this is the rate of interest that the RBI charges commercial banks such as State Bank of India and ICICI Bank when it lends them money, it serves as a key benchmark for the lenders to in turn price the loans they offer to their borrowers.

#### Why is the repo rate such a crucial monetary tool?

• The repo rate system allows central banks to control the money supply within economies by increasing or decreasing the availability of funds.

#### How does the repo rate work?

- As the direct loan pricing relationship
- Functions as a monetary tool by helping to regulate the availability of liquidity or funds in the banking system.
- For instance, when the repo rate is decreased, banks may find an incentive to sell securities back to the government in return for cash. This increases the money supply available to the general economy.
- Conversely, when the repo rate is increased, lenders would end up thinking twice before borrowing from



the central bank at the repo window thus, reducing the availability of money supply in the economy.

#### Impact of Repo Rate change on inflation

- Inflation can broadly be: mainly demand driven price gains, or a result of supply side factors that in turn push up the costs of inputs used by producers of goods and providers of services, thus spurring inflation, or most often caused by a combination of both demand and supply side pressures.
- Changes to the repo rate to influence interest rates and the availability of money supply primarily work
  only on the demand side by making credit more expensive and savings more attractive and therefore
  dissuading consumption. However, they do little to address the supply side factors.

## What is Monetary Policy Committee?

- Urjit Patel committee in 2014 recommended the establishment of the Monetary Policy Committee.
- It is a statutory and institutionalized framework under the Reserve Bank of India Act, 1934, for maintaining price stability, while keeping in mind the objective of growth.
- Composition: Six members (including the Chairman) three officials of the RBI and three external members nominated by the Government of India.
- The Governor of RBI is ex-officio Chairman of the committee
- Functions: The MPC determines the policy interest rate (repo rate) required to achieve the inflation target (presently 4%). Decisions are taken by majority with the RBI Governor having the casting vote in case of a tie.

#### Repo vs Reverse repo rate

- Repo rate is the rate at which the Central Bank grants loans to the commercial banks against government securities.
- Reverse repo rate is the interest offered by RBI to banks who deposit funds with them.

## 3.10 Bridging the regulatory gaps between commercial banks and NBFCs

RBI has issued regulations to bridge the regulatory gaps between commercial banks and NBFCs/cooperatives.

#### **Shadow Banks**

- Traditionally, regulators have adopted a strict regulatory approach for commercial banks, but followed a
  light touch regulation for NBFCs. This is because banks receive deposits from general public whereas
  NBFCs draw their funds mainly from financial institutions primarily banks.
- As banks are much better-informed than the public, there is a belief that NBFCs need not be regulated as strictly as banks. Light regulation helps them innovate.
- The belief of different regulatory structures was turned on its head in the wake of the 2008 crisis. The losses spread to the banking system as NBFCs are connected to the overall system via a complex maze of interlinkages. The global financial system was also connected to the US financial system bringing the entire global financial system and global economy to a halt.

## The global financial crisis earned a new name for the NBFCs—shadow banks

- Called so as they worked like banks but without being regulated as strictly, thus under the shadow.
- The crisis also led to lot of discussion around shadow-banking, and what could be done to bridge the regulatory gaps between banks and non-banks.



• In 2017, the Financial Stability Board, an international body that monitors and makes recommendations on the global financial system, recommended changing the name from shadow banks to non-bank financial entities.

#### **NBFC** situation in India

- India faced a crisis in 2018.
- The failure of the IL&FS group put other NBFCs under the spotlight.
- The other NBFCs struggled to get funds from banks, their major source of finance. RBI does not provide direct funds to NBFCs, and thus opened a special window via banks for supporting NBFCs. Even before 2018, there has been a long history of NBFC failure and RBI efforts to regulate them.
- Post-Independence, RBI did not pay much attention to NBFCs as their share in overall financial activity was negligible. As a result, the Banking Regulation Act (1949), did not have any clause for regulating NBFCs. RBI's thinking began to change in 1960s with failures and frauds in certain NBFCs.
- There have been multiple committees to study the NBFC sector. The committees have suggested reforms
  which have been mainly around strengthening capital base of the NBFCs, higher prudential norms, and so
  on. RBI has acted on the suggestions, but gaps have remained given the nature of the NBFC sector, due to
  the multiple types of NBFCs that have mushroomed over the years and are regulated by multiple type of
  regulators.

#### Regulations passed in 2021 by RBI

- Classified all its regulated NBFCs into four layers, based on size: base layer, middle layer, upper layer and top layer. This scale-based regulation allows RBI to initiate regulations based on size rather than type of NBFCs (the case earlier).
- Passed multiple regulations attempting to strengthen regulatory and compliance requirements at Middle (NBFC-ML) and Upper Layers (NBFC-UL) of NBFCs.
- Asked NBFC-UL to maintain capital equity ratio at 9%, similar to that for banks.
- Applied the large exposure framework on NBFC-UL, which minimises loans to one or more interconnected counterparties.
- Issued guidelines restricting granting loans and advances to directors and their relatives. It has also advised NBFCs to follow loan appraisal policies carefully while lending to the real estate sector.
- The central bank has come up with legal entity identifiers (LEIs), where codes are given to individual borrowers of a certain large amount. The LEIs were first applied to commercial banks and have been now extended to NBFC-UL and cooperatives.
- RBI has asked the NBFCs to appoint a chief compliance officer, similar to that of commercial banks.

#### Conclusion

The above reforms are welcome as they bring NBFC regulation closer to that of commercial banks. RBI has also applied these regulations at middle and upper layers NBFCs, leaving the base layer to continue evolving and innovating.

#### 3.11 Inflation

• Since the start of the inflation-targeting regime of RBI, most of the focus has been on consumer price inflation. That's because that is the inflation rate that RBI seeks to target and keep at the 4% mark. But over the past year, the inflation in wholesale prices has been surging in a rather unprecedented manner.



- Since April last year, WPI (wholesale price index) based inflation has been above 10% in every single month.
- In April 2022, WPI inflation crossed another psychological mark: it went beyond 15%.
- With such high levels of headline inflation, it is clear that most components of WPI are witnessing high inflation.

#### What's fuelling WPI inflation?

- While the highest inflation has been in fuel prices, it is the smallest contributor to the overall index (Much before the Ukrainian crisis).
- While manufactured product inflation is the least, it is likely to have had almost six times the impact on the overall inflation because of the weight.
- The heatwave led to a spike in prices of perishables such as fruits, vegetables and milk, which along with a spike in tea prices pushed up the primary food inflation.
- Much of the inflation spike is being seen as a result of the Russia-Ukraine conflict, with the contribution in retail inflation being seen at three-fourths of the index.

#### What next?

- An increase in WPI-food inflation leads to higher food prices for consumers as well. With WPI inflation remaining in double-digits, the probability of a repo hike in the June monetary policy has risen further.
- One can expect retail food prices to possibly increase further simply on account of higher food inflation in the wholesale market.
- Higher retail prices of food tend to spike wholesale food prices in turn. In other words, one can get into a vicious cycle if inflation is left unaddressed.
- Imported inflation in the form of high energy and commodity prices is a fact of life, and it will continue to force RBI to take action. High WPI inflation will further convince RBI to raise interest rates and do so urgently.

#### Tough Act for RBI:

- The flip-side of raising interest rates sharply, however, is that they will dampen the overall demand in the Indian economy at a time when overall consumer demand is still fledgling.
- The RBI, thus, has a tough balancing act to perform: contain inflation (especially from sources over which it has no control, such as high fuel prices) while ensuring not snuffing out domestic economic recovery.

#### Some of the likely impacts of inflation:

- Reduces people's purchasing power: Restrict people's ability to purchase things, but coupled with reduced incomes and job losses, households would struggle even more. The poor are the worst affected because they have little buffer to sustain through long periods of high inflation.
- Reduces overall demand: The eventual fallout of reduced purchasing power is that consumers demand fewer goods and services. Typically, non-essential demands such as a vacation get curtailed while households focus on the essentials.
- Harms savers and helps borrowers: High inflation eats away the real interest earned from keeping one's money in the bank or similar savings instruments. Earning a 6% nominal interest from a savings deposit effectively means earning no interest if inflation is at 6%. By the reverse logic, borrowers are better off when inflation rises because they end up paying a lower "real" interest rate.
- Helps the government meet debt obligations: In the short term, the government, which is the single



largest borrower in the economy, benefits from high inflation. Inflation also allows the government to meet its fiscal deficit targets. Fiscal deficit limits are is expressed as a percentage of the nominal GDP. As the nominal GDP rises because of inflation (without necessarily implying an increase in overall production), the same amount of fiscal deficit (borrowing) becomes a smaller percentage of the GDP.

- Mixed results for corporate profitability. In the short term, corporates, especially the large and dominant
  ones, could enjoy higher profitability because they might be in a position to pass on the prices to
  consumers. But for many companies, especially smaller ones, persistently higher inflation will reduce sales
  and profitability because of lower demand.
- Worsens the exchange rate: High inflation means the rupee is losing its power and, if the RBI doesn't raise interest rates fast enough, investors will increasingly stay away because of reduced returns.
- Leads to expectations of higher inflation: Persistently high inflation changes the psychology of people. People expect future prices to be higher and demand higher wages. But this, in turn, creates its own spiral of inflation as companies try to price goods and services even higher.

#### **Consumer Price Index**

- A measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care.
- FOOD ITEMS, which account for 46% of the index;
- FUEL & LIGHT, with a weight of 7%;
- CORE, all other items, which make up the remaining 47%.
- It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them.
- Changes in the CPI are used to assess price changes associated with the cost of living;
- The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation.
- Headline inflation is calculated using the Consumer Price Index.
- In the current financial year, it is estimated that all three components will experience an inflation rate of 6% or more.

#### Wholesale Price Index (WPI)

- WPI measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses. In other words, WPI tracks prices at the factory gate before the retail level.
- The numbers are released by the Ministry of Commerce and Industry
- Even as the WPI is used as a key measure of inflation in some economies, the RBI no longer uses it for policy purposes, including setting reportates.

#### Difference between WPI & CPI?

- WPI, tracks inflation at the producer level and CPI captures changes in prices levels at the consumer level.
- Both baskets measure inflationary trends (the movement of price signals) within the broader economy, the two indices differ in which weightages are assigned to food, fuel and manufactured items.
- WPI does not capture changes in the prices of services, which CPI does.

#### **Headline Retail Inflation vs Core Inflation**

- Headline inflation is the raw inflation figure reported through the Consumer Price Index (CPI) that is released by CSO. The headline figure is not adjusted for seasonality or for the often-volatile elements
- Core inflation removes the CPI components that can exhibit large amounts of volatility from month to



month, which can cause unwanted distortion to the headline figure. The most commonly removed factors are those relating to the cost of food and energy.

## 3.12 RBI surplus transfer

- The Reserve Bank of India (RBI) will transfer Rs 30,307 crore as surplus to the government for fiscal ended March 2022 down 69% from the Rs 99,126 crore in the year ended March 2021 and lower than the Rs 74,000 crore budgeted by the government for the current fiscal.
- The fall in the transferable surplus is because of the increased interest the RBI had to pay banks which parked their surplus liqudity in the reverse repo window

#### **Background**

#### **RBI's Earning:**

- Returns earned on its foreign currency assets, which could be in the form of bonds and treasury bills of other central banks or top-rated securities, and deposits with other central banks.
- Interest on its holdings of local rupee-denominated government bonds or securities, and while lending to banks for very short tenures, such as overnight.
- Management commission on handling the borrowings of state governments and the central government.

#### **RBI's Expenditure:**

- Printing of currency notes and on staff, besides the commission it gives to banks for undertaking transactions on behalf of the government across the country, and to primary dealers, including banks, for underwriting some of these borrowings
- The Surplus Distribution Policy of RBI that was finalized is in line with the recommendations of the Bimal Jalan committee that was formed by the RBI, in consultation with the Government, to review the extant Economic Capital Framework of the RBI.
- The Committee's recommendations were based on the consideration of the role of central banks' financial resilience, cross-country practices, statutory provisions and the impact of the RBI's public policy mandate and operating environment on its balance sheet and the risks involved.
- In view of the RBI's function as a lender of last resort, it needs to maintain some Contingent Risk Buffer (CRB) to insure the economy against any tail risk of financial stability crisis.
- The Jalan Committee recommended that the CRB needs to be maintained at a range of 5.5% to 6.5% of the RBI's balance sheet.
- The surplus transfer policy is now formula-based and thus transparent, which is an important departure from the past.
- The formula-based CRB will take care of the risk provisioning and the central board of RBI will decide on the level of risk provisioning.
- Three government employees were terminated by the J&K Government under Article 311 2(c)

## 3.13 Fuel Blending

The Union Cabinet advanced by five years its target for achieving 20% ethanol blending in petrol.

The amended National Biofuel Policy-2018 has now set the new target for 2025-26 instead of 2030, apart from allowing more feedstock for the production of biofuels and export of biofuels in specific cases



#### **National Biofuel Policy**

- The National Biofuel Policy is aimed at reducing dependence on imports by encouraging fuel blending.
- With bioethanol, biodiesel and bio-CNG in focus, its key parts include the Ethanol Blending Programme (EPB), production of second-generation ethanol (derived from forest and agricultural residues), increasing capacity for production of fuel additives, R&D in feedstock, which is the starting material for ethanol production, and financial incentives for achieving these goals.
- Molasses is the sticky liquid formed during sugar production from cane juice, and depending on the
  percentage of sugar left, it is categorized as B heavy and C. Molasses is the feedstock used by sugar mills
  to produce ethanol.
- The policy also allows usage of excess rice or damaged foodgrains as feedstock for ethanol production.
- The National Biofuel Coordination Committee (NBCC), with the Union Minister for Petroleum and Natural Gas as its head, is the agency to coordinate this blending programme.

#### What amendments have been made?

- The most important amendment has been advancing the 20% blending date by five years from Ethanol Supply Year (ESY) 2030 to 2025-26.
- Introduction of more feedstock for production of biofuels; production of biofuels under the 'Make in India' programme in Special Economic Zones, Export Oriented Units; and permission to allow export of biofuels in specific cases are some other changes.
- NBCC, the Committee has now been given the permission to change the policy which it earlier lacked.

#### What is the current blending status?

- As on May 8, the all India average blending as per the Ministry of Petroleum and Natural Gas stands at 9.90%.
- Ethanol derived from sugarcane juice/sugar syrup and from C heavy molasses forms the bulk of this supply, with that from surplus rice and damaged foodgrains being a distant second.

## 3.14 Fuel Tax

- The Union government announced a reduction in the excise duty on petrol and diesel by Rs 8 per litre and Rs 6 per litre respectively.
- Alongside, the government also reduced the customs duty on raw materials and intermediaries for plastic products and iron and steel.

#### Reason for reduction

- These decisions are driven by the desire to cool the surge in inflation recent data showed that retail
  inflation had risen to an eight-year high of 7.9 per cent in April, while wholesale inflation has been in
  double digits for 13 consecutive months.
- As per some analysts the cut in fuel taxes could help reduce inflation directly by around 20 basis points in June
- This is the second time in the recent past that the Centre has cut fuel taxes. In November last year, the Centre had lowered the excise duty on petrol by Rs 5 and by Rs 10 on diesel.
- The entire burden of the tax cuts will be borne by the Centre
- Union Finance Minister said that the entire duty reduction in petrol and diesel announced has been done out of the Road & Infrastructure Cess (RIC) component of the taxes levied on petroleum products so the



- entire burden of the tax cuts will be borne by the Centre.
- Allaying concerns that the duty cuts will lower the devolution of taxes to States, Finance Minister said that the basic excise duty on petro products, which is sharable with States, has not been touched.

#### Taxes levied on petrol and diesel

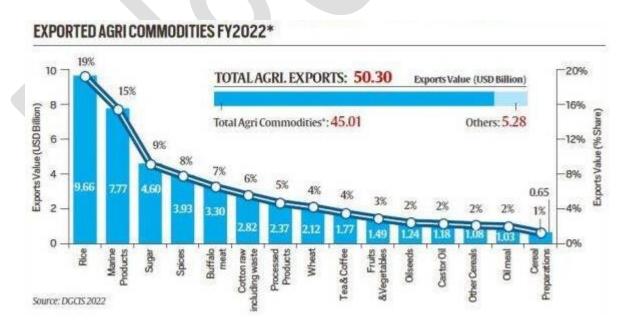
- The total taxes levied on petrol and diesel include a Basic Excise Duty (BED), a Special Additional Excise duty (SAED), the Road & Infrastructure Cess (RIC) and the Agriculture & Infrastructure Development Cess (AIDC), of which only the BED is sharable with States
- The two cuts announced (November and the present one) is from Road & Infrastructure Cess (RIC) component of the taxes levied on petroleum products

#### **Excise duty and Custom duty**

- Excise duty is a form of tax imposed on goods for their production, licensing and sale.
- It is the opposite of Customs duty in sense that it applies to goods manufactured domestically in the country, while Customs is levied on those coming from outside of the country.

## 3.15 Agriculture Export

- In the fiscal year 2021-22 (FY22), agri-exports scaled an all-time high of \$50.3 billion, registering a growth of 20 per cent over the preceding year.
- This was made possible largely by rising global commodity prices, but also by the favourable and aggressive export policy of the Ministry of Commerce and its various export promotion agencies like APEDA, MPEDA, and commodity boards.
- Among the several agri-commodities exported in FY22, rice ranks first with exports of \$9.6 billion in value (with 21.2 million metric tonnes (MMT) in quantity). It is followed by marine products worth \$7.7 billion (1.4 MMT), sugar worth \$4.6 billion (10.4 MMT), spices worth \$3.9 billion (1.4 MMT) and bovine (buffalo) meat worth \$3.3 billion (1.18 MMT).



## Agricultural and Processed Food Products Export Development Authority (APEDA)

• The APEDA was established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act, 1985.



• It functions under the Ministry of Commerce and Industry. The Authority has its headquarters in New Delhi.

#### Composition

- A Chairman appointed by the Central Government
- The Agricultural Marketing Advisor to the Government of India, ex-official member
- Three members of Parliament of whom two are elected by the House of People and one by the Council of States
- Eight members appointed by the Central Government representing respectively...many more from agriculture and allied sectors

#### **Functions**

- APEDA is mandated with the responsibility of export promotion and development of the scheduled products fruits, vegetables and their products; meat and meat products; poultry and poultry products; dairy products etc
- APEDA has been entrusted with the responsibility to monitor import of sugar.
- It looks after the development of industries relating to the scheduled products for export by way of providing financial assistance or otherwise for undertaking surveys and feasibility studies, participating through subsidy schemes.
- Registration of persons as exporters of the scheduled products and fixing of standards and specifications for the scheduled products for the purpose of exports
- Carrying out inspection of meat and meat products in slaughterhouses, processing plants, storage premises and improving packaging of the scheduled products

#### Marine Products Export Development Authority (MPEDA)

- Marine Products Export Development Authority (MPEDA) is a nodal coordinating, state-owned agency engaged in fishery production and allied activities.
- It was established in 1972 under the Marine Products Export Development Authority Act (MPEDA), 1972.
- It functions under the Union Ministry of Commerce and Industry.
- It is headquartered in Kochi, Kerala.
- Its mandate is to increase exports of seafood including fisheries of all kinds, specifying standards, marketing, processing, extension, and training in various aspects.

## 3.16 World of work report

World of work – the ninth edition of the International Labour Organisation (ILO) Monitor was published

## **Key findings**

- The report says that after significant gains during the last quarter of 2021, the number of hours worked globally dropped in the first quarter of 2022, to 3.8% below the employment situation before the pandemic.
- About 11.2 crore jobs might have lost between this period, according to the report.
- The report added that a "great and growing divergence between richer and poorer economies" continues to characterise the recovery.



- While high-income countries experienced a recovery in hours worked, low- and lower-middle-income economies suffered setbacks in the first quarter of the year with a 3.6 and 5.7 per cent gap respectively when compared to the pre-crisis benchmark
- The fresh lockdowns in China, the conflict between Ukraine and Russia, and the global rise in the prices of food and fuel are cited as the main reasons for the findings.
- The ILO urged its member countries to take a humane approach to address the situation.

#### Findings related to India

- The report said both India and lower-middle-income experienced a deterioration of the gender gap in work hours in the second quarter of 2020
- It report said that for every 100 women at work prior to the pandemic, 12.3 women would have lost their job as an average through the entire period considered by the report.
- In contrast, for every 100 men, the equivalent figure would have been 7.5.
- Hence, the pandemic seems to have exacerbated the already substantial gender imbalances in employment participation in the country.





## 4. Science & Technology

#### 4.1 Anabolic Steroids

Two of the Indian track-and-field Tokyo Olympians have failed a dope test for using banned anabolic steroids

#### **Anabolic Steroids**

Anabolic steroids are essentially lab-made versions of the male hormone testosterone and have a similar effect of increasing muscle mass as the natural hormone does.

#### How are they different from Prescription Steroids?

- Prescription steroids are the steroids prescribed by the doctors for inflammations, several autoimmune diseases etc
- These medicines are called corticosteroids and are lab-made molecules that mimic the action of the hormone called cortisol which controls the body's stress response, metabolism, and inflammation.
- Anabolic steroids are mainly misused by athletes and sportspersons nowadays

#### **Anabolic steroids used for treatments**

- Anabolic steroids have a very limited medical role and are mainly used by doctors to help patients gain weight after a severe illness or injury.
- Prescribed in small doses to the elderly to build muscle mass and in some cases also helps to treat anaemia.
- To treat men who have low levels of natural testosterone.

#### **Impacts**

#### Male

- In the short term can cause acne and hair fall.
- Extended misuse of the substance can also lead to gynecomastia (growth of breasts in men) and erectile dysfunction.

#### **Female**

- It can lead to the growth of facial hair.
- It also causes extreme anger, paranoia, and impaired judgement.

## 4.2 Advanced Towed Artillery Gun System (ATAGS)

The indigenous Advanced Towed Artillery Gun System (ATAGS) successfully completed the validation trials towards meeting the specifications of the Army.

#### **About Advanced Towed Artillery Gun System**

- ATAGS artillery gun is jointly developed by Armament Research and Development Establishment (ARDE),
   the Pune-based laboratory of DRDO, in partnership with Bharat Forge and Tata Group.
- The ATAGS is a 155mm, 52-calibre heavy artillery gun



- The ATAGS has demonstrated a range of over 45 km
- It is most consistent and accurate gun in the world
- It is capable of the shortest minimum range at high angle and fast mobility in desert and mountain terrain in addition to autonomous mode firing capability and wireless communication
- It has been designed to fire all in-service ammunitions with a fully automatic ammunition handling system with all electronic drives

## 4.3 Shigella infection

#### What is shigella infection?

- It is a contagious intestinal infection caused by a genus of bacteria known as shigella.
- The bacteria is one of the prime pathogens responsible for causing diarrhea, fluctuating between moderate and severe symptoms, especially in children in African and South Asian regions.
- As per reports, an estimated annual mortality of 35,000–40,000 is noted globally in both under-five and older-than-five age groups.
- Symptoms: most people with Shigella infection have diarrhea (sometimes bloody), fever, and stomach cramps

#### How it spreads?

- Shigella is generally transmitted through contaminated food or water, or through person-to-person contact.
- Shigellosis is primarily a disease of poor and crowded communities that do not have adequate sanitation or safe water.
- The bacteria, after entering the body through ingestion, attack the epithelial lining of the colon resulting in inflammation of the cells and subsequently the destruction of the cells in severe cases.
- Handwashing is said to reduce shigella transmission by 70%.

## 4.4 Monkey Pox

A case detected in United Kingdom

Health authorities in the United Kingdom have confirmed a case of monkey pox, in an individual who recently travelled to that country from Nigeria

### **Monkey Pox**

- It is a rare viral infection similar to smallpox
- Monkeypox is a zoonosis, that is, a disease that is transmitted from infected animals to humans.

#### Monkeypox virus

- The monkeypox virus is an orthopoxvirus, which is a genus of viruses that also includes the variola virus, which causes smallpox, and vaccinia virus, which was used in the smallpox vaccine.
- Monkeypox continues to occur in a swathe of countries in Central and West Africa
- According to the World Health Organisation (WHO), two distinct clade are identified: the West African clade and the Congo Basin clade, also known as the Central African clade



#### **Transmission**

- Monkeypox is a zoonosis
- Monkeypox virus infection has been detected in squirrels, Gambian poached rats, dormice, and some species of monkeys.
- Human-to-human transmission is limited
- Transmission can be through contact with bodily fluids, lesions on the skin or on internal mucosal surfaces, such as in the mouth or throat, respiratory droplets and contaminated objects

#### **Symptoms**

- Monkey pox begins with a fever, headache, muscle aches, back ache, and exhaustion.
- It also causes the lymph nodes to swell (lymphadenopathy), which smallpox does not.

#### **Treatment**

• There is no safe, proven treatment for monkeypox yet. The WHO recommends supportive treatment depending on the symptoms.

## 4.5 Rocket-Propelled Grenade (RPG)

- There was an attack on the Punjab Police's Intelligence headquarters in Mohali
- The weapon recovered after the attack was identified as a Rocket-Propelled Grenade (RPG)

#### What is the Rocket-Propelled Grenade (RPG)?

- The RPG is a weapon of Soviet origin, and its initials stand for Rucknoy Peotivotankovvy Granaromyot, which roughly translated means a handheld anti-tank grenade launcher.
- It is a portable, shoulder fired weapon, which is easy to operate and can cause widespread damage whether used in an anti-personnel mode, against armoured vehicles or against buildings.
- There are different versions of the RPG which are designed as per the usage of the weapon with varying capacity of the warhead, effective range and penetration levels.

#### Origins of the RPG

- The origins of RPG lie in the various conflicts that have taken place in modern military warfare, dating back to World War I
- RPG has made its presence felt in almost every major insurgency or terrorism-affected region in the world.

#### Can such weapons be easily procured by terrorists?

- There is a thriving illicit market for Soviet-origin weapons like the RPG, which are still in circulation worldwide.
- Such weapons are not difficult to procure by arms smugglers, and these then find their way to terrorist organisations
- Eastern European countries, especially those from the former Soviet Union bloc, are well-known markets for the sale and purchase of these weapons.



## 4.6 Pullulan polymer

Biomaterial from fungal extract helps heal wounds

#### **Pullulan polymer**

- The biomaterial is derived from the polymer pullulan which is secreted by the fungus Aureobasidium pullulans.
- It is an exopolysaccharide, that is, this polymer is secreted by the fungus itself into the medium on which it is growing.
- Pullulan as a biomaterial is already successful and widely used commercially.
- It is exploited in food, cosmetics and pharmaceutical industry because of its non-toxic, non-mutagenic and non-immunogenic properties.
- In the biomedicine sector, it has been used for drug and gene delivery

#### Disinfecting the wounds and hastening the process of healing

- Pullulan is basically a polymeric chain of glucose by keeping the biocompatible carbohydrate backbone of the polymer intact and adding some quaternary ammonium groups, make the polymer positively charged
- They process the polymer to get a powder which is water-soluble. This solution can be applied on the wound surface and then covered with sterile gauze. This can also be used in a gel form.
- With this gel the wounds can be disinfected and also healed faster.

## 4.7 RNA granules

In yeast cells, a protein (sbp1) promotes disintegration of RNA granules, the study found that the Sbp1 protein helps in reducing the aggregates of human proteins involved in neurodegenerative disorders.

#### What is an RNA granule?

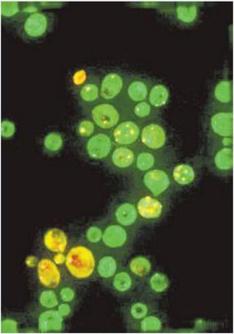
- In the cytoplasm of any cell and one comes across structures made of messenger RNA (mRNA) and proteins known as RNA granules
- Unlike other structures in the cell (such as mitochondria), the RNA granules are not covered and confined by a membrane
- This makes them highly dynamic in nature, thereby allowing them to constantly exchange components with the surrounding
- RNA granules are present in the cytoplasm at low numbers under normal conditions but increase in number and size under stressful conditions including diseases.
- A defining feature which does not change from one organism to another (conserved) of the RNA granule protein components is the presence of stretches containing repeats of certain amino acids
- Such stretches are referred to as low complexity regions. Repeats of arginine (R), glycine (G) and glycine
   (G) known as RGG are an example of low complexity sequence.



## A protein to dissolve aggregates in the neurons

Knowledge obtained from yeast is very often applicable to humans

- Researchers at IISc
   Bangalore have identified a protein in yeast cells that dissolves RNA-protein complexes, also known as RNA granules
- This finding is critical for many neurodegenerative disorders such as Amyotrophic Lateral Sclerosis (ALS) and Frontotemporal Dementia (FTD)
- These neurodegenerative disorders are characterised by the accumulation of aggregates that resemble RNA granules. These aggregates are believed to contribute to the disease



Naked: Unlike other structures in the cell, the RNA granules are not covered and confined by a membrane.

- In yeast cells, a protein (Sbp1) promotes the disintegration of RNA granules. The protein dissolves only the P-bodies
- The study found that the Sbp1 protein helps in reducing the aggregates of human proteins involved in neurodegenerative disorders
- The next step is to experimentally test the effect of repeat sequences in genetically engineered mice
- This study once again suggests that knowledge obtained from yeast is very often applicable to humans

#### **Protein Synthesis**

- Messenger RNAs are converted to proteins (building blocks of the cell) by the process of translation.
- RNA granules determine messenger RNA (mRNA) fate by deciding when and how much protein would be produced from mRNA.
- Protein synthesis is a multi-step and energy expensive process.
- Therefore, a common strategy used by cells when it encounters unfavorable conditions is to shut down protein production and conserve energy to deal with the stressful situation.
- RNA granules help in the process of shutting down protein production.
- Some RNA granule types (such as Processing bodies or P-bodies) not only regulate protein production but also accomplish degradation and elimination of the mRNAs, which in turn helps in reducing protein production.

#### Treatment of disease

- In recent years, a strong link has emerged between RNA granules and neurodegenerative disorders such as Amyotrophic Lateral Sclerosis (ALS) and Frontotemporal Dementia (FTD).
- The proteins implicated in these diseases are RNA binding proteins that can reside in RNA granules.
- These proteins also contain low complexity sequences (repeats of amino acids) that are important for their movement into RNA granules.
- In fact, these proteins are deposited as insoluble granules/aggregates in the neurons of ALS and FTD patients which are believed to contribute to the pathophysiology of these diseases.
- Finding ways of solubilizing these aggregates could provide a breakthrough in treating these diseases.



#### Findings of the study

- A recent study has identified a protein (Sbp1) as a factor that dissolves the RNA granules (P-bodies)
- The work also concluded that low complexity sequences (containing repeats of arginine (R) and glycine (G) amino acids RGG) which normally promote granule formation, in this case promote the disintegration of RNA granules in yeast cells.
- The identified protein Sbp1 is specific for dissolving P-bodies and not stress granules which are related RNA granule types also present in the cytoplasm.
- This finding can be used to treat neurodegenerative disorders such as Amyotrophic Lateral Sclerosis (ALS) and Frontotemporal Dementia (FTD).

## 4.8 Gaganyaan

ISRO tests booster for Gaganyaan

- The Indian Space Research Organization (ISRO) has successfully carried out the static test of the HS200 solid rocket booster, taking the space agency one more steps closer to the keenly awaited Gaganyaan human spaceflight mission.
- The test was held at the Satish Dhawan Space Centre, Sriharikota
- Designed and developed by the Vikram Sarabhai Space Centre (VSSC) in Thiruvananthapuram
- The HS200 booster is the 'human-rated' version of the S200 rocket boosters used on the geosynchronous satellite launch vehicle Mk-III (GSLV Mk-III), also called the LVM3.
- The GSLV Mk-III rocket, which will be used for the Gaganyaan mission, will have two HS200 boosters that will supply the thrust for lift-off.
- The HS200 is a 20-metre-long booster with a diameter of 3.2 metres and is the world's second largest operational booster using solid propellants.
- The successful completion of this test marks a major milestone for the prestigious human space flight mission of ISRO, the Gaganyaan, as the first stage of the launch vehicle is tested for its performance for the full duration
- The control system used in the HS200 booster employs one of the world's most powerful electromechanical actuators with multiple redundancy and safety features

#### **Gaganyaan Mission**

• Gaganyaan is a mission by the Indian Space Research Organisation (ISRO) to send a three-member crew to space for a period of five to seven days.





- Launch Vehicle: ISRO's Geosynchronous Satellite Launch Vehicle GSLV Mk III (3 stages heavy-lift vehicle)
- Components: Consists of a service module and a crew module, collectively known as an Orbital Module (Crew Module carries astronauts & Service Modules carries propellants.)
- The Gaganyaan spacecraft will be placed in a low earth orbit (LEO) of 300-400 kilometres.
- Vyom Mitra: ISRO to send humanoid Vyommitra in unmanned Gaganyaan spacecraft ahead of human spaceflight (Monitoring module parameters)

#### Geosynchronous Satellite Launch Vehicle GSLV Mk III

- GSLV MkIII, is a three-stage heavy lift launch vehicle developed by ISRO.
- The vehicle has two solid strap-ons, a core liquid booster and a cryogenic upper stage.
- GSLV Mk III is designed to carry 4 ton class of satellites into Geosynchronous Transfer Orbit (GTO) or about 10 tons to Low Earth Orbit (LEO), which is about twice the capability of the GSLV Mk II.

## 4.9 Radio Frequency Identification (RFID)

- Amarnath Yatra pilgrims to be tracked through RFID tags
- The movement of each Amarnath Yatra pilgrim will be tracked with the help of Radio Frequency Identification (RFID) tags
- The RFID tags will be provided by the Shri Amarnathji Shrine Board (SASB). Registration of all pilgrims are done by the shrine board.

#### What is Radio Frequency Identification?

- RFID is a type of passive wireless technology that allows for tracking or matching of an item or individual.
- The system has two basic parts: Tags and Readers.
- The reader gives off radio waves and gets signals back from the RFID tag, while the tag uses radio waves to communicate its identity and other information.
- A tag can be read from up to several feet away and does not need to be within the direct line-of-sight of the reader to be tracked.
- The technology has been approved since before the 1970s but has become much more prevalent in recent years due to its usages in things like global supply chain management and pet microchipping.

#### 4.10 mRNA vaccine

The Centre for Cellular and Molecular Biology (CCMB) has established the "proof of principle" (proof of concept) of the first indigenous mRNA vaccine technology

- The replication is based on the Moderna model, but has been built with the information available in the open and our own technology and materials
- While vaccines work by training the immune system to identify disease-causing micro-organisms and eliminate them quickly when they encounter them, in the mRNA technology, the host cell's immune system is trained to evade the real infection.
- This is done by introducing mRNA of the micro-organism of concern into the host.
- The home-grown mRNA vaccine platform holds promise to deal with other infectious diseases such as TB,



dengue, malaria, chikungunya, rare genetic diseases and others.

#### What are mRNA vaccines?

- mRNA vaccines trick the body into producing some of the viral proteins itself.
- They work by using mRNA, or messenger RNA, which is the molecule that essentially puts DNA instructions into action.
- Inside a cell, mRNA is used as a template to build a protein

#### How it works?

- To produce an mRNA vaccine, scientists produce a synthetic version of the mRNA that a virus uses to build its infectious proteins.
- This mRNA is delivered into the human body, whose cells read it as instructions to build that viral protein, and therefore create some of the virus's molecules themselves.
- These proteins are solitary, so they do not assemble to form a virus.
- The immune system then detects these viral proteins and starts to produce a defensive response to them.

#### **Centre for Cellular and Molecular Biology**

- The Centre for Cellular & Molecular Biology (CCMB) is a premier research organization which conducts high quality basic research and trainings in frontier areas of modern biology, and promotes centralized national facilities for new and modern techniques in the interdisciplinary areas of biology.
- It was set up initially as a semi-autonomous Centre on April 1, 1977 with the Biochemistry Division of the then Regional Research Laboratory (presently, Indian Institute of Chemical Technology, IICT) Hyderabad.
- It is located in Hyderabad and operates under the aegis of the Council of Scientific and Industrial Research (CSIR).
- It is designated as "Center of Excellence" by the Global Molecular and Cell Biology Network, UNESCO.

## 4.11 Black Hole

Scientists from the Event Horizon Telescope (EHT) facility, revealed the first image of the black hole at the centre of the Milky Way.

- Astronomers believe nearly all galaxies, including our own, have these giant black holes at their centre
- The Milky Way black hole is called Sagittarius A\*, near the border of Sagittarius and Scorpius constellations.
- It is 4 million times more massive than our sun.
- The image of Sagittarius A\* (SgrA\*) gave further support to the idea that the compact object at the centre of our galaxy is indeed a black hole, strengthening Einstein's general theory of relativity.
- What is Black Hole?
- Black hole refers to a point in space where matter is so compressed as to create a gravity field from which
  even light cannot escape.
- Light gets chaotically bent and twisted around by gravity as it gets sucked into the abyss along with superheated gas and dust.
- Black-holes were theorized by Albert Einstein in 1915.



#### A black hole has two parts:

- Singularity at its core— a point that is infinitely dense, as all the remnant mass of the star is compressed into this point.
- Event Horizon There is a region of space beyond the black hole called the event horizon. This is a "point of no return", beyond which it is impossible to escape the gravitational effects of the black hole.
- Event Horizon Telescope Project
- EHT is a group of 8 radio telescopes located in different parts of the world.
- In 2006, an international team of more than 200 researchers, led by Harvard University astronomers, launched the Event Horizon Telescope (EHT) project with a sole aim: to capture a direct shot of a black hole.

#### **General Theory of Relativity**

• Essentially, it's a theory of gravity. The basic idea is that instead of being an invisible force that attracts objects to one another, gravity is a curving or warping of space. The more massive an object, the more it warps the space around it.

## 4.12 Artificial Intelligence (AI) chips

The adoption of Artificial Intelligence (AI) chips has risen, with chipmakers designing different types of these chips to power AI applications

#### What are AI chips?

- Al chips are built with specific architecture and have integrated Al acceleration to support deep learningbased applications.
- These chips, with their hardware architectures and complementary packaging, memory, storage and interconnect technologies, make it possible to infuse AI into a broad spectrum of applications to help turn data into information and then into knowledge
- There are different types of AI chips such as application-specific integrated circuits (ASICs), field-programmable gate arrays (FPGAs), central processing units (CPUs) and GPUs, designed for diverse AI applications.

#### How are they different from traditional chips?

- When traditional chips, containing processor cores and memory, perform computational tasks, they continuously move commands and data between the two hardware components
- These chips, however, are not ideal for AI applications as they would not be able to handle higher computational necessities of AI workloads which have huge volumes of data.
- Although, some of the higher-end traditional chips may be able to process certain AI applications
- In comparison, AI chips generally contain processor cores as well as several AI-optimised cores (depending on the scale of the chip) that are designed to work in harmony when performing computational tasks.
- The AI cores are optimised for the demands of heterogeneous enterprise-class AI workloads with low-latency inferencing, due to close integration with the other processor cores, which are designed to handle non-AI applications.



#### What are their applications?

- All chips are used for a multitude of smart machines and devices, including ones that are said to deliver the performance of a data centre-class computer to edge devices.
- Some of these chips support in-vehicle computers to run state-of-the-art AI applications more efficiently.
- Al chips are also powering applications of computational imaging in wearable electronics, drones, and robots.
- The use of AI chips for NLP (Natural Language Processing) applications has increased due to the rise in demand for chatbots and online channels such as Messenger, Slack, and others.
- They use NLP to analyse user messages and conversational logic.

#### 4.13 5G

- Recently, Prime Minister of India inaugurated the country's first indigenous test bed to help support the ecosystem around 5G.
- Earlier this year, the Government reiterated its plans to conduct auctions for 5G spectrum in June and expected services to be rolled out by the third quarter of the year.
- With increased capacity, lower latency, and energy efficiency, 5G is expected to significantly improve the state of art and enable new applications

#### **5G**

- Radio electronics refers to a broad range of technologies that can transmit, receive and process wireless signals.
- While these technologies can utilize electromagnetic spectrum that goes all the way up to 300GHz, the lower frequencies of this spectrum are particularly attractive.
- Lower frequency signals can travel longer distances and penetrate obstacles with lesser attenuation.
- Electronic components (amplifiers, transmitters, receivers) operating at lower frequencies are also easier to design and manufacture.
- Consequently, much of the bandwidth in the lower frequencies of this spectrum has already been allocated for several applications (mobile communications currently use the spectrum from 800MHz to 2.5 GHz).

#### New spectrum for 3GHz

- With the increasing demand for mobile services, the currently allocated spectrum is proving inadequate.
- At the simplest level, 5G represents the allocation of new spectrum to increase capacity.
- Since most of the spectrum at lower frequencies is already being utilised much of this new spectrum is being allocated at higher frequencies.
- The first deployments in India will be around 3GHz, but will expand to 25 GHz and beyond.
- While operating at higher frequencies has some fundamental challenges, it offers some unique opportunities as well
- As 5G services evolve to occupy higher frequencies, it will significantly increase the bandwidth available for mobile services.
- However, at these frequencies the design of the transmitting and receiving equipment becomes more complex.
- Signal attenuation also increases. So, the coverage area of each cell tower will decrease which will require



the towers to be more closely spaced.

- At higher frequencies it becomes easier to direct a signal in specific direction.
- So, signals transmitted from a cell tower can be more precisely directed at a specific user
- Intuitively, this enhanced directivity results in less interference between signals meant for different users which directly translate to increased capacity.
- Since much of the 5G infrastructure is being built from ground up, there is a chance to redesign the technology to make it more suitable for the evolving communication needs of the future.
- 5G places special emphasis on low latency, energy efficiency and standardization Low delays between transmission and reception of messages are extremely critical to avoid accidents. For instance, Self-driving cars is an illustrative example
- As 5G rolls out, over the next several years the volume of data is expected to exponentially increase. To
  ensure that there isn't a corresponding increase in the energy usage, 5G places a lot of importance on
  energy efficiency
- Greater attention to standardisation is another important aspect of 5G enable the rapid deployment of 5G infrastructure there is an industry-wide effort to standardise interaction between components.
- Thus, while operating at higher frequencies has some fundamental challenges, it offers some unique opportunities as well.

## Way forward

- There should be lot of research in both industry and academia centred around 5G.
- Convergence of positioning, sensing and communication traditionally, positioning, sensing and communication have been seen as separate technologies (for e.g., GPS is used for positioning, and radar for sensing). However, all three technologies involve transmission and reception of radio signals hence it is possible for positioning and sensing to piggy back on 5G infrastructure that is primarily meant for communication.
- There should be research around cost and energy efficient electronic devices that can transmit and receive high frequency signals. This involves delving into the fundamental physics of semiconductor technologies and is expected to lay the foundation for the growth of wireless technology into higher frequency bands.



## 5. Environment & Ecology

#### 5.1 Deemed forests India

Karnataka Chief Minister has signed cabinet decision to release 6.5 lakh hectares from the deemed forest classification

- This measure will essentially declassify close to 67 per cent of the land in Karnataka that was otherwise classified as deemed forests
- There is no comprehensive definition for "forests" in India.
- The ambiguity around this term was clarified by the Supreme Court in T N Godavarman Thirumulpad case where it defined "forest" to include any piece of land that resembles the dictionary meaning of forest for the purpose of the Forest (Conservation) Act, 1980.

#### This case also conceptualized "deemed forests"

- Deemed forests were conceived as areas those has not been notified under the legislation, but are recorded as forests in government records.
- These are lands that have characteristics of forests, irrespective of ownership.
- Once forests are "deemed", they cannot be de-reserved or utilized for non-forest purposes without prior approval of the Centre.
- Deemed forests, comprising about 1% of India's forest land
- In Godavarman case the Court ordered the setting up of expert committees in each state to identify deemed forests to remove any ambiguities
- This decision paved the way for the preservation of forest areas in India to be continuously monitored by the Supreme Court, mandating the state governments to obtain clearances for affecting or implementing changes to lands classified as deemed forests.

## 5.2 Ethanol blending

Petroleum Minister has stated that the level of ethanol blending in petrol in India has reached 9.99 per cent

#### **Ethanol Blending**

- India had targeted 10 per cent ethanol blending in petrol by the end of 2022 and 20 per cent blending by 2030
- But recently Government of India has advanced the target for 20% ethanol blending in petrol to 2025 from 2030
- The Centre has also targeted 5 per cent blending of biodiesel with diesel by 2030

#### Ethanol

- It is one of the principal biofuels, which is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as ethylene hydration
- The ethanol blending programme is aimed at reducing the country's dependence on crude oil imports, cutting carbon emissions and boosting farmers' incomes.



• The Centre has also announced an additional duty of Rs 2 per litre on unblended fuels starting October to incentivise blending

## 5.3 Pangolin

A Pangolin was rescued from the Ranthambhore Tiger Reserve

#### **Pangolin**

- Out of the eight species of pangolin, the Indian Pangolin (Manis crassicaudata) and the Chinese Pangolin (Manis pentadactyla) are found in India.
- Pangolins are scaly anteater mammals and they have large, protective keratin scales covering their skin.
- They are the only known mammals with this feature.
- Insectivore- Pangolins are nocturnal, and their diet consists of mainly ants and termites
- Habitat Indian Pangolin It is widely distributed in India, except the arid region, high Himalayas and the North-East.
- Chinese Pangolin found in the Himalayan foothills in Eastern Nepal, Bhutan, Northern India, and North-East Bangladesh and through Southern China.

#### Difference between Indian and Chinese Pangolin

- Indian Pangolin is a large anteater covered by 11-13 rows of scales on the back.
- A terminal scale is also present on the lower side of the tail of the Indian Pangolin, which is absent in the Chinese Pangolin.

#### Status

- Wildlife Protection Act, 1972: Schedule I
- IUCN Red List: Indian Pangolin Endangered; Chinese Pangolin critically endangered
- CITES: Appendix I

#### **Threats**

- Hunting and poaching for local consumptive use and international trade for its meat and scales in East and South East Asian countries, particularly China and Vietnam.
- They are believed to be the world's most trafficked mammal

#### 5.4 Urban heat island

Several parts of the country are reeling under heat wave conditions. Cities, especially, are a lot hotter than rural areas.

- 15th May 2022: Two areas in Delhi recorded temperatures close to 50 degrees Celsius. Temperatures around these cities, however, were not as high.
- This is due to a phenomenon called an "urban heat island". The sun's heat and light reach urban and rural areas in the same way but the difference in temperature is mainly because of the surfaces in each environment and how they absorb and hold heat

#### **NASA's Observation**

• NASA's Ecosystem Spaceborne Thermal Radiometer Experiment (Ecostress) captured an image shortly before midnight of May 5, covering an area of about 12,350 square kilometres, which showed a large red patch around Delhi and smaller red patches around neighbouring cities of Sonipat, Panipat, Jind and



- Bhiwani. These red patches, implying higher temperatures, were the heat islands, while the rural areas around the cities witnessing lower temperatures.
- Ecostress is an instrument with a radiometer, can measure temperatures on the ground, as opposed to the air temperature.
- Tasked with measuring the temperature of plants and understanding their water requirements and the impact of the climate on them.

#### What is an Urban Heat Island (UHI)?

- A local and temporary phenomenon experienced when certain pockets within a city experience higher heat load than surrounding or neighbouring areas on the same day.
- The variations are mainly due to heat remaining trapped within locations that often resemble concrete jungles.
- The temperature variation can range between 3 to 5 degrees Celsius.

#### Why are cities hotter than rural areas?

- Rural areas have relatively larger green cover in the form of plantations, farmlands, forests and trees as compared to urban spaces.
- This green cover plays a major role in regulating heat in its surroundings.
- Transpiration is a natural way of heat regulation: This is the scientific process of roots absorbing water from the soil, storing it in the leaves and stems of plants, before processing it and releasing it in the form of water vapour.
- On the contrary, urban areas lack sufficient green cover or gardens and are often developed with high-rise buildings, roads, parking spaces, pavements and transit routes for public transport.
- As a result, heat regulation is either completely absent or man-made.
- Black or any dark coloured object absorbs all wavelengths of light and converts them to heat, while white reflects it.
- Cities usually have buildings constructed with glass, bricks, cement and concrete all of which are dark-coloured materials, meaning they attract and absorb higher heat content.
- Water cannot flow easily through/via them
- Without a cycle of flowing and evaporating water, these surfaces have nothing to cool them down.
- Heat is also released by numerous human activities vehicles, factories, household appliances, release heat in the environment and cause a spike in temperature.
- Thus, forms temporary islands within cities where the heat remains trapped. These are urban heat islands that record higher day temperatures than other localities.

#### Impacts of UHI

- Power/Energy costs: Increases energy costs (e.g., for air conditioning), air pollution levels, and heat-related illness and mortality.
- Poor water and air quality: As there are more pollutants, they are blocked from from scattering and becoming less toxic by the urban landscape. Warm water from the UHI stresses the native species that have adapted to life in a cooler aquatic environment.
- Colonization by heat-loving species: UHI increases the colonization of species that like warm temperatures, such as lizards and geckos. Insects such as ants are more abundant here than in rural areas; these are referred to as ectotherms.
- Heatwaves: Affect human and animal health, leading to exhaustion, dehydration and increased mortality



rate.

#### How can urban heat islands be reduced?

- By increasing the green cover: filling open spaces with trees and plants.
- Appropriate choice of construction materials
- Promoting terrace and kitchen gardens
- Painting white or light colours on terraces wherever possible to reflect heat.

## 5.5 Air pollution in India

Air pollution was responsible for 16.7 lakh deaths in India in 2019, or 17.8% of all deaths in the country that year. This is the largest number of air-pollution-related deaths of any country

- Globally, air pollution alone contributes to 66.7 lakh deaths.
- Overall, pollution was responsible for an estimated 90 lakh deaths in 2019 (equivalent to one in six deaths worldwide), a number that has remained unchanged since the 2015 analysis.
- Ambient air pollution was responsible for 45 lakh deaths, and hazardous chemical pollutants for 17 lakh, with 9 lakh deaths attributable to lead pollution.

#### **Pollution in India**

- Out of the majority of the air pollution-related deaths in India
- 8 lakh were caused by PM2.5 pollution
- 1 lakh by household air pollution.
- Although the number of deaths from pollution sources associated with extreme poverty (such as indoor air pollution and water pollution) has decreased, these reductions are offset by increased deaths attributable to industrial pollution (such as ambient air pollution and chemical pollution).
- The World Health Organization (WHO) has lowered the guideline value for PM2.5 from 10 micrograms per cubic metre to 5. This means that there is hardly any place in India which follows the WHO norms.
- Air pollution is most severe in the Indo-Gangetic Plain.
- Burning of biomass in households was the single largest cause of air pollution deaths in India, followed by coal combustion and crop burning.

#### **Major Issues:**

- Lack of a strong centralised administrative system to drive its air pollution control efforts:
- The number of deaths remains high despite India's considerable efforts against household air pollution, including through the Pradhan Mantri Ujjwala Yojana programme.
- India has developed a National Clean Air Programme, and in 2019 launched a Commission for Air Quality Management in the National Capital Region.
- Therefore, improvements in overall air quality have been limited and uneven.

#### The Way Forward

- Need for a radical shift in the approach to pollution management efforts: Towards a green recovery model that is less emissions-intensive
- Governance: Along with political will and the ability to reduce corruption at the planning in monitoring level, air pollution control of Indian cities has to be tackled at the city governance level not at the central



level.

- Need integrated surveillance platforms for health and exposure survf-eillance: Population exposure surveillance via biological and environmental monitoring can inform risk attributions within health programmes already in place to reduce the burden of maternal and child health as well as noncommunicable diseases.
- Capacity Building: Public and media discussions are needed for the longer-term adverse health effects of
  chronically high pollution levels throughout the year. More awareness needs to be created among
  policymakers and the general public about the slow but substantial impact of ambient particulate matter
  and household air pollution.
- A viable public transport system strategy: While the Metro has provided massive relief to Delhi's
  commuters, it is not viable for all economic classes. Therefore, Delhi needs an active bus service that runs
  on electricity. Regardless of the high initial cost, such vehicles offer other advantages like low maintenance
  cost, longer service life and lower operational costs per kilometre. More importantly, they reduce
  pollution levels.
- Electric mobility is a definitive way towards cleaner air, without compromising functionality. A shift to electric mobility is long-overdue.

#### Lead pollution

- An estimated 9 lakh people die every year globally due to lead pollution and this number is likely to be an underestimate.
- Globally more than 80 crore children (India alone contributes to 27.5 crore children) are estimated to have blood lead concentrations that exceed 5  $\mu$ g/dL which was, until 2021, the concentration for intervention established by the US Centers for Disease Control and Prevention. This concentration has now been reduced to 3.5  $\mu$ g/dL.
- Earlier the source of lead pollution was from leaded petrol which was replaced with unleaded petrol.
- However, the other sources of lead exposure include unsound recycling of lead-acid batteries and e-waste
  without pollution controls, spices that are contaminated with lead, pottery glazed with lead salts and lead
  in paint and other consumer products.

## 5.6 Public Health Engineering

Globally, around 80% of wastewater flows back into the ecosystem without being treated or reused, according to the United Nations. This can pose a significant environmental and health threat.

- In the absence of cost-effective, sustainable, disruptive water management solutions, about 70% of sewage is discharged untreated into India's water bodies.
- A staggering 21% of diseases are caused by contaminated water in India, according to the World Bank
- One in five children die before their fifth birthday because of poor sanitation and hygiene conditions, according to Startup India.
- As we confront these public health challenges emerging out of environmental concerns, expanding the scope of public health/environmental engineering science becomes pivotal.

#### **Expanding the cadre**

• Objective: For India to achieve its sustainable development goals of clean water and sanitation and to address the growing demands for water consumption and preservation of both surface water bodies and



- groundwater resources, it is essential to find and implement innovative ways of treating wastewater.
- To achieve the objective: The specialised cadre of public health engineers, also known as sanitation engineers or environmental engineers, is best suited to provide the growing urban and rural water supply and to manage solid waste and wastewater.

# Combine engineering and public health fields together: Together, these fields can offer a wide range of opportunities for

- The development of advanced wastewater treatment systems
- Understanding complex quality and monitoring processes
- Designing and managing septic tank systems
- Supplying good quality water in adequate quantities
- Maintaining hygiene and access to water

Ensuring that water supply is sustainable, including the study of relevant industry standards and codes of practices.

Courses to develop skills of Civil Engineers and Public Health professionals: Most often, civil engineers do
not have adequate skills to address public health problems. And public health professionals do not have
adequate engineering skills. The goal of reaching every rural household with functional tap water can be
achieved in a sustainable and resilient manner only if the cadre of public health engineers is expanded and
strengthened.

#### Following international trends - The Way Forward

- In India, public health engineering is executed by the Public Works Department or by health officials. This differs from international trends. To manage a wastewater treatment plant in Europe, for example, a candidate must specialize in wastewater engineering.
- The need to introduce public health engineering as a two-year structured master's degree programme or through diploma programmes for professionals working in this field must be considered to meet the need of increased human resource in this field.
- Refresher courses for health and engineering institutes with an updated knowledge in areas of environment science should be made available.
- Public health professionals can be groomed through in-service training.
- Public health engineering should be developed as an interdisciplinary field.
- Engineers can significantly contribute to public health in defining what is possible, identifying limitations, and shaping workable solutions with a problem-solving approach.
- Similarly, public health professionals can contribute to engineering through well-researched understanding of health issues, measured risks and how course correction can be initiated.
- Once both meet, a public health engineer can identify a health risk, work on developing concrete solutions such as new health and safety practices or specialised equipment, in order to correct the safety concern.
- Enable contextualised decision-making regarding water management in India.
- From promoting a robust understanding of processes, trends, and the latest technology in water and wastewater quality monitoring, treatment, and management, public health engineering can help decision/policy makers explore the available options.
- Given the population growth, diminishing resources and risky exploitation of natural resources, various State governments and not-for-profit organisations are looking to hire environmental engineers through whom public health problems can be addressed.



#### Conclusion

- There is no doubt that the majority of diseases are water-related, transmitted through consumption of contaminated water, vectors breeding in stagnated water, or lack of adequate quantity of good quality water for proper personal hygiene.
- Diseases cannot be contained unless we provide good quality and adequate quantity of water. Most of the world's diseases can be prevented by considering this.
- Training our young minds towards creating sustainable water management systems would be the first step.

## 5.7 Guidelines for Safety Assessment of Genome Edited Plants, 2022

The Department of Biotechnology (DBT) has issued guidelines easing norms for research into genetically modified (GM) crops and circumventing challenges of using foreign genes to change crops profile.

#### Guidelines for Safety Assessment of Genome Edited Plants, 2022

- It exempts researchers who use gene-editing technology to modify the genome of the plant from seeking approvals from the Genetic Engineering Appraisal Committee (GEAC)
- The final call however is taken by the Environment Minister as well as States where such plants could be cultivated.
- The DBT said guidelines is a road map for the development and sustainable use of genome editing technologies in India, specifying the biosafety and/or environmental safety concerns, and describing the regulatory pathways to be adopted while undertaking the genome editing of plants.
- The guidelines say that all requirements that researchers must adhere to develop transgenic seeds will apply to gene-edited seeds except clauses that require permission from the GEAC.

#### Opposition

• Environmentalist groups have opposed this exception for gene-edited crops arguing that gene editing is included in genetic engineering. Therefore, there is no question of giving exemptions to particular kinds of genome edited plants from the regulatory purview

#### **Genetic Engineering Appraisal Committee (GEAC)**

- The Genetic Engineering Appraisal Committee (GEAC) is a statutory body constituted under the 'Rules for the Manufacture, Use /Import /Export and Storage of Hazardous Microorganisms/Genetically Engineering Organisms or Cells, 1989' notified under the Environment (Protection) Act, 1986.
- It functions under the Ministry of Environment, Forests & Climate Change.
- The body regulates the use, manufacture, storage, import and export of hazardous microorganisms or genetically-engineered organisms and cells in India.

#### **GEAC Functions**

- It is responsible for the appraisal of activities that involve the large scale use of hazardous microbes and recombinants in research and industrial production from the point of view of the environment.
- The GEAC also assesses proposals regarding the release of genetically engineered products and organisms into the environment, and this includes experimental field trials as well.
- The body also looks into proposals regarding the use of living modified organism that comes in the risk



- category III and above in the import/manufacture of recombinant pharma products, or where the end-product of the recombinant pharma product is a modified living organism.
- The Committee has the power to take punitive action against people/body under the Environment (Protection) Act.
- The approval of the GEAC is mandatory before genetically modified organisms and products derived from them can be used commercially.

#### **GEAC Composition**

- The Committee is chaired by the Special Secretary/Additional Secretary of the Ministry of Environment, Forests and Climate Change, GOI. A representative of the Department of Biotechnology is a co-chair
- There are many other members who meet every month to review the applications in the Committee's domain. The members include experts from other ministries as well as institutions such as the ICAR, ICMR, CCMB, etc.

# 5.8 Green Hydrogen

- India is moving faster than any other country towards a green transition, Petroleum Minister says at Davos
- Minister of Petroleum and Natural Gas stated that India will emerge as the leader of green hydrogen

#### Hydrogen

Hydrogen is one of the most abundant elements on earth for a cleaner alternative fuel option.

## Type of hydrogen depends up on the process of its formation:

- Green Hydrogen
- Green hydrogen is produced by electrolysis of water using renewable energy (like Solar, Wind) and has a lower carbon footprint.
- Electricity splits water into hydrogen and oxygen.
- By Products: Water, Water Vapor.
- Brown hydrogen is produced using coal where the emissions are released to the air.
- Grey hydrogen is produced from natural gas where the associated emissions are released to the air.
- Blue hydrogen is produced from natural gas, where the emissions are captured using carbon capture and storage.

#### **Uses:**

- Hydrogen is an energy carrier, not an energy source and can deliver or store a tremendous amount of energy.
- It can be used in fuel cells to generate electricity, or power and heat
- Due to their high efficiency and zero-or near zero-emissions operation, hydrogen and fuel cells have the potential to reduce greenhouse gas emission in many applications.

## **Green Hydrogen Policy (GHP)**

- Recently, the Ministry of Power (MoP) announced a Green Hydrogen Policy (GHP).
- The policy has set a target of 5 million tonnes per annum (MTPA) of green hydrogen production by 2030, more than 80% of the current hydrogen demand in the country.



- Under the policy, the government is offering to set up manufacturing zones for production, connectivity to
  the ISTS (Inter-State Transmission System) on priority basis, and free transmission for 25 years if the
  production facility is commissioned before June 2025.
- Producers will be allowed to set up bunkers near ports for storage of green ammonia for export by shipping.
- Manufacturers of Green hydrogen and ammonia are allowed to purchase renewable power from the power exchange or set up Renewable Energy (RE) capacity themselves or through any other developer, anywhere.

## **Significance of the Policy**

- India's largest oil refiner, Indian Oil Corp (IOC) estimates that GHP measures will reduce the cost of green hydrogen production by 40-50%.
- Fuels like Green Hydrogen and Green Ammonia are vital for any nation's environmentally sustainable energy security.
- India has already committed to achieving net-zero carbon emissions by 2070, and green hydrogen will play a significant role as a disruptive feedstock in India's transition from oil and coal.
- The GHP lays a solid foundation for developing a competitive green hydrogen sector in India.

# 5.9 Money spider, ant-mimicking spider discovered at Wayanad Wildlife Sanctuary

## **Money Spider**

- Money spiders, commonly found in European meadows, have been reported for the first time in the country from the Muthanga range of the Wayanad Wildlife Sanctuary
- The species is called so as it is "believed to bring luck" to the person who comes in contact with it.
- The spider belongs to the family of dwarf spiders (Linyphiidae) under the genus Prosoponoides.
- It has been given the name Prosoponoides biflectogynus.
- Only six species of spiders belonging to this genus have been identified from across the world so far.
- It is the first report of this genus from India and hence no extensive studies have been conducted on this species of spiders in the country
- The male and the female money spiders are typically 3 mm and 4 mm long respectively.
- Both sexes are dark brown and have irregular silver patches and black spots on elliptical abdomen.
- There are numerous fine black spines on their olive green legs.
- Eight dark eyes are arranged in two rows
- Females build triangular webs in between dry tree twigs and feed on small insects, while males prefer to hide beneath dry leaves.
- Two or more male spiders can be found in the web of a single female.

## **Ant-mimicking spiders**

- Research team also discovered ant-mimicking spiders, belonging to the group of jumping spiders, from the Mananthavady range.
- They belong to the family of Salticidae.
- The ant-mimicking spider has been named Toxeus alboclavus
- They perfectly mimic ants by lifting their front pair of legs while walking as a mechanism to escape from potential predators.



- Only three species of this genus have been reported from India, and this is the first species reported from the Western Ghats
- The male and the female spiders of this species grow up to 4 mm and 6 mm long respectively.
- A pair of white stripes on the dark brown abdomen of females makes them distinct from other spiders of this group.
- The male of the species are characterized by a brown cephalic region and black thorax with white hairs.
- The forward-projecting fangs have a characteristic shape of an antler.
- Long spines are present on the base of each leg.

#### Wayanad Wildlife Sanctuary (WWS)

- Located in Kerala, WWS is an integral part of the Nilgiri Biosphere Reserve. It was established in 1973.
- Spread over 344.44 sq km, Wayanad Wildlife Sanctuary is contiguous to the tiger reserves of Nagerhole and Bandipur of Karnataka and Mudumalai of Tamil Nadu.
- Kabini river (a tributary of Cauvery river) flows through the sanctuary.
- The forest types include South Indian Moist Deciduous forests, West coast semi-evergreen forests and plantations of teak, eucalyptus and Grewelia.
- Elephant, Gaur, Tiger, Panther, Sambar, Spotted deer, Barking deer, Wild boar, Sloth bear, Nilgiri langur, Bonnet macaque, Common langur, Wild dog, common otter, Malabar giant squirrel etc are the major mammals.

Other wildlife parks within the Reserve (Nilgiri Biosphere) are: Mudumalai Wildlife Sanctuary, Bandipur National Park, Nagarhole National Park, Mukurthi National Park and Silent Valley.

# **5.10 Community forest resource**

The Chhattisgarh government has become only the second state in the country (after Simlipal in Odisha) to recognize Community Forest Resource (CFR) rights of a village inside a national park (rights of tribals living in Gudiyapadar, a hamlet inside the Kanger Ghati National Park in Bastar district).

## **Community forest resource area:**

- The common forest land that has been traditionally protected and conserved for sustainable use by a particular community.
- The community uses it to access resources available within the traditional and customary boundary of the village; and for seasonal use of landscape in case of pastoralist communities.
- Has a customary boundary with identifiable landmarks recognised by the community and its neighboring villages.
- It may include forest of any category revenue forest, classified & unclassified forest, deemed forest, DLC land, reserve forest, protected forest, sanctuary and national parks, etc.

## **Community Forest Resource rights:**

- Provide for recognition of the right to "protect, regenerate or conserve or manage" the community forest resource.
- Rights allow the community to formulate rules for forest use by itself and others and thereby discharge its responsibilities under Section 5 of the FRA.
- Include nistar rights and rights over non-timber forest products, ensure sustainable livelihoods of the



community.

• Authority to the Gram Sabha to adopt local traditional practices of forest conservation and management within the community forest resource boundary.

## **Significance**

- Aimed at undoing the "historic injustice" meted out to forest-dependent communities due to curtailment of their customary rights over forests, the FRA came into force in 2008.
- Recognises the community's right to use, manage and conserve forest resources
- To legally hold forest land that these communities have used for cultivation and residence.
- Underlines the integral role that forest dwellers play in sustainability of forests and in conservation of biodiversity.
- Traditional dwellers then become a part of management of the protected forests using their traditional wisdom.

Challenge: Getting a consensus amongst various villages about their traditional boundaries.

# 5.11 Valmiki Tiger Reserve

- The forest department of Bihar has established an elephant rescue centre at Bihar's Valmiki Tiger Reserve (VTR) to rehabilitate stray, abandoned and injured elephants
- The facility is in the process of getting approval from the central government
- VTR is spread over 899 square kilometres in West Champaran district, with Nepal to its north and Uttar Pradesh to its west.
- VTR provides the perfect atmosphere for elephant habitation
- Several elephants stray into VTR from neighboring Chitwan National Park in Nepal
- The plan is not without drawbacks: The risk of human-animal conflicts, though not new, will remain high

#### Valmiki Tiger Reserve

- Valmiki Tiger Reserve is the only tiger reserve in Bihar and forms the easternmost limit of India's Himalayan Terai forests.
- The forest contains a mix of bhabar and terai tracts and is located in the Gangetic Plains bio-geographic zone.
- In 1978, it was designated as a Wildlife Sanctuary.
- In 1990, Valmiki National Park was established.
- The Valmiki Wildlife Sanctuary and National Park is the country's 18th Tiger Reserve. Valmiki National Park and Valmiki Wild Sanctuary make up the Valmiki Tiger Reserve.
- The tiger reserve shares a border with Nepal's Chitwan National Park.
- The park is bisected by two rivers: the Gandak and the Masan River. Valmiki wildlife sanctuary is bordered on the west by the River Gandak.
- It enters India at Valmikinagar, where it is joined by two rivulets, Sonha and Pachnad, to form the holy Triveni confluence.
- A diverse range of flora and fauna can be found in the Valmiki National Park. Moisture-bearing Sal forests, dry-bearing Sal forests, moist mixed deciduous forests without Sal, cane, and tropical seasonal swamp forests with reed beds and wet grasslands make up the park.



- Fauna includes Mammals: tiger, rhinoceros, black bear, leopard, wild dog, wild buffalo, wild boar, hyena, leopard cat, wild cat, etc
- Reptiles Python, Cobra, King cobra, Krait, Banded krait, Sand boa, Crocodiles, etc
- Indian bison and one-horned rhinoceros frequently migrate from Chitwan to Valmikinagar.





# 6. Security & Defence

# **6.1 Project 75I**

French defence major Naval Group announced that it is unable to participate in the P-75 India (P-75I).

## What is Project 751?

- Under this project, the Indian Navy intends to acquire six diesel-electric submarines, which will also feature advanced Air-independent propulsion (AIP) systems
- Project 75 (I), approved in 2007, is part of the Indian Navy's 30 year Plan for indigenous submarine construction.
- It will be the developed under the strategic partnership model which was promulgated in 2017 to boost indigenous defence manufacturing.
- The strategic partnership model allows domestic defence manufacturers to join hands with leading foreign defence majors to produce high-end military platforms to reduce import dependence.
- Acquisitions under the Strategic Partnership model refer to participation of private Indian firms along with foreign OEM (Original Equipment Manufacturer) in line with AatmaNirbhar Bharat principle.

## Air Independent Propulsion (AIP) System:

- Submarines are essentially of two types: conventional and nuclear.
- The conventional submarines use diesel-electric engines, which require them to surface almost daily to get atmospheric oxygen for fuel combustion.
- If fitted with an Air Independent Propulsion (AIP) system, the submarine will need to take in oxygen only once a week.

## **Fuel Cell Based AIP system:**

- In a fuel cell based AIP, electrolytic fuel cell releases energy by combining hydrogen and oxygen, with only water as the waste product ensuring less marine pollution.
- The cells are highly efficient, and do not have moving parts, thus ensuring that the submarine has a low acoustic emissions of sound.

## Why did Naval Group step back?

- It said it cannot meet conditions of the Request for Proposal (RFP) and will, therefore, not continue with its bid.
- The present RFP requires that the fuel cell AIP be sea proven, presently there is no such technology with the company.

# 6.2 Sela Tunnel project

The strategically-significant Sela Tunnel project in Arunachal Pradesh is nearing completion.

## Located in

- West Kameng district of Arunachal Pradesh
- Will provide an alternate axis to the Sela pass (at 13,700 feet)
- On the BCT Road the Balipara, Charduar and Tawang axis (more than 300 km long)
- Being executed by: Border Roads Organisation
- Includes two tunnels and a link road; Tunnel 2 will be one of the longest tunnels to have been constructed



- above an altitude of over 13,000 feet.
- The total length of the project, including the tunnels, the approach and the link roads, will be around 12 km.

## Why does the project matter?

- All-weather connectivity to Tawang and other forward areas in the sector
- Will provide a new alignment on the axis towards the LAC, and allow movement of military and civil vehicles all through the year (Sela pass stays closed for a few winter months).
- Reduction in more than one hour of travel time from Tezpur to Tawang and travellers avoiding dangerous snow covered Sela top at a height of 13,700 feet.
- All weather connectivity to Tawang would be a game-changer for the local population ahead of Sela apart from the much-required strategic edge for our security forces.

# 6.3 CDS & top level military reforms

- The Government is yet to announce a successor to the country's top military post, post death of India's first Chief of Defence Staff (CDS) General Bipin Rawat.
- The reason for the delay: The Government is reassessing the concept of the post as well as the Department of Military Affairs (DMA) and is looking to streamline the setup.

#### **Role of the Chief of Defence Staff**

- The Government's decision in 2019 to create the post of a CDS, a long-pending demand to bring in triservice synergy and integration, is the biggest top-level military reform since independence.
- The Principal Military Adviser to the Defence Minister and Permanent Chairman Chiefs of Staff Committee (CoSC). However, the three Chiefs will continue to advise the Defence Minister on matters exclusively concerning their respective Services
- In addition, the Department of Military Affairs was created as the fifth department in the Ministry of Defence (MoD) with the CDS functioning as its Secretary.
- Broad mandate of the CDS: includes bringing about jointness in "operations, logistics, transport, training, support services, communications, repairs and maintenance of the three Services, within three years of the first CDS assuming office."
- Bring about synergy and optimise procurements, training and logistics and facilitate restructuring of military commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint/ theatre commands.
- Evaluate plans "for 'Out of Area Contingencies', as well other contingencies such as Humanitarian Assistance and Disaster Relief (HADR)".
- The specialised tri-service divisions special operations, defence cyber and defence space were also brought under the ambit of the CDS.

## Why the rethink?

- Dichotomy in the roles and responsibilities with the several hats worn by the CDS and also overlap in responsibilities between the DMA and DoD.
- On the ambitious timelines set for the creation of theatre commands and also the number of commands and their envisaged format.



#### The Way Forward:

- To have a CDS with operational powers who will after due legislative changes have theatre commanders
  report to him while the Service Chiefs will look after the raise, train and sustain functions of respective
  Services.
- In this direction, it is being looked at if the Chief of Integrated Defence Staff to the Chairman, Chiefs of Staff Committee (CISC) can function as the Secretary DMA reporting directly to the CDS.

# 6.4 Threats to Internal Security

The war in Europe, political turmoils in South Asia dominates newspaper headlines today. This has pushed the debate on India's many internal security problems on the backburner.

#### **Threats**

## **Upheaval in Kashmir**

- While Jammu and Kashmir has been a troubled region ever since 1947, the situation has metamorphosed over the years at times tending to become extremely violent followed by spells of near normalcy.
- Political angst over the revocation of Article 370 of the Constitution is possibly one of the reasons for local support being available for the current crop of Jammu and Kashmir militants. A majority of them are believed to be home-grown militants, though backed by elements from across the border in Pakistan.
- Irrespective of the reasons for the latest upsurge in violence, what is evident is that Jammu and Kashmir has again become the vortex of violence, specialising currently on targeted killings of outsiders, mainly Kashmiri Pandits.
- Evidently, the doctrine of containment pursued by the Jammu and Kashmir police and security agencies is not having the desired effect.

#### The Maoist shadow

- The combination of ideological ideation and brutal killings has often confused and confounded the police, intelligence and security establishments of the States and the Centre.
- In that sense, the Maoists represent the biggest challenge to the idea of India.
- While railing against the use of State violence, and from time to time displaying a willingness to hold peace talks with both the State and Central governments, the Maoists have seldom displayed a commitment to peaceful ways.
- More than any other militant or violent movement in the country, curbing the Maoist menace will require considerable doses of statecraft, as many of the purported demands of the Maoists find an echo among intellectuals in the cities and the 'poorest of the poor' in the rural areas.

## In Punjab and the North-east

- The recent discovery of 'sleeper cells' in the Punjab clearly indicates the potential for the revival of a pro-Khalistan movement — which once ravaged large parts of the Punjab
- In Assam, the United Liberation Front of Assam–Independent (ULFA-I) is trying to revive its activities after a long spell of hibernation.
- Likewise in Nagaland, where the National Socialist Council of Nagalim (I-M) has recently initiated a fresh push for a solution of the 'Naga political issue



#### A threat in the South

- In the South, intelligence and police officials appear concerned about a likely revival of Liberation Tigers of Tamil Eelam (LTTE)-sponsored activities in Tamil Nadu.
- This stems from a possible revival of LTTE-sponsored militancy in Sri Lanka following the recent economic crises and uncertainty there.
- Security agencies in India believe that an attempt could be made to reach out to elements in Tamil Nadu to revive the spirit of the 1980s.

## Limitations of a security vigil

- While the country's security agencies do maintain a tight vigil, what is seldom realized is that security agencies can only deal with the immediate threat.
- Additional doses of security whenever a situation arises are at best a temporary solution. This does not amount to problem solving.
- To change the mindsets of both the authorities and those challenging the existing order, it may be first necessary to admit that more and more security has its limitations.
- The next step is even harder, viz., to admit that the forces threatening the state have lately become nimbler in adopting new technologies and modes of warfare.

## Way forward

- Long-term solutions require the use of statecraft.
- In many countries, both the authorities and security agencies are beginning to acknowledge the importance of resorting to statecraft as a vital adjunct to the role played by the security agencies.
- Statecraft involves fine-grained comprehension of inherent problems; also an ability to quickly respond to political challenges.
- It further involves strengthening the ability to exploit opportunities as they arise, and display a degree of political nimbleness rather than leaving everything to the security agencies.
- In short, it entails a shift from reposing all faith in the security establishment to putting equal emphasis on implementation of policies and programmes.
- In effect, it shifts the emphasis to formulating strategies that favour political deftness, strength and agility, after the initial phase.



# 7. Social issues

## 7.1 World Press Freedom Index

The 20th World Press Freedom Index was published by Reporters Without Borders (RSF)

#### **Key findings**

- The index reveals a two-fold increase in polarisation amplified by information chaos that is, media polarisation fuelling divisions within countries, as well as polarisation between countries at the international level.
- Within democratic societies, divisions are growing as a result of the spread of opinion media and the spread of disinformation circuits that are amplified by the way social media functions
- At the international level, democracies are being weakened by the asymmetry between open societies
  and despotic regimes that control their media and online platforms while waging propaganda wars against
  democracies.
- Polarisation on these two levels is fuelling increased tension. The invasion of Ukraine (106th) by Russia (155th) reflects this process.
- Rise in use of legislative arsenal to confine its population and cut it off from the rest of the world, China (175th)
- Confrontation between "blocs" are growing, for instance, for instance India (150th) and Pakistan (157th)
- Media polarisation is feeding and reinforcing internal social divisions in democratic societies such as the United States (42nd)
- The trio of Nordic countries at the top of the Index Norway(1st), Denmark and Sweden continues to serve as a democratic model where freedom of expression flourishes
- The world's 5 worst countries for press freedom include Myanmar (176th), Turkmenistan (177th), Iran (178th), Eritrea (179th) and North Korea (180th).

#### Methodology

- RSF developed a new methodology to compile the 20th World Press Freedom Index.
- The new methodology defines press freedom as "the effective possibility for journalists, as individuals and
  as groups, to select, produce and disseminate news and information in the public interest, independently
  from political, economic, legal and social interference, and without threats to their physical and mental
  safety."
- In order to reflect press freedom's complexity, five new indicators are now used to compile the Index: the political context, legal framework, economic context, sociocultural context, and security.

#### **Performance of India**

- India has slipped 8 places on the World Press Freedom Index 2022
- With a global score of 41, India has gone down to the 150th position from 142 last year.

## 7.2 Poverty

A recent World Bank Report has shown that extreme poverty in India more than halved between 2011 and 2019 -



from 22.5 per cent to 10.2 per cent.

The reduction was higher in rural areas, from 26.3 per cent to 11.6 per cent.

#### **Reasons for reduction**

• Identification of deprived households on the basis of the Socioeconomic and Caste Census (SECC) 2011 across welfare programmes was a game-changer in the efforts to ensure balanced development, socially as well as across regions.

#### **Participation of Women:**

- Coverage of women under the Deendayal Antyodaya Yojana and Self Help Groups (SHG) increased from 2.5 crore in 2014 to over 8 crore in 2018
- This provided a robust framework to connect with communities and created a social capital that helped every programme.

#### **Financial Decentralization**

- Finance Commission transfers were made directly to gram panchayats leading to the creation of basic infrastructure
- The high speed of road construction under the Pradhan Mantri Gram Sadhak Yojana created greater opportunities for employment by improving connectivity and enhancing mobility.

#### **Credit Access**

• The social capital of SHGs ensured the availability of credit through banks, micro-finance institutions and MUDRA loans

#### **Basic Needs**

 Thrust on universal coverage for individual household latrines, LPG connections and pucca houses improved standard of living

## Co operative federalism

The competition among states to improve basic needs helped in development

Example: NITI Aayog SDG index

#### **Monitoring**

Through processes like social and concurrent audits, efforts were made to ensure that resources were fully utilized.

#### Still Poverty persists in India

- Pandemic and pandemic induced lockdown loss of livelihood
- Population Explosion
- Low Agricultural Productivity
- Inefficient Resource utilisation
- Inflation
- Social Factors Caste system, communal vilolence etc
- Climatic Factors Extreme Weather events disasters like cyclone, landslides etc



#### Way forward

- Realistic Assessment of the present situation of poverty in the country in need of the hour
- Improving social infrastructure and job opportunities in rural areas
- Investment in Agriculture by the government is necessary to decrease rural poverty
- Access to credit, financial inclusion and DBT
- Adoption of ICT to fight corruption
- Involvement of citizen in developmental plans, adoption of bottom-up approach etc
- A lot has been achieved, much remains to be done. Strong political will and proper implementation of existing schemes is the need of an hour.

# 7.3 Accredited Social Health Activists (ASHAs)

- The World Health Organisation (WHO) has recognized the contribution of India's 1 million Accredited Social Health Activists (ASHAs) during the Covid-19 pandemic.
- It is acknowledged that ASHAs facilitate linking households to health facilities, and play pivotal roles in house-to-house surveys, vaccination, public health and Reproductive and Child Health measures.

## Genesis & evolution of the ASHA programme

- The ASHA programme was based on Chhattisgarh's successful Mitanin programme, in which a Community Worker looks after 50 households.
- The National Health Mission was launched to provide effective health care to the entire rural population in the country The core strategy of the mission is to provide well trained female health activist (Accredited Social Health Activist- ASHA) in each village (1/1000 population) to fill the gap of unequal distribution of health services in rural area.
- Accredited Social Health Activist (ASHA) is a trained female community health activist.
- Selected from the community itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system.
- At present there are over 9 Lakh ASHAs.

## Roles and responsibilities

- The role of an ASHA is that of a community level care provider.
- This includes a mix of tasks: facilitating access to health care services, building awareness about health care entitlements especially amongst the poor and marginalized, promoting healthy behaviours and mobilizing for collective action for better health outcomes and meeting curative care needs as appropriate to the organization of service delivery in that area and compatible with her training and skills.

## Success of the programme

- The World Health Organisation (WHO) has recognized the contribution of India's 1 million Accredited Social Health Activists (ASHAs) during the Covid-19 pandemic.
- ASHAs facilitate linking households to health facilities, and play pivotal roles in house-to-house surveys, vaccination, public health and Reproductive and Child Health measures thus help in keeping track and monitoring of diseases, outbreak, MMR and IMR etc
- In many states, ASHAs are involved in national health programmes
- With newly acquired skills in health care and the ability to connect households to health facilities, ASHAs



were able to secure benefits for households.

• In a way, it became a programme that allowed a local woman to develop into a skilled health worker.

#### Issues

- They get performance-based payments, not a fixed salary like government servants. There have been agitations demanding employee status for ASHA workers.
- In many states, the payout is low, and often delayed.
- The original idea was never to deny the ASHA a compensation that could be even better than a salary it was only to prevent "governmentalisation", and promote "communitisation" by making her accountable to the people she served.
- There is a strong argument to grant permanence to some of these positions with a reasonable compensation as sustaining motivation.

## Way forward

- It is important to ensure that compensation for performance is timely and adequate.
- Provide opportunities for moving up the skill ladder in the formal primary health care system as an ANM/ GNM or a Public Health Nurse
- Upgrading skill sets and providing easy access to credit and finance will ensure a sustainable opportunity to earn a respectable living while serving the community.
- Strengthening access to health insurance, credit for consumption and livelihood needs at reasonable rates, and coverage under pro-poor public welfare programmes will contribute to ASHAs emerging as even stronger agents of change.

#### **National Health Mission**

- National Health Mission (NHM) was launched by the government of India in 2013 subsuming the National Rural Health Mission and the National Urban Health Mission.
- The main programmatic components include Health System Strengthening in rural and urban areas for Reproductive-Maternal- Neonatal-Child and Adolescent Health (RMNCH+A), and Communicable and Non-Communicable Diseases.
- The NHM envisages the achievement of universal access to equitable, affordable & quality health care services that are accountable and responsive to people's needs.

## The National Health Mission seeks to ensure the achievement of the following indicators:

- Reduce Maternal Mortality Rate (MMR) to 1/1000 live births
- Reduce Infant Mortality rate (IMR) to 25/1000 live births
- Reduce Total Fertility Rate (TFR) to 2.1
- Prevention and reduction of anemia in women aged 15–49 years
- Prevent and reduce mortality & morbidity from communicable, non-communicable; injuries and emerging diseases
- Reduce household out-of-pocket expenditure on total health care expenditure
- Reduce annual incidence and mortality from Tuberculosis by half
- Reduce the prevalence of Leprosy to <1/10000 population and incidence to zero in all districts</li>
- Annual Malaria Incidence to be <1/1000
- Less than 1 percent microfilaria prevalence in all districts
- Kala-azar Elimination by 2015, <1 case per 10000 population in all blocks.



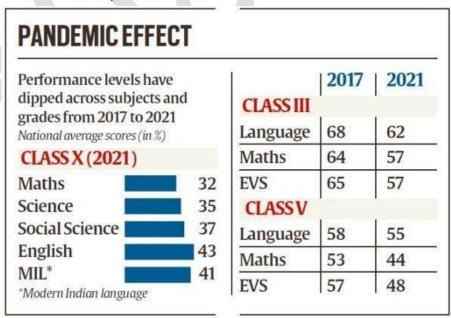
# 7.4 National Achievement Survey (NAS)

The Ministry of Education released its National Achievement Survey (NAS) 2021 report

- The objective of NAS 2021 is to evaluate children's progress and learning competencies as an indicator of the efficiency of the education system, so as to take appropriate steps for remedial actions at different levels
- The survey assesses the health of the school education system in the country through a survey of children's learning competencies at Classes 3, 5, 8 and 10.
- The survey is conducted every three years, and the last one was held in 2017.
- Nearly 34 lakh students of 1.18 lakh schools in 720 districts from government, government-aided and private-unaided schools participated in the exercise.
- The survey was conducted via an OMR (optical mark recognition)-based achievement test comprising multiple-choice questions along with questionnaires in 22 different languages.
- This nationwide survey was administered by the Central Board of Secondary Education in one single day at the same time.

## **Key Findings**

- A DEEP learning crisis has set in during the Covid pandemic; there is fall of up to nine percentage points between 2017 and 2021 in the performance of students in subjects ranging from maths to social sciences
- The dip has happened across subjects, and grades.
- It is also found that as many as 24 per cent of the students surveyed did not have access to digital devices at home, 38 per cent said they faced difficulty carrying out learning activities at home during the pandemic, while 80 per cent said they learn better at school with the help of peers.
- It found that out of a score of 500, students across various classes performed better in languages but lagged behind in subjects like mathematics and science.
- It also shows that across various subjects and classes, SC, ST and OBC students performed worse than general category students.
- For instance, while general category students in Class 8 scored an average of 260 marks in mathematics, SC students scored 249 marks, ST scored 244 marks and OBCs scored 253 marks.





# 7.5 Potential Economic Impact of COVID-19 related School Closures

- India's GDP to take a big hit due to pandemic-linked learning losses for students: ADB study
- A new working paper titled 'Potential Economic Impact of COVID-19 related School Closures' was published by the Asian Development Bank (ADB)

## **Findings**

- The GDP of India, which is among the countries with the longest school closures during the COVID-19 pandemic, would see the highest decline in South Asia due to learning losses for the young
- Starting with a \$10.5 billion dent in 2023, the country's economy could take a nearly \$99 billion hit by 2030, translating into a 3.19% reduction in GDP from the baseline growth trends
- India may thus account for over 10% of the global GDP decline of \$943 billion estimated by the ADB on account of earning losses in 2030, with jobs for skilled labour expected to decline by 1%, and unskilled labour by 2% that year.
- Economies with a significant population of schoolchildren and college-going youth in rural areas and in the poorest and second wealth quintile have been worst-hit as they lack access to stable Internet connection needed to study online
- Learning and earning losses are significant because a notable portion of the impacted population will migrate to the unskilled labour force
- A large part of India's work force is constituted by unskilled labour 4 million as per the ADB paper's
  estimates, compared to 72.65 million skilled workers.
- In terms of absolute change, India experiences the highest GDP decline in South Asia, at about \$98.84 billion in 2030.
- School closures lead to declines in global GDP and employment. Moreover, the losses in global GDP and employment increase over time. Declines in global GDP amount to 0.19% in 2024, 0.64% in 2028, and 1.11% in 2030.

## Recommendations

- India has the highest number of children enrolled in primary and secondary education among the Asian economies covered in the paper, at 255.74 million.
- The number of students in tertiary education were second only to China at 36.39 million
- While mooting greater investments in education and skills with a focus on narrowing the digital divide, the study has suggested the most immediate challenge for governments is to help students recover "lost opportunities" by conducting assessments among impacted children.
- Governments need to direct adequate funding and resources to young populations most affected by closures, such as those from the poor, rural and socially disadvantaged groups.
- It is important to keep school-age children in education as much as possible by providing financial support and incentives, while giving additional support for skills training to youth already out of school

#### **Asian Development Bank**

- ADB is a regional development bank established on 19th December 1966.
- ADB now has 68 members, 49 from within Asia.
- ADB is headquartered in Manila, Philippines.
- ADB's five largest shareholders are Japan and the United States (each with 15.6% of total shares), the



People's Republic of China (6.4%), India (6.3%), and Australia (5.8%).

- It aims to promote social and economic development in Asia.
- ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty.

# 7.6 India Hypertension Control Initiative (IHCI)

India registers success with BP treatment and control

- The India Hypertension Control Initiative, started in 2018, has been successful in treating and controlling hypertension
- Cardiovascular diseases (CVD) are the leading cause of death among adults in India.
- One of the major drivers of heart attack and stroke is untreated high blood pressure or hypertension.
- India has more than 200 million people with hypertension, and only 14.5% of individuals with hypertension are on treatment

## **India Hypertension Control Initiative (IHCI)**

- India Hypertension Control Initiative (IHCI) is a multi-partner initiative involving the Indian Council of Medical Research, WHO-India, Ministry of Health and Family Welfare, and State governments to improve blood pressure control for people with hypertension.
- The project initiated in 26 districts in 2018 has expanded to more than 100 districts by 2022.
- More than two million patients were started on treatment and tracked to see whether they achieved BP control.
- The project demonstrated that blood pressure treatment and control are feasible in primary care settings in diverse health systems across various States in India.
- Before IHCI, many patients travelled to higher-level facilities such as community health centres (block level) or district hospitals in the public sector for hypertension treatment.
- Over three years, all levels of health staff at the primary health centres and health wellness centres were trained to provide treatment and follow-up services for hypertension.

# 7.7 Sex as Work: SC

- A long-standing demand of sex workers that their work be decriminalized, has been partially fulfilled with the Supreme Court passing an order stating that adult sex workers are entitled to dignity and equal protection under law (Article 21).
- Coming down heavily on the brutal and violent "attitude" of the police toward sex workers, the Court said "it is as if they are a class whose rights are not recognised".
- With the Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill yet to see the light of day, the Court invoked powers under Article 142 to issue guidelines till the legislation is in force.
- SC has asked states and Union Territories to "implement" and "to act in strict compliance of" certain recommendations made by a panel appointed by the court in 2011 on the rehabilitation of sex workers.

#### What was the case about?

• Case Budhadev Karmaskar (2011): Sex workers are also entitled to a "life of dignity".



- 2011: Had set up a panel to look at prevention of trafficking; rehabilitation; and conditions conducive for sex workers who wish to continue work.
- As the Court awaits the Government's response to the panel's recommendations that adult sex workers should not be "arrested or penalised or harassed or victimised," a three-judge Bench led by Justice L. Nageswara Rao did well to direct the police to treat "all sex workers with dignity and should not abuse them, ... verbally and physically, subject them to violence or coerce them into any sexual activity".

#### **Challenges the Panel highlighted**

- Sex workers find it difficult to acquire proofs of identity such as ration cards or voter cards because they lacked proof of residence.
- District authorities did not recognize the identities of sex workers and their children, and sex workers did not have access to schemes meant for their rehabilitation.
- They also had no access to credit offered by states, because the lack of documents prevented them from opening bank accounts.

## Changes in the Immoral Traffic (Prevention) Act

- Has asked State governments to do a survey of protective homes under the Immoral Traffic (Prevention) Act, the legislation governing sex work in India, to review the cases of "adult women" detained there and process their release in a time-bound manner.
- ITP Act penalises acts such as running a brothel, soliciting in a public place, living off the earnings of a sex worker and living with or habitually being in the company of one.
- The Government's responsibility is now to draw up appropriate legislation to free consenting sex workers from stigma and grant them workers' rights.
- The Court suggested the Centre and States involve sex workers or their representatives to reform laws.

## Recommendations that the SC has directed to be implemented

- Provision for immediate medical assistance for any sex worker who is a victim of sexual assault
- Direction to states to do a survey of all Immoral Trafficking (Prevention) Act Protective Homes so that
  cases of adult women who are detained against their will can be reviewed and processed for release in a
  time-bound manner
- Sensitising police and other law enforcement agencies to the rights of sex workers and to ensure that
  police treat them with dignity and do not abuse them verbally or physically or coerce them into any sexual
  activity
- Ask The Press Council of India to issue appropriate guidelines for the media to take utmost care not to reveal the identities of sex workers
- Direction that measures that sex workers employ for their health and safety (condoms, etc.) must neither be construed as offences nor seen as evidence of commission of an offence.

## 7.8 COVID orphans

- Prime Minister of India released PM CARES benefits for 'COVID orphans'
- Initiatives are announced under the PM CARES for children initiative.



#### **Features**

- The Covid initiative for children will be open to those who lost both their parents, only surviving parent, legal guardian or adoptive parents to Covid between March 11, 2020 and February 28, 2022
- They will be provided financial assistance of Rs 10 lakh, and health cover of Rs 5 lakh through Ayushman cards
- The beneficiaries will be eligible to avail loans for higher education and professional courses.
- The Rs 10 lakh assistance will be in the form of an investment with the returns given to beneficiaries in form of a monthly stipend between the ages of 18 and 23, and the entire amount handed over when they attain the age of 23.
- The benefits also include an annual scholarship of Rs 20,000 for school students and monthly financial support of Rs 4,000 for daily needs.
- School-going children will also receive free education, textbooks and uniforms at the nearest government schools. Those in private schools may avail fee reimbursement under norms for the Right to Education Act, 2005.
- To avail the benefits, the names of affected children need to be registered on the portal pmcaresforchildren.in it will also act as a single-window system for approvals.
- Data available on the portal show that 9,042 applications have been received under the programme with 4,345 of them already approved.
- Children may also need emotional support and mental guidance. A special 'Samvad' service has also been started for this.
- On the 'Samvad Helpline', children can consult, discuss with experts on psychological matters

#### PM - CARES Fund

- The government set up the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM-CARES Fund) to deal with any kind of emergency or distress situation like posed by the COVID-19 pandemic.
- The Fund is a public charitable trust with the Prime Minister as its Chairman. Other Members include Defence Minister, Home Minister and Finance Minister.
- PM CARES do not receive budgetary support
- It is not audited by Comptroller and Auditor General (CAG).
- The Fund enables micro-donations as a result of which a large number of people will be able to contribute with the smallest of denominations.
- Donations have been made tax-exempt, and can be counted as a company's corporate social responsibility (CSR) obligations.

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