

VISION IAS

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CURRENT AFFAIRS JULY 2019

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1. POLITY & CONSTITUTION

1.1. AMENDMENT TO THE RTI ACT

Why in news?

Recently, the Parliament passed the Right to Information (Amendment) Bill, 2019.

Amendments brought in the RTI Act

- Removal of fixed term- As per the act, the CIC and ICs will hold office for a term of five years. The Amendment removes this provision and states that the central government will notify the term of office for the CIC and the ICs.
- **Determination of Salary** As per the act, the salary of the CIC and ICs (at the central level) will be equivalent to the salary paid to the Chief Election Commissioner and Election Commissioners, respectively. Similarly, the salary of the CIC and ICs (at the state level) will be equivalent to the salary paid to the Election Commissioners and the Chief Secretary to the state government, respectively.
 - The Amendment empowers the Central Government to determine the salaries, allowances, and other terms and conditions of service of the central and state CIC and ICs.

Rationale behind the amendments

- The salaries and allowances and other terms and conditions of service of the CEC and EC are equal to a Judge of the Supreme Court, therefore, the CIC, IC and the State CIC becomes equivalent to a Judge of the Supreme Court in terms of their salaries and allowances and other terms and conditions of service.
 - But, the functions being carried out by the Election Commission of India and the Central and State Information Commissions are totally different. Whereas the ECI is a constitutional body, but the CIC and SIC are statutory bodies.
 - The decisions of ICs are challenged in high courts, therefore their status being equivalent to Supreme Court judges was causing legal hindrances.
 - Hence, their status and service conditions need to be rationalised accordingly.
- The purpose of the amendments proposed is to provide for enabling provision under the RTI Act to frame Rules regarding salaries, allowances and conditions of service for Chief Information Commissioners and Information Commissioners and State Information Commissioners. Presently, there are no such provisions available under the RTI Act 2005.

Arguments against the Amendments

- **Incorrect Rational given-** Experts have rejected the justifications of government on the rationalisation of status-
 - The decisions of all authorities including those of the President and prime minister are challenged before high courts and that their status does not prevent or debar such challenges.
 - The genesis of the RTI comes from Supreme Court rulings on how right to information is a pre-condition for informed voting and therefore, parity between information and election commissioners is not an anomaly.
- **Dilutes the independence of CICs and ICs-** as the Central government may determine the term and salaries of CICs and ICs.
 - o Uncertain term and salary changeable by executive notification reduces CIC to an obedient subordinate.
 - o This also hampers accountability as it calls people's right to information under question.
 - o A situation could arise where different commissioners will have different tenures and salaries.
 - o if salaries and tenures are downgraded, eminent people may not apply for the vacant posts.
- **Dilutes the status of CICs-** Chief Information Commissioner and Chief Election Commissioner (and the state level officers) were kept at the same footing, as according to the Supreme Court of India RTI and Right to vote are equally important fundamental rights. However, the amendments tend to change this scenario.
- **Encroaches upon the state jurisdiction-** as the Central government will prescribe the term, status and salary of State Information Commissioners.

• Lack of consultation- with the civil society and the state Governments, which amounts to undemocratic imposition. It was not put in the public domain and the amendment did not undergo much scrutiny.

Way forward

- As per legal experts, rather than downgrading the status, the Information Commission should be given a constitutional status.
- With the increasing number of attacks on RTI users, the government may focus its efforts on better proactive
 disclosure of information and offer protection to people who show truth to power by exposing corruption
 and wrongdoing.

1.2. PROTECTION OF HUMAN RIGHTS (AMENDMENT) ACT 2019

Why in news?

President gave assent to the **Protection of Human Rights (Amendment) Act, 2019** in order to make NHRC more inclusive and efficient in its functioning.

Need for the amendment in the existing Act

- The NHRC was denied A-grade accreditation in 2017 by the Global Alliance of National Human Rights Institutions (GANHRI), a UN body based in Geneva, due Commission's failure in ensuring gender balance and pluralism in its staff and lack of transparency in selecting its members and rising political interference.
 - However, in February 2018, GANHRI, re-accredited India's apex rights watchdog with the 'A' status.
- Demand from the certain State Governments have also proposed for amendment of the Act, as they have been facing difficulties in finding suitable candidates to the post of Chairperson of the respective State Commissions owing to the existing eligibility criteria to the said post.

Significance of the recent amendment

- The proposed amendments will enable both the National Commission as well as the State Commissions to be more compliant with the Paris Principles concerning its **autonomy**, **independence**, **pluralism** and wideranging functions in order to effectively protect and promote human rights.
- **Filling up the Vacancies:** The age limit for appointment to the panel has been **reduced to fill the vacancies**. The amendment has ensured **transparency in the appointment** of Chairman and members of the Commission.
- **Enabling conditions to incorporate Civil Society**: Effort is to also to increase the presence of civil Society in the composition of the Commission.
- **Ease of accessibility**: The applicants in Union Territories can now appeal in the human Rights Commission of nearby states instead of coming all the way to Delhi.

Amendments to the original Act of 1993

Provisions	Original Act of 1993	Amended Act of 2019
Composition of NHRC:	 Under the Act, the chairperson of the NHRC is a person who has been a Chief Justice of the Supreme Court. The Act provides for two persons having knowledge of human rights to be appointed as members of the NHRC. Under the Act, chairpersons of various commissions such as the National Commission for Scheduled Castes, National Commission for Scheduled Tribes, and National Commission for Women are members of the NHRC. 	 The Bill amends this to provide that a person who has been Chief Justice of the Supreme Court, or a Judge of the Supreme Court will be the chairperson of the NHRC. The Bill amends this to allow three members to be appointed, of which at least one will be a woman. The Bill provides for including the chairpersons of the National Commission for Backward Classes, the National Commission for the Protection of Child Rights, and the Chief Commissioner for Persons with Disabilities as members of the NHRC.
Chairperson of SHRC:	 Under the Act, the chairperson of a SHRC is a person who has been a Chief Justice of a High Court. 	 The Bill amends this to provide that a person who has been Chief Justice or Judge of a High Court will be chairperson of a SHRC.

Term of office:	 The Act states that the chairperson and members of the NHRC and SHRC will hold office for five years or till the age of seventy years, whichever is earlier. Further, the Act allows for the reappointment of members of the NHRC and SHRCs for a period of five years. 	 The Bill reduces the term of office to three years or till the age of seventy years, whichever is earlier. The Bill removes the five-year limit for reappointment. 	
Union Territories:		The Bill provides that the central government may confer on a SHRC human rights functions being discharged by Union Territories. Functions relating to human rights in the case of Delhi will be dealt with by the NHRC.	

1.3. THE INTER-STATE RIVER WATER DISPUTES (AMENDMENT) BILL, 2019

Why in news?

Recently, the Lok Sabha cleared the Inter-State River Water Disputes (Amendment) Bill, 2019, which proposes to streamline the adjudication of inter-state river water disputes and make the present legal and institutional architecture robust.

Background

- India has seen protracted river water sharing disputes in recent years.
 - Depleting groundwater, drying rivers and increasing demand for water have led to long legal contentions between warring states.
- Under the Interstate River Water Disputes Act, a state government may request the central government to refer an inter-state river dispute to a Tribunal for adjudication.
 - If the central government is of the opinion that the dispute cannot be settled through negotiations, it is required to set up a Water Disputes Tribunal for adjudication of the dispute, within a year of receiving such a complaint.
- Over the years, there have been many Water Dispute Tribunals hearing the cases between states on river water sharing. But they have not been able to effectively resolve the disputes.

Constitutional and Legal Provisions with regard to Water

- Article 262(1) provides that Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter State river or river valley.
- Article 262(2) empowers Parliament with the power to provide by law that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint.
- Under Article 262, two acts were enacted
 - River Boards Act 1956: It was enacted with a declaration that centre should take control of regulation and development of Inter-state rivers and river valleys in public interest. However, not a single river board has been constituted so far.
 - The Interstate River Water Disputes Act, 1956 (IRWD Act) confers a power upon union government to constitute tribunals to resolve such disputes. It also excludes jurisdiction of Supreme Court over such disputes.
- Despite Article 262, the Supreme Court does have jurisdiction to adjudicate water disputes, provided that the parties first go to water tribunal and then if they feel that the order is not satisfactory only then they can approach supreme Court under article 136.
 - This article gives discretion to allow leave to appeal against order, decree, judgment passed by any Court or tribunal in India.

Key Provisions include

- Dispute Resolution Committee (DRC)- to be established by the Central Government before referring dispute
 to the tribunal, to resolve the dispute amicably by negotiations within one year (extendable by six months),
 and submit its report to the central government.
 - o If a dispute cannot be settled by the DRC, the central government will refer it to the Inter-State River Water Disputes Tribunal.
- **Establishment of a Single Inter-State River Water Disputes Tribunal-** by the Central Government, which can have multiple benches.

- All existing Tribunals will be dissolved, and the water disputes pending adjudication before such existing Tribunals will be transferred to the new Tribunal.
- Composition of Tribunal- will include a Chairperson, Vice-Chairperson, three judicial members, and three expert members.
 - They will be appointed by the central government on the recommendation of a Selection Committee.
 - The term of office of the Chairperson and Vice-Chairperson shall be five years or till they attain the age of seventy years, whichever is earlier.
 - The central government may also appoint two experts serving in the

Issues with the present Inter State River Water Dispute Act, 1956:

- A **separate Tribunal** has to be established for each Inter State River Water Dispute.
- Inordinate delay in securing settlement of such disputes.
 Tribunals like Cauvery and Ravi Beas have been in existence for over 26 and 30 years respectively without any award.
 - There is **no time limit for adjudication**. In fact, delay happens at the stage of constitution of tribunals as well.
- No provision for an adequate machinery to enforce the award of the Tribunal.
- Lack of uniform standards- which could be applied in resolving such disputes.
- Lack of adequate resources- both physical and human, to objectively assess the facts of the case.
- Lack of retirement or term- mentioned for the chairman of the tribunals.
- Issue of finality- In the event the Tribunal holding against any Party, that Party is quick to seek redressal in the Supreme Court.
 Only three out of eight Tribunals have given awards accepted by the States.
- Central Water Engineering Service as assessors to advise the Bench in its proceedings.

 The assessor should not be from the state, which is a party to the dispute.
- **Timeline**: the proposed Tribunal must give its decision on the dispute **within two years**, which may be extended by **another year**.
- **Finality** The decision of the Tribunal shall be final and binding. The bill also removes the requirement of publication of decision in the official gazette in the original Act. It also makes mandatory for the Central Government to make a scheme to give effect to the decision of the Tribunal.
- Data Collection and maintenance of a databank- at national level for each river basin by an agency to be appointed and authorized by central government.

Benefits of the Amendment

- **Speed up the Process-** as there will be less work on appointment of judges, assessors and other experts, which used to delay the process at setting up the tribunal itself earlier. Further, with concrete timelines, resolution will be complete.
- **Continuous evaluation** of the river basins could be possible owing to the maintenance of databank. It can not only provide insights on the rivers associated with a particular dispute, rather they can be used in all other basins.

Issues in the Amendment

- **Fear of Centralisation-** Some states like Tamil Nadu and Odisha, have raised serious concerns about the appropriation of more powers by the central government to decide water disputes between states.
 - o Instead of the Chief Justice of India nominating persons for appointments, it would now be the central government making such appointments through a selection committee.
- Benches of Permanent Tribunals are proposed to be created as and when need arise. Thus it is not clear how these temporary benches will be different from present system.
- **Decision still not final-** as the Supreme Court had said that it can hear appeals against water tribunal set up under ISWDA.
- Institutional mechanism to implement tribunal's award is still mired in ambiguities.

Way Forward

- Inter-State Council (ISC) can play a useful role in facilitating dialogue and discussion towards resolving conflicts.
- Bringing water into concurrent list: as recommended by Mihir shah report where central water authority
 can be constituted to manage rivers. It was also supported by a Parliamentary Standing Committee on Water
 Resources.

- Declaration of Rivers as National Property: which may reduce the tendency of states, which consider controlling of river waters as their right. Water disputes need to be depoliticized and not be made into emotional issues linked with regional pride. Further, there is a need for scientific management of crop patterns by bringing out policy measures that promote water efficient crops and varieties.
- **Interlinking of rivers** can help in adequate distribution of river water in the basin areas.

1.4. PARLIAMENTARY STANDING COMMITTEES

Why in news?

In the recent session of Parliament, all the bills were passed without the scrutiny by parliamentary standing committees.

Background

- Parliamentary Committees are setup as an instrument to assist the working of Parliament in its various activities. They are classified into- Standing Committee and Adhoc Committee (temporary). Standing Committees are permanent, constituted every year and work in a continuous manner.
- Recently, after the formation of the 17th Lok Sabha, parliamentary standing committees have not been constituted, as consultations among parties are still under way. Partly as a result of this, all the bills were passed without committee scrutiny.
 - According to PRS Legislative Research, only 25% of the Bills introduced were referred to committees in the 16th Lok Sabha, as compared to 71% and 60% in the 15th and 14th Lok Sabha respectively.

Significance of the Standing Committee System-

- Detailed scrutiny and upholding government accountability: Parliament cannot effectively uphold the accountability of the executive due to the increasing magnitude and complexity of modern administration and time constraints of the sessions of Parliament. The disruptive changes in technology also throw up new policy challenges that require a constant reform of legal and institutional structures.
 - Standing committees increase the ability of Parliament to scrutinize government policies and make it accountable through an informed debate in the legislature.
 - They also examine budgetary allocations for various departments and other policies of the government.
 - Some of them are the Public Accounts Committee, the Estimates Committee, the Committee on Public Sector Undertakings, the Departmental Standing Committees and other committees to inquire, control, and for general purpose etc.
- Work in non-partisan manner- Committee meetings are 'closed door' and members are not bound by party whips, which allows them the latitude for a more meaningful exchange of views. It aids the Opposition and other members in both the houses to play a greater role in exercising control over the executive.
- Engagement with relevant stakeholders: The committees regularly seek feedback from citizens and experts on subjects it examines for example, the RBI governor was summoned by the Finance Committee on the subject of demonetization.
 - They act as a link between parliament and people on the one hand, and between the administration and parliament on the other.
- Financial Prudence- The system ensures economy and efficiency public expenditure, as the ministries/ departments would not be more careful in formulating their demands.

Implications of passing bills without going through Standing Committee

In absence of such scrutiny by the Standing Committees, the legislations may not become holistic and farsighted. Such

Other issues related to the standing committees

- **Poor attendance of Members:** The attendance of members in committee meetings has been a cause for concern as well, which is about 50% since 2014-15.
- Short tenure for members: Constitution of DRSCs for a year leaves very little time for specialisations.
- Lack of Discussion on Committee Reports: Since they are recommendatory in nature, reports of the committees are not taken up for discussion in Parliament except for references in certain debates on bills.
- Lack of expertise: The members of the committee lack technical expertise required to go into intricacies of specialized subjects under consideration of some committees such as accounting and administrative principles.
- **Politicization of the proceedings:** With greater public interest shown in some issues, members have started taking strict party lines in committee meetings.

- laws may require frequent amendments, which delay the process and defeat the purpose.
- It complements other actions such as frequent use of guillotine, ordinances, which **try to evade scrutiny of the legislature.**
- All this does not allow a **detailed, continuous, in-depth and comprehensive control** of Parliament over executive.

Way Forward

Strengthening the committee system can go a long way in improving the quality of laws drafted and minimise potential implementation challenges. The need of the hour is for greater and effective utilisation of Parliamentary Committees to strengthen Parliament as a deliberative body which can ensure effective oversight.

Scrutiny of all the legislations through Parliamentary Standing Committees must be made mandatory by convention. The government must not seek to vote the legislation without it being considered by the Standing Committee.

1.5. STATE FUNDING OF ELECTION

Why in News?

A private member's bill 'Representation of the People (Amendment) Bill' was proposed in the Rajya Sabha that seeks removal of the limit on candidate election expenditure and proposed state funding of elections.

What is state funding of election?

This means that government gives funds to political parties or candidates for contesting elections and meeting other election-related expenses instead of individual campaign contribution.

Argument for state funding of election

- It creates a level playing field for parties and candidates with less resources.
- It helps to reduce the dependency on corporate or private money.
- By providing "floor level fund" to everyone, state fund scheme can be very **helpful for smaller and newer political entrants.**
- Candidates who are elected through a fair electoral process would be **transparent and accountable in providing governance.**
- Through state funding the demand for internal democracy in party, women representations, representations of weaker section can be encouraged.

Argument against state funding of election

- State **funding increases the distance between political leaders and ordinary citizens** as the parties do not depend on the citizens for mobilization of party fund.
- If all or a substantial amount of the party income comes directly from the State rather than from voluntary sources, political parties risk losing their independence and become organs of the State, thereby losing their ties to the civil society.
- State funding would **encourage non-serious candidate to enter into the political arena** merely to avail of state funds.
- Many experts believe that state-funding of election will not stop parties from lobbying and getting undisclosed additional funds.

Various Committees on state funding of election

- Indrajit Gupta Committee on State Funding of Elections (1998): It said that state funds should be given only to registered national and state parties and that it should be given in kind only.
- Law Commission Report on Reform of the Electoral Laws (1999): The report concurred with state funding of election but also recommended first putting a strong regulatory framework in place including internal elections, accounting procedures etc.
- National Commission to Review the Working of the Constitution (2001): It did not endorse state funding of
 elections but concurred with the 1999 Law Commission report that the appropriate framework for
 regulation of political parties would need to be implemented before state funding is considered.

- **Second Administrative Reforms Commission (2008):** It also recommended partial state funding of elections for the purpose of reducing "illegitimate and unnecessary funding" of elections expenses.
- View of election commission: The Election Commission has told a parliamentary committee that it does not support state funding of elections but instead seeks "radical" reforms in the way funds are spent by political parties.

Conclusion

Many successful democracies around the world has successfully implemented comprehensive or partial state funding of election. India should also implement the state funding of election to curb use of black money. But first bring necessary reforms like inner party democracy as recommended by most of the commission.

Candidate election expenditure

- The Election Commission of India has set an expenditure limit of Rs 70 lakh for the candidates in the Lok Sabha elections 2019.
- A limit has been fixed for all expenses such as posters, banners, vehicles, prints and electronic advertisements, public meetings, tents and all such expenses made by the candidates under legal limits of which a record is maintained in the Lok Sabha election.
- It is mandatory for all candidates to open an account in bank for the expenses, the payment of which will be made through cheque.
 - An incorrect account, or expenditure beyond the ceiling, can attract disqualification for up to three years.
- The district authorities monitor the expenses of the political parties from the date of declaration of election to the date of declaration of results through a flying squad.

Argument for a cap

- Limits on campaign expenditure are meant to provide a level-playing field for everyone contesting elections.
 - The 255th Report of the Law Commission on electoral reforms argued that unregulated or under-regulated election financing could lead to "lobbying and capture, where a sort of quid pro quo transpires between big donors and political parties/candidates".

Argument Against Capping

- Candidate do not provide true poll expenses: There is evidence to suggest that candidates may be spending beyond their ceilings.
 - An analysis of expenses for the 2014 Lok Saha elections by the non-profit Association for Democratic Reforms (ADR) found that even though candidates complained that the EC's limits were too low and unrealistic, as many as 176 MPs (33%) had declared election expenses that were less than 50% of the limit in their constituency.
- **Political Parties are not covered:** Recently, the EC has asked the government to amend the Representation of Peoples Act and Rule 90 of The Conduct of Elections Rules, 1961, to introduce a ceiling on campaign expenditure by political parties in the Lok Sabha and Assembly polls.
- **Limit is counter-productive:** Honest candidate who can raise white money openly cannot spend more than ₹70 lakh in parliamentary elections. Whereas candidate with black money usually drive their expenditure underground.

1.6. FREE LEGAL AID IN INDIA

Why in News?

A report titled 'Quality of Legal Representation: An Empirical Analysis of Free Legal Aid Services in India' was released by National Law University, Delhi (NLUD).

What is free legal aid?

- Free legal services entail the provision of free legal aid in civil and criminal matters for those who cannot afford the services of a lawyer for the conduct of a case or a legal proceeding.
- The instrument of legal aid services across the globe have been recognised as a part of

Legal Services' are of two types:

- Pre-litigation Legal Services: It includes services such as legal education, legal advice, legal awareness, pre litigation settlements etc. In order to provide pre-litigation services government established or give financial support to law colleges and law faculties in the Universities, Legal aid clinics.
- Post-litigation Legal Services: Post litigation legal services incudes – appointment of lawyer for poor, reimbursement of process fee, witnesses' expenditure, court fee etc. by the State.

fundamental human right under the international instruments, conventions, codes and agreement.

 Legal aid as a human right is envisaged in Articles 7, 8 and 10 of the Universal Declaration of Human Rights, 1948

Legal Aid in India

- In India, right to free legal aid or free legal service is an essential fundamental right guaranteed by the Constitution. It forms the basis of reasonable, fair and just liberty under Article 21 of the Constitution.
- In 1976, government inserted Article 39A with 42nd
 Amendment act, which directs the State to provide free legal aid by suitable legislation or schemes or in any other way

Persons eligible for getting free legal services include

- Women and children.
- Members of SC/ST.
- Industrial Workmen.
- Victims of trafficking in human beings or beggars.
- Victims of mass disaster, violence, flood, drought, earthquake, industrial disaster etc.
- Disabled persons.
- Persons in custody.

• To give statutory base to legal aid programmes, parliament passed Legal Services Authorities Act in 1987.

Legal Service act, 1987

- This Act came into force on 9th November, 1995 to establish a nationwide uniform network for providing free and competent legal services to the weaker sections of the society on the basis of equal opportunity.
- Under the act, the Central Government constituted National Legal Services Authority (NALSA).
 - The Central Authority shall consist of the Chief Justice of India who shall be the Patron-in-Chief and a serving or retired Judge of the Supreme Court to be nominated by the President, in consultation with the Chief Justice of India, who shall be the Executive Chairman
- In every State, a State Legal Services Authority and in every High Court, a High Court Legal Services Committee have been constituted.
 - O District Legal Services Authorities, Taluk Legal Services Committees have been constituted in the Districts and most of the Taluks to provide free legal services to the people and conduct Lok Adalats in the State.

Issues in access to legal aid service in India

- Lack of awareness: which leads to exploitation and deprivation of rights of the poor.
- Less number of empanelled lawyers: A recent report by Commonwealth Human Rights Initiative (CHRI) reveals that there are only five lawyers empanelled for legal aid service on per lakh population.
- Long pendency: The average time between application for legal aid and lawyer assigned was 11 days nationally, which stretched to 48 for Rajasthan.
 - The best performers were states such as Andhra Pradesh which took less than a day to allocate a lawyer.
 Kerala had the highest number of legal aid lawyers per district at 234
- **Per capita spending:** The per capita spending on legal aid in India is just Rs 0.75 (\$0.008 USD). In Australia, it is \$23 and in Argentina \$17.
- Quality of service: There is a perception that free service is incompatible with quality service. In recent report by NLUD, about 75% of beneficiaries responded that they opted for free legal aid because they had no means and resources to hire a paid private practitioner. While only 8% opted for quality of legal service by LAC
- Service fee: The lawyers are compensated by the government at rates that are below the market average.
- No legal aid at the police station:
 Article 22 of the Constitution guarantees the right to a lawyer for an arrestee, but there is no national scheme for legal aid at the police station, neither do any state have such a scheme.

Function of NALSA

- To lay down policies and principles for making Legal Services available under the provisions of the legal service Act.
- To Monitor and evaluate implementation of the legal aid programmes at periodic intervals and provide for independent evaluation of programmes and schemes implemented in whole or in part by funds provided under this Act.
- To frame the **most effective and economical schemes** for the purpose of making the legal services available under this act.
- To utilise the funds at its disposal and make appropriate allocations of funds to the State authorities and District authorities
- To organise legal aid camps specially on rural areas, slums or labour colonies for educating weaker sections of society as to their rights
- Take necessary steps by way of social justice litigation with regard to consumer protection, environmental protection or any other matter of special concern to the weaker sections of the society and for this purpose, give training to social workers in legal skills.
- To encourage the settlement of Disputes by ways of negotiation, conciliation and arbitration
- To undertake and promote research in the field of legal services with special references to need for such services among poor
- To provide grants in aid for specific schemes to various voluntary social services institutes working at grass root level specially amongst SC and ST, women and rural and urban labour.

Steps to be taken

- **Public awareness:** Successful legal aid delivery in India requires the government to embark on a campaign to inform and educate the public of its right to free legal aid.
- **Inclusion of all designated senior lawyers**: in the Legal Aid Schemes and requesting them to undertake at certain cases free of charge every year.
- Better payment: Payment of better honorarium to the lawyers who provide Legal Aid.
- Paralegal Volunteers and Panel Lawyers: There is a need for improvements in selection, training and monitoring of empanelled lawyers.
- Supporting Innovative Legal Empowerment Initiatives: Government should support various innovative initiatives of Civil Society Organizations and also provide support to legal aid clinics being run by certain law schools/Institutions.
- Client feedback: It is an important element to gauge the quality of legal representation.

1.7. ARBITRATION IN INDIA

Why in news?

Recently, the government has passed **New Delhi International Arbitration Centre (NDIAC)** Act and **Arbitration and Conciliation (Amendment)** Act.

More on NDIAC Act

- The Act envisages NDIAC to replace International Centre for Alternative Dispute Resolution (ICADR) as an Institution of National Importance.
- It will facilitate conducting of international and domestic arbitration, mediation and conciliation proceedings in a most professional, cost effective and timely manner.
- It will be headed by a chairperson, who has been a judge of the Supreme Court or a High Court or an eminent person having special knowledge and experience in the administration of arbitration.
- Other objectives of the centre includes:
 - maintaining panels of accredited arbitrators, conciliators and mediators through a Chamber of Arbitration.
 - establishing an **Arbitration Academy** for training arbitrators.
 - o **promoting studies and reforms** in the field of alternative dispute resolution and related matters.
 - co-operating with other societies, institutions and organisations, national or international for promoting alternative dispute resolution.

Arbitration

- It is the settlement of dispute between parties to a contract by a neutral third party (the arbitrator) without resorting to court action.
- It is one of the ways of alternative dispute resolution. Others being mediation, conciliation and Lok Adalats.
- It is confidential, speedier and cheaper than court.
- Arbitral awards are binding and enforceable through courts.

ICADR

- It was registered as a Society in May 1995 under the Societies registration Act, 1860 for the promotion and development of ADR facilities.
- A major drawback of ICADR, as identified by the Justice Srikrishna Committee, was its failure in keeping pace with new developments in the arbitration scenario to match up with the dynamic developments in the field of arbitration globally.
- It failed to account for the latest developments in the field of arbitration such as provisions for joinder of parties, consolidation of arbitral proceedings, emergency arbitration, etc.
- Another drawback was a large governing council which made it difficult for the institution to coordinate its governance.

More on Arbitration and Conciliation (Amendment) Act, 2019

- It was passed by the parliament recently and amends the Arbitration and Conciliation Act, 1996 to deal with domestic and international arbitration.
- Under it, an independent body called the Arbitration Council of India (ACI) will be set up for
 - o promotion of alternative dispute redressal mechanisms.
 - o framing policies for grading arbitral institutions and accrediting arbitrators,
 - o maintaining a depository of arbitral judgments made in India and abroad, and
 - o maintenance of uniform professional standards for all alternate dispute redressal matters.
- **Appointment of arbitrators** will now be done by the Supreme Court designated arbitral institutions, which was earlier used to be done by parties themselves.

- It seeks to **remove time restriction** for international commercial arbitrations and says tribunals must try to dispose of international arbitration matters within 12 months.
- **Completion of written submissions** to be completed within six months of the appointment of the arbitrators. Earlier there was no time limit.

Benefits of Institutionalised Arbitration

The new acts will strengthen the arbitration ecosystem in India and bring many benefits for the country such as:

- time bound settlement of disputes and accountability of the arbitrator.
- promoting ease of doing business in India.
- bringing in quality experts.
- helping reduce burden on our courts.
- **encouraging investors** in India to resolve their disputes in India instead of the currently preferred arbitration centers in London, Singapore and Hong Kong.
- facilitating India becoming a hub for institutional arbitration.

1.8. DEMAND FOR LOCAL JOB QUOTAS

Why in news?

Recently, Andhra Pradesh became the first state in the country to offer 75% reservation to locals in private jobs.

Background

- There has been growing demand by the people in the states to have local jobs in their states itself.
 - A survey done by the Centre for the Study of Developing Societies (CSDS) in 2016 showed that nearly two-third of respondents were in favour that state priority should be given to the people from the state itself.
 - This sentiment was more profound in the Southern and the Eastern states.
- Various political parties and states have made attempts to use reservation as a major poll plank.
- In this direction, the Andhra Pradesh assembly passed the Andhra Pradesh Employment of Local Candidates
 in Industries/Factories Act, 2019, under which 75% of the privates jobs across all factories, joint ventures,
 and industries in the state, including those

taken up under public-private partnership mode, will be reserved for **local Andhra** people.

- Similar demands are being raised in other states like Karnataka, Maharashtra, Gujarat, Maharashtra too.
- Recently, Madhya Pradesh (MP) also announced that it would bring in legislation to provide 70 per cent reservation in private jobs for locals.

Significance of the move

- Could Promote Inclusive Development- like in Germany, where every village has a factory, India also should have industries in villages and provide jobs to the local people for an all-round development. However, there should be an overarching framework at the Union level to promote such development.
- Could lead to a transparent pattern of industrialisationwithout much scope for corruption and effective implementation of labour laws.

Reasons behind demand for local jobs

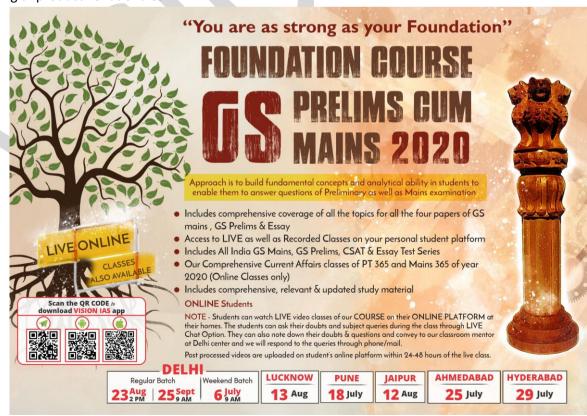
- Agrarian Distress- the agrarian sector is under tremendous stress across the country, and young people are desperate to move out of the sector.
- Lack of jobs- there is a serious dearth of jobs (private and government). Not only are the jobs too few, they are precarious and do not pay well.
- **Displacement of landowners-** Since most of the land requirement is met by acquiring private agricultural lands, the landowners are being displaced and deprived of their occupation and thereby loss of income.
- Lack of participation of all sections in the workforce- Several reports like, the State of Working India 2018 released by the Centre for Sustainable Employment of the Azim Premji University --- have shown that discrimination is one of the reasons for under-representation of Dalits and Muslims in the corporate sector.
- **Perception that Central devolution is insufficient-** especially in the southern states, as they feel successive finance commissions accord a high weightage to poverty and population vis-a-vis development thus majority share goes to the northern states.

Analysis

- May not pass the legal scrutiny- as the Article 16 does not empower the state government to provide for such reservation, rather the Parliament is empowered to do so.
- **Politically motivated move-** which rather than addressing the core concerns like **structural reforms**, **infrastructure** is merely making use of reservations.
- Dangerous for unity of the country- Such moves could lead to a Pandora box where other states start implementing such policies, which result in fractures in the unity of India.
- **Concerns of the Industry-** Although, most of the units employ locals only, however, there are certain sectors where it may be difficult to find locals for the jobs and the units will be forced to search outside.
- **Difficult to attract investments** Andhra Pradesh is already struggling to attract investments in different sectors after bifurcation. Such a decision may further alienate the potential investors. Lack of investments could further drop the job creation.
- Lack of details- While it defines 'Locals' as candidates who are domiciled in the state of Andhra Pradesh, it does not elaborate on the requirements for 'domicile' status.
- **Previous such efforts were not successful-** such as Maharashtra and Karnataka announced some package on this basis, but they were not enforced.

Way Forward

- **Need to tackle the core issues-** of unemployment by more job creation and industrialisation rather than such moves.
 - Governments should provide incentives to industries for more investments and create an enabling environment for it. The Economic Survey 2018-19 also alerts the policy makers against such policy uncertainties for the industries, which may rather impact economic development.
 - O Government should focus on making the youth of a state employable with proper investments in education, health and skill development.
- **Need to promote labour intensive industries-** to make use of the labour surplus in the country, rather than simply forcing any industry for the locals.
- **Need to promote entrepreneurship-** where people are themselves motivated to create livelihood for them. State can provide incentives and help here such as done for Dalit entrepreneurs in Maharashtra.
- **Need to move towards economy based reservation-** rather than further expansion of reservation policies using unproductive rationales.



2. INTERNATIONAL RELATIONS

2.1. REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP

Why in News?

Currently, the 26th round of negotiations for the RCEP are being held in Melbourne, Australia.

About Regional Comprehensive Economic Partnership (RCEP)

- It is a proposed pact between 10 ASEAN economies and six others (New Zealand, Australia, China, India, Japan, and South Korea) with which the grouping currently has FTAs.
- The objective of launching RCEP negotiations is to achieve a modern, comprehensive, highquality, and mutually beneficial economic partnership agreement among the ASEAN Member States and ASEAN's FTA partners.
- It is often characterised as a China-led response to the Trans-Pacific Partnership (TPP) put forward by the US.
- RCEP will provide a framework aimed at lowering trade barriers and securing improved market access for goods and services for businesses in the region, through:
 - Recognition to ASEAN Centrality in the emerging regional economic architecture and the interests of ASEAN's FTA partners in enhancing economic integration and strengthening economic cooperation among the participating countries
 - Facilitation of trade and investment and enhanced transparency between the participating countries.
 - Facilitation of SMEs' engagements in global and regional supply chains
 - Broaden and deepen ASEAN's economic engagements with its FTA partners.
- Though talks on seven of the sixteen chapters of the agreement are complete, the key

REPUBLIC OF KOREA CHINA (SOUTH) JAPAN LAOS INDIA VIETNAM MYANMAR BRUNEI-DARUSSALAM THAILAND THE PHILIPPINES CAMBODIA MALAYSIA SINGAPORE **INDONESIA** RCEP countries cover approximately half the world's population and 27% NEW ZEALAND of global trade **Potential of RCEP**

RCEP
REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP

- RCEP has the potential to deliver significant opportunities for businesses in the East Asia region making it the world's largest trading bloc.
- 16 RCEP participating countries account for almost half of the world's population
- It contributes about 30 per cent of global GDP and over a quarter of world exports.
- SMEs make up more than 90 per cent of business establishments across all RCEP participating countries.

RCEP compared with Trans-Pacific Partnership (TPP)

- TPP negotiations was led by US while RCEP was led by China.
- The TPP was a more ambitious plan, including market access for goods and services as well as regulations on labour, the environment, intellectual property and state-owned companies.
- The RCEP, on the other hand, is more narrowly focused on standardising tariffs across the region, as well as improving market access for services and investment.
- RCEP includes **special provisions for developing economies**, such as gradual tariff liberalisation and transition times.
- According to forecasts from the Asian Development Bank in 2016, the TPP had the potential to provide up to US\$400 billion in global income benefits before the US withdrawal, whereas the RCEP's contribution would amount to an estimated US\$260 billion.
- areas of goods, services and investment are still being negotiated.
- Despite pressure to conclude the Regional Comprehensive Economic Partnership (RCEP) trade agreement this year, **there is huge differences among members** like India-China trade relationship, Australia and New Zealand on labour and environmental protections etc.
- RCEP is likely to be signed by the middle of next year.

How RCEP can be beneficial for India?

- Market Access: Owing to its size, it is expected to provide market access for India's goods and services exports and encourage greater investments and technology into India.
- Enhance MSME sector: RCEP recognises the importance of being inclusive, especially to enable SMEs leverage on the agreement and cope with challenges arising from globalisation and trade liberalisation. Hence, RCEP would facilitate India's MSMEs to effectively integrate into the regional value and supply chains.
- Alternative to APEC: RCEP offers alternative to Asia-Pacific Economic Co-operation (APEC) on economic front in which India has been attempting to join APEC since 1993, but still has not got the membership.
- **FDI gains**:. The arrangement is expected to harmonise the trade-related rules, investment and competition regimes of India with those of other countries in the group. There would be a boost to inward and outward foreign direct investment, particularly export-oriented FDI.
- Increase in Trade: India's engineering trade with RCEP countries reached \$108 billion in 2018 from \$79 billion in 2014. Exports increased from \$15.34 billion to \$17.20 billion in 2018 while imports increased from \$64.28 billion to \$90.95 billion.
- Increasing hold in Indo-Pacific region: It provides a platform to India for rebalancing the Asia strategy and an acknowledgement of linkage between the Indian and Pacific Oceans.
- Aligned with India's initiative
 - o India wants its 'Make in India' to become a global success, it must participate positively to become a part of the Asian value and supply chain which either begins or ends in India.
 - o It also aligns with **Act East Policy** which make both economic and strategic sense for India to be the part of the agreement

Growth of supply chains:

- Signing the RCEP treaty will enable India to **enter the global supply chain** as it will be helped by frictionless movement between 16 members.
- RCEP may also encourage regional supply chains involving BIMSTEC countries and ASEAN members in products that the region specialises in like bamboo and wood products, leather goods, garments, silk, handicrafts and jewellery.
- **Beneficial for labour market:** RCEP will offer India with opportunity to do more labour intensive manufacturing as multinationals would be attracted to set up manufacturing base in India and RCEP membership will enable them to access the large RCEP market.

India's Concerns with RCEP

- Trade deficit: India's trade deficits have always widened with nations after signing free-trade-agreements (FTAs) with them. The same is true for India's FTAs with the ASEAN, Japan, Korea, and Singapore, most of which are RCEP nations.
 - o India's merchandise trade deficit with the RCEP grouping hit \$105 billion in FY19 (60% of its total deficit).
 - The broad trade flows analysis indicates that the Compounded Annual Growth Rate (CAGR) of imports was 9.06 per cent while for exports, it was 2.90 per cent during the period of 2014-2018, reflecting higher growth of imports than exports.
- Threat to domestic market: RCEP members, particularly China, are demanding zero tariffs over 90 per cent tariff lines which is a major concern for India as low cost Chinese manufacturing goods will swamp its domestic market by dumping cheaper goods.
 - A large number of Indian industry including iron and steel, dairy, marine products, electronic products, chemicals and pharmaceuticals and textiles have expressed concerns that proposed tariff elimination under RCEP would render them uncompetitive.
 - o India has several sensitive areas of competing interests in agriculture, horticulture and dairy with other non-FTA partners like Australia and New Zealand.
- Lack of compliance with rules: The surge in goods imports into India is accentuated by instances of nonadherence to the Rules of Origin provisions and lack of full cooperation in investigating and addressing such breaches.

Rules of origin

- They are the criteria needed to determine the national source of a product.
- Their importance is derived from the fact that duties and restrictions in several cases depend upon the source of imports.

- o India has made tagging the "Country of Origin" on all products a sticking point in RCEP negotiations.
- Competition from China: It is evident that the size and scale of Chinese manufacturing industry backed with extensive financial and non-financial support provide a clear edge to Chinese manufacturing producers.
 - o Product groups such as electrical machinery and equipment and parts thereof, and machinery, mechanical appliances, nuclear reactors are major contributors to India's trade deficit in engineering goods with China.
- Low labour productivity: Despite low relative labour cost, labour productivity in India in manufacturing is still one of the lowest in the world, and spatially fragmented labour laws escalate costs of transaction. Under such circumstances, the Indian industry is hardly in a position to compete in a level playing ground in a free-
- Strict IPR policy: The "stringent IP provisions" have been stumbling blocks for a while, with India arguing for these to be taken out of the agreement.
 - The provisions, if adopted, would lead to domestic pharma companies not being able to launch or export affordable life-saving drugs across the world.
 - While in the agriculture sector, farmers would lose the right to save or sell seeds or the harvested produce from plant varieties that have been granted intellectual property.
 - India had negotiated to reject high-level protections at RCEP under the International Union for the Protection of New Varieties of Plants (UPOV), a provision going beyond World Trade Organization, or 'WTO-plus'.

Way Ahead

- Protect domestic industry: Given the costs and benefits in RCEP, it is important for India to strike a balance between domestic and external interests to minimise the adverse effects of RCEP on its domestic engineering industry.
 - o It is important to grasp the possible opportunities that RCEP will extend to the Indian engineering industry as some of RCEP countries, particularly China, are moving up the value chain and vacating space for other low-cost economies.
- Use of skilled labour: India has been insisting on capitalising on its pool of 'skilled' labour force to gain from improved access to employment opportunities in these economies.
 - This has been expected to come about by increasing the ease of movement of professionals through the liberalisation of what is called Mode 4 in services trade.

Mode 4 in services trade

- The movement of natural persons is one of the four ways through which services can be supplied internationally.
- Otherwise known as "Mode 4", it covers natural persons who are either service suppliers (such as independent professionals) or who work for a service supplier and who are present in another WTO member to supply a service.
- Protect tariff structure: India should continue to maintain its position of proposed dual tariff structure in the RCEP as it will help India to protect its tariff lines which are more vulnerable to cheap Chinese imports.
 - o It must emphasise on a special and differential treatment based on stages of economic development.
- Propose a "non-tariff ecosystem" with China to facilitate exports: India should try to evolve a framework to negotiate sanitary and phyto-sanitary regulations, technical regulations, conformity assessment systems, sectoral regulations and their compliance frameworks.
 - o A specific annexure for non-tariff barriers with China need to be negotiated to protect our export interest to avoid the scope of disguised trade barriers.
- Restrict Rules of Origin (RoO): It can be used as a strong instrument in RCEP to curb the free flow of Chinese goods into the domestic market.
 - India should restrict RoO to high value-addition to prevent the imports of cheap Chinese goods, which may come to India through our existing FTA partners.
 - Strict RoO in RCEP will provide a safety wall to domestic producers against cheap Chinese goods.
- Labour and market reforms: If domestic industry has to thrive, it needs protection as also the enabling conditions created by factor and product market reforms.
- Placing suitable safeguards: Within the FTA, provision should be made for safeguard measures like antidumping etc which should be invoked if a volume or price trigger for the concerned products is reached.

2.2. AFGHAN PEACE PROCESS

Why in news?

Recently, India has spelt out three new "red lines" on the peace and reconciliation process in Afghanistan.

Background

- Afghanistan has been in a state of turmoil for the last 40 years including a Soviet invasion of Afghanistan in 1979 and withdrawal in 1989.
- The Taliban came to power in 1996 and were later ousted from power by International Security Assistance Force (ISAF) in an effort to counter Al-Qaeda in 2001.
- A new government was formed, but Taliban was not eliminated and the struggle between different sections has continued since then.
- Since 2011, NATO forces started withdrawing. In 2014, US also declared withdrawal from Afghanistan.
 - o After that the Taliban has steadily expanded and a continued turmoil has remained in Afghanistan.
 - According to the U.S., Afghan forces control just a little over half the territory today, down from nearly three-fourths in 2015.
 - Since then various countries have been involved in bringing peace in the country, by negotiating with all stakeholders.
- A new initiative (**Quadrilateral Coordination Group**) involving the U.S., China, Pakistan and Afghanistan was launched in January 2016.
- Afghan President Ghani launched the **Kabul Process for Peace and Security Cooperation** and made an unconditional dialogue offer to the Taliban.
- Recently, the Afghan government announced that it was preparing for direct negotiations with the Taliban. However, Taliban rejected it stating its refusal to directly negotiate with the Afghan side until the United States announces a schedule for withdrawing the remainder of its 14,000 troops in the country.
- The US also undertook "agreement in principle" on the framework of a peace deal with the Taliban earlier this year.
- The legitimacy of Taliban has increased drastically and almost all the stakeholders want to engage with Taliban.
- The quadrilateral consultation group has now agreed to start **intra-Afghan negotiations** between the Taliban, the Afghan government and other local stakeholders.
- With this changing scenario, India has also softened its stance on engaging with Taliban, even though it has drawn some red lines on the peace and reconciliation process in Afghanistan.

India's role in Afghan peace process

- Traditionally, India has been in favour of democratically elected government in Afghanistan and has
 promoted its cause. India has argued that the Taliban are not elected and have no locus standi, as they do
 not represent the will of Afghan people.
- But now, India said it is committed to "any process" which can help Afghanistan emerge as a united, peaceful, secure, stable, inclusive and economically vibrant nation, with guaranteed gender and human rights.
- This was in sharp contrast to India's position over the last few years, where it had always supported
 "Afghan-led, Afghan-owned, and Afghan-controlled" process, with participation of the Afghanistan
 government.
- The new red lines are seen to be more realistic and in sync with the current situation. India now needs to be
 more articulate about this and proactive diplomatically, so that it can be part of the regional initiatives on
 Afghanistan.

All initiatives and processes must include all sections of the Afghan society, including the legitimately elected government Importance In the past, the Afghan government was often sidelined by international interlocutors when they engaged with the Taliban. There is acceptability in India about talking to the Taliban, since they represent a "section of the Afghan society".

Any process should respect the constitutional legacy and political mandate.

Any process should not lead to any ungoverned spaces where terrorists and their proxies can relocate.

- The achievement of establishing democratic processes and human rights, including women's rights, should be respected.
- This is crucial for India, as it points out the threat from terrorist groups including the Haqqani network, Al Qaeda, Islamic State, which must not be allowed to operate there.
- Also, the Pakistan-based terrorist groups like the Lashkar-e-Taiba, Jamaat-ud-Dawa, and Jaish-e-Mohammed must not be allowed to relocate.

Significance of Afghan Peace Process for India-

- Peace in the region- is needed so that trade and prosperity could be ushered among the countries.
- Strategic Depth- India has invested heavily in capacity building of the Afghan forces, administration among other domains. If a settlement is achieved, India will have a strategic partner in Afghanistan, which can be used as a tool against Pakistan.
- Other Areas of Cooperation- with Afghanistan has a lot to offer for India such as-
 - Economic Markets- for Indian agricultural products, electrical machinery, rubber products, pharmaceuticals among others. During April-December 2016-17, the bilateral trade was to the tune of \$590.1 million with India's exports to Afghanistan being \$377.2 million and imports from Afghanistan worth \$212.9 million.
 - o Natural Resources- such as hydrocarbons, rare earth metals, and other minerals.
 - o **Connectivity-** to Iran and Central Asia through highways.
- **Spread of terror-** If the terror groups operating from and around Afghanistan-Pakistan border are not neutralized now and US withdrawal takes place in haste, it could have dangerous effects for Indian security.

Challenges in Afghanistan peace process

- **Rise of IS**: Despite the Afghan government's claims of cracking down on militants, threats from the IS and Taliban have only grown both of which have a goal to destabilize the state that and throw the country into further chaos.
- **Failure of USA's strategy**: USA has failed to evolve a cohesive strategy regarding military aid to Pakistan, troop presence in Afghanistan, indiscriminate use of airpower or infrastructure building in the country.
- Role of Pakistan: Pakistan has direct links with the Taliban and its allies in the Haqqani network and provides safe havens to terrorist groups within it territory. Pakistan would hamper the democratic process in Afghanistan, as it loses strategic depth to India due to that.
- Legitimacy of the National Unity Government (NUG) seems eroded due to conflict between Chief Executive Abdullah Abdullah and President Ashraf Ghani, corruption, lack of implementation of Electoral reforms and refusal of Taliban to talk to Afghan government which it thinks as artificial, foreign imposed and not representative of Afghan people.
- Conflicts between different stakeholders- There seems to be a 'Great Game' for influence in Afghanistan.
 - O U.S.-Russia tensions are creating space for proxies for both on Afghan soil, and the attacks by al-Qaeda and IS-related terror groups have their roots in the larger war between Iran and the Arab world.
 - o Tensions between India and Pakistan also cast a shadow over Afghanistan, with India's development assistance under attack.
 - In turn, driven by the desire to secure itself from Islamist groups, China is trying to build a rival military base in Afghanistan. All these factors have contributed to regrouping and strengthening of Taliban which controls more than half of territory in the country.

Conclusion

- India must adopt a balanced diplomacy without favoring any particular country by sacrificing its own interests
- The inclusion of the Taliban in the talks clearly indicates that any future government will be formed with the support of the armed group, which in turn has Pakistan's support.
 - Under such a power-sharing agreement that would allow for Pakistan's influence, India's commercial interests and security concerns will only be exacerbated.
 - o India can also unilaterally open dialogue with the Taliban to protect its interests.

• India must ensure that it remains in the loop of consultations or otherwise arrange for alternative means to safeguard its commercial and security concerns in the aftermath of the withdrawal of coalition forces.

2.3. NATO ALLY-LIKE STATUS

Why in news?

The US Senate has passed a binding legislation to accord India the same status as its other NATO allies — South Korea, Japan and Australia.

More on news

- It will be part of the **National Defense Authorisation Act** for the current fiscal 2020.
- The legislation paves the way for improved maritime security and advanced technology transfer between the two countries.
- India and USA over the years have strengthened their defence relations thorough various agreements such as:
 - Signed the Logistics Exchange Memorandum of Agreement (LEMOA).
 - Signed the Communications, Compatibility and Security Agreement (COMCASA).
 - India has special status of a Major Defence Partner to the US, by virtue of the National Defence Authorisation of 2017.
- But, India was still at best equivalent to other Major non-NATO allies (MNNA) of the US.
- Upon enactment, the NDAA will thus ensure that the US State Department treats India as a non-member NATO ally for the purposes of the Arms Export Control Act.

Significance of this move

- Defence benefits for India- such as
 - Make India eligible for entry into cooperative research and development projects with the Department of Defense (DoD) on a shared-cost basis.
 - Enable Purchase of depleted
 Uranium anti-tank rounds.

About NATO

- It is an **intergovernmental military alliance** between 29 North American and European countries.
- It implements the **North Atlantic Treaty** that was signed on 4 April 1949.
- It constitutes a system of collective defence whereby its independent member states agree to mutual defence in response to an attack by any external party.
- NATO's defence commitments overseas have evolved from fighting Communism to Islamist extremism, with its involvement in conflicts like Kosovo, Afghanistan, Mediterranean waters and Iraq, especially after 9/11.
- Major non-NATO ally (MNNA) is a designation given by the United States government to close allies that have strategic working relationships with the US Armed Forces but are not members of the NATO.

Challenges faced by the NATO

- Handling of US-Russia Conflicts-
 - OUS has formally declared its intent to withdraw the Intermediate-Range Nuclear Forces (INF) Treaty, which prevents the United States and Russia from fielding ground-based missiles with ranges between 500 and 5,500 kilometers.
 - Russia has deployed some of its missiles, after it accused the NATO deployment in its spheres of influence.
- Containing the Chinese growth- especially its expansion in Indo-Pacific and its assertiveness in Africa and Middle East.
- Reducing enthusiasm of the US-
 - US President Donald Trump called the alliance "obsolete", casting the future of US involvement in the group into doubt
 - He has also complained about the bulk of NATO's budget being funded by the US, resulting in a landmark resolution to withdraw the US from the organisation, which was defeated.
- **US decision to withdraw from Afghanistan-** has caused concerns among other NATO partners.
- Need to learn the **new art of security** and new domains such as space security, cyber security.
- o Give India a **Priority delivery** of ships and military ration.
- Allow possession of War Reserve Stocks of Department of Defence owned equipment that are kept outside of American military bases
- Leaves no scope of ambiguity- NDDA clarifies in greater detail what the closer defence cooperation actually means and entails between the two countries.
- **Highlights India's stature-** and shows the faith and centrality of India in the USA's scheme of things in the times to come.
- **Ensures enduring relation-** between India and USA which helps India to maintain a strategic autonomy on various other issues like climate change, trade etc.

- Edge over Pakistan- in terms of relation with NATO and US, which have been falling over time (Refer the box). As China ramps up its alliance with Pakistan, having the perks of a NATO ally can help advance India's national security and defence commitments.
- Boost cooperation in Indo-Pacific- This adjustment to US law will further allow the US-India partnership to flourish in line with security commitments to the Indo-Pacific region.
- Does not impose burden on India- As opposed to member nations who have to fund NATO, major non-NATO allies (MNNAs) and NATO allies are only involved in strategic working partnerships with NATO countries.

NATO-Pak Relationship over time

- Pakistan received the status of Major non-NATO Ally from the US in 2001.
- Apart from receiving funding and defence equipment, Pakistan participated in the following activities of NATO-
 - Pakistan Military and NATO established the Joint **Intelligence Operation Centre.**
 - Pakistan has opened ground and airlines of communication to re-supply NATO mission.
- However, the US in 2017 downgraded regional rival Pakistan's status as an MNNA, citing the harbouring of Osama bin Laden and financing of terror, besides suspending \$1.66 bn worth of military aid.

2.4. INDIA-UK RELATIONS

Why in News?

India and the UK have agreed to set up three new bilateral working groups to tackle barriers to trade in specific sectors of food and drink, healthcare and data services as part of the 13th Joint Economic and Trade Committee (JETCO) meeting.

More about news

- The three new business-led working groups will be run by the UK India Business Council (UKIBC) alongside the Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI).
- The three groups will identify solutions to the key issues in each sector, making recommendations directly to the UK and Indian ministers.
- The three new bilateral working groups were launched as part of the 13th Joint Economic and Trade Committee (JETCO) meeting.

India-UK relations

Economic:

- UK-India trade continues to increase, over the last three years, between 2015-2018, total trade between the UK and India has increased by 27%.
- UK is the 4th largest inward investor in India,
- after Mauritius, Singapore and Japan, accounting for around 7% of all foreign direct investment into India.
- India continued to be the third largest investor in the UK and emerged as the second largest international job creator with Indian companies having created over 110,000 jobs in the UK.
- Education: Over the last 10 years, the relationship has grown substantially with the introduction of bilateral mechanisms such as the India-UK Education Forum, UK-India Education and Research Initiative (UKIERI), Joint Working Group on Education, Newton-Bhabha Fund and Scholarship schemes.
- Science and Technology: Joint investment in UK-India research has been growing.

Bilateral Institutional Mechanisms between India & UK

- India-UK Joint Economic and Trade Committee (JETCO): The JETCO was established on January 13, 2005 to develop a strategic economic relationship following the Joint Declaration "India-UK towards a new and dynamic partnership" between the then Prime Ministers of the two countries in September 2004.
- India-UK Economic and Financial Dialogue (EFD): The objective is to strengthen the financial and economic relationship between India and the UK, in the light of each country's economic policy agenda and within a global economic perspective.
- India-UK Financial Partnership (IUKFP): It will strengthen links between the Financial Services industries of both countries and deepen cooperation between London and Mumbai, two of the World's leading Financial Centres
- India-UK CEO's Forum: Objective of the forum is making recommendations to Governments for increasing the level of bilateral trade and investment between the two countries

UK India Business Council (UKIBC)

The UKIBC, a membership-based non-profit body set up to promote the UK-India economic partnership, plays the role of a Secretariat for the JETCO talks and provides a forum for UK companies to enhance their links and develop new partnerships with Indian businesses.

- India-UK Clean Energy R&D Centre with a focus on solar energy storage and a collaborative R&D programme in energy efficient building materials were announced.
- New research partnerships worth £80 million including a new Joint Strategic group on Anti-Microbial Resistance (AMR) with a joint investment of up to £13 million have also been established.
- **Cultural ties**: For Indian tourists, the UK is the fifth most-popular destination.

Challenges

- Restrictive immigration policies: India has been asking for an ease in visa rules but the UK has been hardening its stance on the issue.
 - o The recent exclusion of India by the UK Home Office from a new list of low-risk countries with relaxed student visa rules is a case in point.
- Decreasing Indian students: The number of Indian students coming to the UK halved from about 40,000 in 2009-10 to 20,000 in 2017-18: far fewer than those opting to study in the US, Canada, Australia or New Zealand.
- Inclination towards China: India was being treated less favourably than China. For e.g. UK pilot scheme introduced in 2016 gave Chinese nationals access to a multiple entry visa almost four times cheaper than that available to Indian citizens.
- Treatment towards former colonies: At the heart of the problem is a lingering colonial mindset that still informs British foreign policy treating former colonies simply as markets to be mined.
 - The reality that countries like India are now major economic powers in their own right and expect to be treated as equal partners in accordance with their new status has not fully sunk in.

Way Ahead

- Collaboration of India and UK in the realm of investment and business can truly transform both the nation's entrepreneurial ecosystem.
- It is essential for both the parts to become proactive and prompt in finalizing the bilateral agreement to rejuvenate the existing bilateral trade between India and UK.
- Both nations should continuously meet and engage in discussions related to mitigating bilateral trade issues, defense ties, renewable energy, skill development and other vital areas.
- There is a huge scope in areas like education and among others.

Recent Development

- UK-India Tech Partnership: It will pair businesses, universities and others from different regions in the UK with states in India.
- Access India Programme: High Commission of India, London initiated the 'Access India Programme' in September 2017 for facilitating investments by UK SMEs in India.
 - The primary focus of the AIP programme is on companies interested in investing in India i.e. those intending to set up manufacturing facilities as part of the 'Make in India' initiative.
- Rupee-denominated bonds: Over \$3.5 billion of rupee-denominated bonds have been issued in London since July 2016 including by HDFS, NTPC and NHAI.
- Green Bonds: Indian Railway Finance Corporation (IRFC) has raised \$500 million via a green bond offering and listed these instruments on the London Stock Exchange.
- National Investment and Infrastructure Fund: Both Governments have committed an anchor investment of up to £120 million each in the India-UK Sub- Fund under the National Investment and Infrastructure Fund.
- Varanasi Smart City Development Plan: New technical assistance for the redevelopment of Varanasi railway station under the Varanasi Smart City Development Plan will be extended by the UK.
- Supporting the Start- up India initiative: UK will be investing £160 million across 75 start-up enterprises, apart from an additional £20million for a Start-Up India Venture Capital Fund.
- First bond index series: State Bank of India (SBI) launched India's first bond index series for overseas investors at the London Stock Exchange (LSE) on 22 September 2017.
- skill development, smart cities and technological collaboration, advanced manufacturing and engineering
- Close involvement and consultation with UK and Indian businesses, especially SMEs that already export, to find out what would make them import/export more between the UK and India;
- An India-UK Free Trade Agreement would, no doubt, boost trade by lowering tariffs and aligning standards. So the Joint Trade Review (JTR) being undertaken by the UK and Indian governments is an important initiative, which will secure quicker wins, while laying the foundations for a deeper and broader trade deal after the UK leaves the EU.

• This use of digital technology could open opportunities for India to provide exported services in telemedicine, tele-surgery and tele-diagnosis; along with healthcare-related process outsourcing services such as transcription.

Related information

Impact of Brexit on India-UK relations

- Easing of Bilateral Relations in terms of trade and commerce: India sees the British exit as an opportunity to expand its trade and economic relations with the UK.
 - According to the PHD Chamber of Commerce and Industry, Brexit would bring about a situation where in the UK and EU compete for trading with India and enter into long term relationships with increased growth of trade.
- **No impact to free trade agreement (FTA) negotiations**: Brexit with or without a deal would not affect contentious issues like the delays in the UK-India and the EU-India free trade agreements.
- Impact on currency: US Dollar would be the only currency that benefits from a hard Brexit (no deal Brexit scenario) and the subsequent uncertainty in global markets. Such an outcome will not only affect the pound sterling but the currencies of emerging markets, including the Indian rupee, as well.
- **Impact on Businesses and economy**: Brexit and the uncertainty it produces would have many adverse impacts on the Indian economy in general and Indian businesses in the UK in particular.
 - For instance, at present, roughly 800 Indian companies operate in the UK. The UK serves as an entry point for many Indian companies to the European market. A disorderly British exit would shut the direct access of these companies to the EU market. That may force some of the companies to relocate or shut down their businesses.

2.5. AFRICAN CONTINENTAL FREE TRADE AREA

Why in news?

Recently, the 12th Summit of the African Union (AU) saw 54 of 55 of its member states signing the African Continental Free Trade Agreement (AfCFTA) for goods and services, with, 27 countries ratifying it.

About AfCFTA

- The AfCFTA would be world's largest FTA as it would eventually create an African Common Market of 1.2 billion people and a GDP of over \$3.4 billion having a global impact.
- The Free Trade zone should be operational from July 2020, as countries needed time to adapt to the agreed changes.
- AfCFTA will lead to a 60% boost in intra-African trade by 2022. At the moment, African countries trade only about 16% of their goods and services among one another, compared to 65% with European countries.

Hurdles and viability issues with AfCFTA

- Political, organisational and logistical challenges to the AfCFTA:
 National economies in Africa are generally weak with a low manufacturing base, lack of competitiveness and mutual complementarity.
 - Africa's inherent sub-regional, administrative, bureaucratic logistical, connectivity as well as security challenges remain, that have stunted the integration and growth so far, and needs to be addressed in a more concerted manner.
- Global World-order Challenges: The AfCFTA seems to be countercyclical to the ongoing global protectionist trends as seen in the U.S.-China trade conflict, Brexit and the stalemates at the WTO.
- Might start a new race for Africa: China has already taken a significant lead through decades of concerted engagement with the African countries, chequebook diplomacy and by fast delivery of projects.
 - ✓ The western countries especially the US are trying to catch up by containing China and possibly Russia through a 'containment of influence' strategy.
 - ✓ Japan, the biggest ODA provider, is also keen to expand and work with India both in private and public sector projects under the aegis of Asia Africa Growth Corridor (AAGC).
- AfCFTA will bring the much-needed formalisation in the African economy with other benefits, such as improved quality and quantity of employment, increase in fiscal revenue and overall improvement in quality of life.

3. ECONOMY

3.1. 50 YEARS OF BANK NATIONALISATION

Why in news?

19th July, 2019 marked the 50th anniversary of Bank nationalization.

Background

- On July 19, 1969, the Government of India had issued an ordinance 'Banking Companies (Acquisition and Transfer of Undertakings) Ordinance, 1969' and nationalized 14 banks with deposits of over Rs 50 crores.
- Ordinance was initiated by Indira Gandhi government which brought more than 75% banking sector under state control along with its assets, liabilities, entire paid-up-capital.
- For this purpose, the Central Government was supposed to pay compensation to the banks.
- The total amount of compensation could be determined by consensus between the bank and the government.

Reasons for Bank Nationalisation

- Private Banks were unreliable: There were 361 private banks which "failed" across the country in the period from 1947 to 1955, translating to an average of over 40 banks per year. This resulted in depositors losing all their money as they were not offered any guarantee by their respective banks.
- Conformity with national policy and objectives: Nationalisation of banks was to sync the banking sector with the goals of socialism adopted by the Indian government after independence.

Bank Nationalisation Case

- The main challenge was the lack of any clear legal principles in determining compensation.
- By a majority of 10:1, the Supreme Court of India struck down the Banking Companies (Acquisition and Transfer of Undertaking) Act, 1969 mainly on the ground that the proposed compensation to be provided to the 14 banks failed the test of Article 31(2).
 - The said provision provided that the in case any property is acquired by the government then they have to provide compensation to the property owner. Since there was clear violation of the said provision therefore, the court struck down the said act.
- Thereafter, the Banking Companies (Acquisition and Transfer of Undertaking) Act, 1970 was enacted by the Parliament but with inclusion of a specific amount of compensation to be paid to each of the 14 banks.
- Later, Twenty-fifth Amendment of the Constitution of India curtailed the right to property, and permitted the acquisition of private property by the government for public use, on the payment of compensation which would be determined by the Parliament and not the courts.

The idea to nationalise banks and insurance companies germinated as early as 1948, in an All India Congress Committee report.

- The Reserve Bank of India was nationalised with effect from 1st January, 1949 on the basis of the Reserve Bank of India (Transfer to Public Ownership) Act, 1948. All shares in the capital of the Bank were deemed transferred to the Central Government on payment of a suitable compensation.
- In 1955, India nationalized Imperial Bank of India and its undertaking was taken over by State Bank of India.
- The insurance sector was nationalised in 1956 with the formation of Life Insurance Corporation of India.
- In 1969 the Indian government nationalised 14 major private banks. In 1980, six more private banks were nationalised.
- To break the nexus between banks and big business: These commercial banks were seen as catering to the large industries and businesses who were disproportionately cornering bank finance.
- Balanced flow of credit: it was aimed at ensuring the balanced flow of credit to all the productive sectors, across various regions and social groups of the country. Agriculture and other priority sector were largely ignored by these banks.
- Planned development of the economy: It was envisaged that with nationalisation the proportion of bank investments in Government securities would go up. This would ensure enough development funds for the planned growth of the country

Benefits of Nationalisation of banks

• **Increase in Rural branch:** In July 1969, there were just 8,262 bank branches in the country which raised to 30,303 in June 1979.

- **Priority-sector lending:** All banks had to compulsorily set aside 40% of their net bank credit for agriculture, micro and small enterprises, housing, education and "weaker" sections.
- **Demonstrated the utility of monetary policy:** India's nationalisation shows that monetary policy, banks and interest rates can be effectively used to take banks to rural areas, backward regions and under-served sectors, furthering redistributionist goals in an economy.
- **Investment in Government Securities:** There has been a significant increase in the investment of the banks in government and other approved securities in recent years.
- **Job opportunities:** The huge expansion of the branch network created job opportunities, giving employment to a vast number of educated youths in the country.

Issues with bank Nationalisation

- **Complex interest rate structure:** There were different rates of interest for different types of loans. This defeated the purpose of nationalization, as due to complex structure loans never reach the needy ones.
- Under-lending: Banks became risk-averse and rarely lending to new firms.
- **Low Profitability:** A major defect of banking after nationalisation is that the nationalised banks are either operating under losses or experiencing falling dividends.
- Low Efficiency: Nationalisation has created bureaucratic attitude in the functioning of banking system. Political interference also disturbs the smooth working of the nationalised banks.

Conclusion

The 50th anniversary of bank nationalization is an appropriate occasion to take a call on their future. Conceptually bank nationalization is a good idea if it pushes for financial inclusion. But at the same time efforts should be taken to improve its efficiency and reduce the growing bad assets.

3.2. FOREIGN CURRENCY BORROWINGS

Why in news?

In the Budget 2019-20, the Finance Minister announced that the government would start raising a part of its gross borrowing programme in external markets in external currencies.

Background

• A government bond or sovereign bond is a form of debt that the government undertakes wherein it issues bonds with the promise to pay periodic interest payments and also repay the entire face value of the bond on the maturity date. So far, the government has only issued bonds in the domestic market.

Other factors for going towards Foreign Currency Borrowings

- India's foreign borrowings are among the lowest globally- At the end of March 2019, the total sovereign debt stood at \$103.8 billion, which was **3.8 per cent** of the GDP.
- Low Current Account Deficit- which as a percentage to GDP was 2.1 per cent in 2018-19, which was financed comfortably by capital flows (both debt and equity).
- Most of the external sector vulnerability indicators are stable- such as
 debt to GDP (19.7 per cent), debt to forex reserve (76 per cent), debt
 service ratio (6.4 per cent) and forex reserve to import cover (eight
 months). Also, the volatility of the rupee is least among the emerging
 market economies. It shows the amount of resilience in the external
 sector.
- Strong Macro-economic indicators- though economic growth has slowed down, it is highest in the global context and is accompanied by a benign inflation outlook.
- Strong commitment voiced by the government for fiscal consolidation- will be well received by the global market, even though the debt (68 per cent of GDP) is at a higher level for the general government (both Centre and the States).
- Sovereign bonds can be denominated in both foreign and domestic currency.
- The idea of the Indian government borrowing in foreign currency has been discussed multiple times earlier in the 1990s, in the early 2000s etc.
 - Each time the possibility of a sovereign foreign currency bond was put on the table, it came from a place of vulnerability.
 - That vulnerability, until now, was the need to shore up foreign currency reserves or support the rupee.
- This time, though, it is a different vulnerability that has prompted the government to announce that it will consider borrowing overseas.

- Fiscal pressures and high public sector borrowing requirements are crowding out private borrowers and keeping interest rates high.
- The government is hoping that by diverting a part of its borrowings overseas, it will free up the domestic financial savings pool for private use and bring down interest rates.
- The government plans to borrow 10-15 per cent of the total borrowing offshore, which can be used to mop up at least Rs 70,000 crore, according to tentative plans.
- The government and the Reserve Bank of India (RBI) will reportedly finalise the plans for the overseas issue of sovereign bonds by September.

Pros

- Address the shallowness of bond market which exists in India- especially at a time when the government needs the bond market to finance several of its commitments such as the Ujwal Discom Assurance Yojana (UDAY) scheme. As an issuer, the government will get the benefit of diversification of investor bases with global presence, and there could be some easing of pressure on the domestic bond rates.
- Frees up resources for domestic savings and production- which can boost private investment in the country, as they will have funds to adequately meet its credit and investment needs. As less domestic funds would be sought by the government, it would reduce yields in the Indian bond market, help banks pass on policy rate cuts to their loan customers.
- Less expensive sourcing of resources- It is the perfect time to raise the money, considering that overseas yields are low, and some European bonds have even dipped in negative territory. So foreign money can be raised quite cheaply, at less than half the domestic rate, by one estimate.
- It creates a **benchmark for Indian companies** to raise money abroad. Also, if Indian sovereign bonds become part of international market indices, their prices would set a reliable interest rate benchmark for overseas credit sought by Indian firms, which should ease their access to foreign loans.
- **Force Financial Discipline on Governments-** by not allowing fiscal slippage. Also, the overseas borrowing programme allows the government to maintain its gradual reduction of the fiscal deficit.

Cons

- Exposed to the global vulnerabilities- In the past, India has managed to survive at 6.5 per cent of fiscal deficit. It didn't suffer from the credit crisis because the sovereign bond was not held by foreign investors, who could short sell the bonds and create panic in the domestic market. With an overseas bond issue, the government would not be able to inflate itself out of trouble.
 - o If the rupee weakens over the tenure of the paper, the government's payback burden would increase, since it would take more rupees to buy each dollar, euro, yen, etc.
- Could turn out to be costlier: The volatility in India's exchange rate is much greater than the volatility in the interest rates of India's G-Secs. It means that although the government would be borrowing at cheaper rates than those domestically, the eventual rates after incorporating the weaking of rupee against the dollar might make the deal costlier.
- Might make the exports less competitive- overseas borrowings would lead to a quicker increase to its
 foreign exchange reserves, which would lead to a stronger rupee. A stronger rupee would encourage
 imports at a time when the government is trying to curb them. It would make it harder to pursue exportdriven economic expansion.
- May not lessen the pressure on domestic market: it has been argued that borrowing outside would not necessarily reduce the number of government bonds the domestic markets have to absorb.
 - o If fresh foreign currency comes into the economy RBI has to neutralise it by sucking the amount from the money supply, this would require selling of more bonds.
 - o If RBI does not take this step then the excess money supply can cause inflation pushing up the interest rates and thus disincentivising the private instruments.
- International examples- Several economists have expressed their concerns over the fact that India might
 follow the path of some Central and South American countries such as Mexico and Brazil. In the 1970s,
 several of these countries borrowed heavily overseas when the global market was flush with liquidity. But
 then, when their currencies depreciated sharply a decade later, these countries were in big trouble, as they
 could not repay their debt.

Way Forward

- India needs to take a measured approach in dealing with foreign borrowings, by not allowing its percentage to total borrowings slip out of hand.
- By issuing the bonds, the government will have to manage its policies extremely well. And this would require fiscal discipline, since all sorts of investors would be looking at India's numbers closely.
- It is appropriate to float the issuance in countries where there is a large presence of NRIs like North America, and the Middle East. In addition, Japan is a good place to float this because of the strong political association and past bilateral swap arrangements between Japan and India.

3.3. REGULATION OF NBFCS

Why in News?

In the Union Budget for FY 2019-20, the Finance Minister announced that **RBI will get greater powers to regulate Non-Banking Finance Companies (NBFCs).**

Recent issues with NBFCs

- **Liquidity crisis**: NBFC experienced difficult times in 2018-19 in the aftermath of the ratings downgrades and default of IL&FS Group.
 - o Immediately after the IL&FS crisis, NBFCs faced **severe liquidity crunch** as mutual funds (MFs) stopped refinancing the loans of NBFCs.
 - o **Government took measures** to control this issue, consequently, the flow of resources from the banking sector to NBFCs improved for some time.
 - However, the **flow of resources from the banking side has contracted** since November 2018 which has impacted the lending capability of the sector in recent quarters

Worsening condition of NBFC:

- o The **net NPA increased** marginally to 3.6 per cent in December 2018 from 3.2 per cent in March 2018.
- The **GNPA ratio of NBFC sector deteriorated** to 6.5 per cent as in December 2018 from 6.1 per cent in March 2018.
- At the end of December 2018, **CRAR of NBFC sector worsened** to 22.2 per cent from 22.8 per cent at end-March 2018.
- o Return on Assets and return on equity also declined from March 2018 to December 2018.

Issues faced by NBFC

- **Delayed payments**: The Housing Finance Company (HFC) segment was recently rocked by the payment delays by DHFL and some NBFCs which have led to a contraction in spreads, a rise in funding cost and an increased spotlight on their asset-liability mismatches.
- **Liquidity crunch:** NBFCs are facing a liquidity crunch. They don't have money to lend or are facing enormous difficulties in raising funds.
- **Borrowing Cost:** NBFCs face a higher cost of borrowings which is eventually passed on to their borrowers in the form of higher interest on loans. It increases delinquencies and reduces profit margin which affects your credit rating with the banks in turn. With a low credit rating, cost of funds goes up further.
- Capital Adequacy: NBFCs face more problems when raising capital. The compression in profit margins impacts the ability to attract private equity investment and meeting capital adequacy norms becomes a continuing challenge.
- **Multiple regulatory bodies**: RBI doesn't regulate all the NBFC. Other institutions such as SEBI, Insurance Regulatory and Development Authority (IRDAI), etc. are also involved depending on the type of NBFC.
- **Delayed Projects**: Many infrastructural projects financed by NBFCs are stalled due to various reasons like delayed statutory approvals, problems of land acquisition, environmental clearance, etc. which has impacted their financial health.

Recent Steps taken by Government for NBFC

- The amendments are proposed to the RBI Act 1934, include powers relating to resolution of NBFCs.
- The RBI will also have **power to remove a director of an NBFC**, excluding those owned by the government.

- The RBI may frame schemes for amalgamation, reconstruction or splitting up of the viable and nonviable businesses of the NBFC to ensure continuance of critical activities.
- The regulator may also establish "bridge institutions" that is a temporary arrangement to enable continuity of NBFC's business.
- The government has proposed to transfer the regulatory authority over housing finance sector to the Reserve Bank of India (RBI) from the National Housing Bank (NHB) in a bid to strengthen the sector which was hit by payment delays and liquidity crunch.
- For purchase of high-rated pooled assets of financially sound NBFCs, amounting to a total of ₹1-lakh crore during the current financial year, the government will provide a one-time six months' partial credit guarantee to public sector banks for the first loss of up to 10 per cent.
- NBFCs which do public placement of debt have to
 - maintain a Debenture Redemption Reserve (DRR) and, in addition, a special reserve, as required by RBI, has also to be maintained.
- NBFCs will also be allowed to raise finance the Trade Receivable Discounting System (TreDS) platform, which shall open a new avenue of financing.
- RBI Board has decided to create a specialised supervisory and regulatory cadre within the RBI.

Other steps that need to be taken

- Regulatory capacity should be directed towards better risk-management and governance across the system rather than create capital redundancies that curtail the growth of small specialist entities.
- Timely Project clearances: Ensuring timely clearances, especially to infrastructural projects is a must to minimise cost inflation of these projects. Expanding

About Non-Banking Financial Company (NBFC)

- It is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/ debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business.
- It does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property.
- Housing Finance Companies, Merchant Banking Companies, Stock Exchanges, Companies engaged in the business of stock-broking/subbroking, Venture Capital Fund Companies, Nidhi Companies, Insurance companies and Chit Fund Companies are NBFCs.

Systemically important NBFCs

- NBFCs whose asset size is of ₹ 500 cr or more as per last audited balance sheet are considered as systemically important NBFCs.
- The rationale for such classification is that the activities of such NBFCs will have a bearing on the financial stability of the overall economy.

Difference between NBFC & Bank

- NBFC cannot accept demand deposits;
- NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself;
- Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.
- Unlike banks, CRR does not apply on any NBFCs while a lower SLR of 15% applies only to Deposit taking NBFC.
- NBFCs get license under Companies Act, 1956 and Banks under Banking regulation Act.

Role of NBFC

- NBFCs have played increasingly important role in resource mobilization and credit intermediation, thereby helping commercial sector to make up for low bank credit growth.
- NBFCs depend largely on public funds which account for 70 per cent of total liabilities of the sector.
- Bank borrowings, debentures and commercial paper are the major sources of funding for NBFCs.

Debenture Redemption Reserve (DRR)

It is a provision stating that any Indian corporation that issues debentures must create a debenture redemption service in an effort to protect investors from the possibility of a company defaulting.

Trade Receivable Discounting System (TreDS)

It is an online bill discounting platform that helps cash-starved micro, small and medium enterprises (MSMEs) raise funds by selling their trade receivables to corporates.

Finance Industry Development Council (FIDC)

- It is a Self-Regulatory Organization (SRO) cum Representative Body of the Non-Banking Finance Companies (NBFCs), registered with the Reserve Bank of India.
- FIDC was formed in 2004, and is the recognized face of NBFCs, especially, those engaged in Assets and Loan financing.

the "Plug and Play" approach to other sectors can be a possible solution.

- Finance Industry Development Council (FIDC) suggestions:
 - o A dedicated liquidity window for NBFCs through banking channels.
 - o It has called for setting up a permanent refinance window for NBFCs akin to that provided by the National Housing Bank to housing finance companies.
 - o It has suggested setting up an alternative investment fund (AIF) to channelise institutional funds to the NBFCs.
 - o NBFCs should be allowed an on-tap facility for issuance of NCDs to the retail market by offering these instruments through an easy and cheaper procedure.

3.4. BANNING OF UNREGULATED DEPOSIT SCHEMES ACT, 2019

Why in news?

President gave assent to the **Banning of Unregulated Deposit Schemes Act, 2019,** to put in place a mechanism to secure poor depositors/investors from Ponzi schemes.

Background

- Ponzi schemes, over the years have been a menace in the country. Rose Valley, Saradha, IMA Jewels scam in Bengaluru—are among the major scams in the recent past.
- The Act covers existing gaps in legislation that had been exploited by various parties to siphon large amounts of money away from small investors.
- In particular, it amends three laws, i.e.,
 - o The Reserve Bank of India Act, 1934
 - The Securities and Exchange Board of India Act, 1992 and
 - o The Multi-State Co-operative Societies Act, 2002.

Major Highlights of the Act

- **Deposit:** The Act **defines a deposit** as an amount of money received through an advance, a loan, or in any other form, with a promise to be returned with or without interest.
 - Further, the Act defines certain amounts which shall not be included in the definition of deposits such as amounts received in the form of loans from relatives and contributions towards capital by partners in any partnership firm.
- All deposit-taking schemes are required to be registered with the relevant regulator: Currently, nine regulators oversee and regulate various deposit-taking schemes. These include: The Reserve Bank of India, the Securities and Exchange Board of India, the Ministry of Corporate Affairs etc.
- Bans Unregulated deposit scheme: A deposit-taking scheme is defined as unregulated if it is taken for a business purpose and is not registered with the regulators listed in the Act.
- **Competent Authority:** The Act provides for the appointment of one or more government officers, not below the rank of Secretary to the state or central government, as the Competent Authority, who can provisionally attach the property of the deposit taker, as well as all deposits received.
- Designated Courts: The Act provides for the constitution of one or more Designated Courts in specified areas
 who can direct the Competent Authority to sell the property and equitably distribute the money realised
 among the depositors. The Court will seek to complete the process within 180 days of being approached by
 the Competent Authority.
- **Central database:** The Act provides for the central government to **designate an authority to create an online central database** for information on deposit takers.
- Offences and penalties: The Act define three types of offences, and penalties related to them. These offences are:

About Ponzi scheme

- A Ponzi scheme is a fraudulent investing scam promising high rates of return with little risk to investors. It generates returns for early investors by acquiring new investors.
- They rely on a constant flow of new investments to continue to provide returns to older investors. When this flow runs out, the scheme falls apart.

Reasons for the popularity of Ponzi Schemes:

- Higher rate of return: A major reason for their popularity is that they offer a higher rate of return than conventional forms of investing such as post office schemes and fixed deposits.
- Ease of investment: It is very convenient to invest in these schemes with agents providing door-to-door service. Sometimes, brand ambassadors associated with these schemes provide them legitimacy.

- o Running (advertising, promoting, operating or accepting money for) unregulated deposit schemes,
- o Fraudulently defaulting on regulated deposit schemes, and
- Wrongfully inducing depositors to invest in unregulated deposit schemes by willingly falsifying facts.

Way Ahead

The new Act basically aims to speed up the process of justice after a scam is noticed. While that is important, what is more important is to nip these schemes in the bud. For this, the SEBI and Reserve Bank of India need to be **more vigilant**, aware of Ponzi schemes while they are getting popular and spreading, and act on them fast.

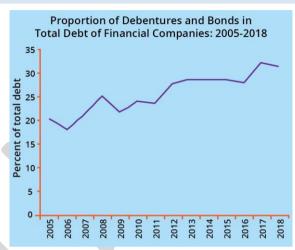
3.5. CORPORATE BOND MARKET

Why in news?

Recently, the government announced some measures in the Budget 2019-2020 for developing the corporate bond market in India.

Background

- Corporate bonds are debt securities issued by private and public corporations. Companies issue corporate bonds to raise money for a variety of purposes, such as building a new plant, purchasing equipment, or growing the business.
- Successive budgets and various committees mandated by the government, the RBI and the Securities and Exchange Board of India (SEBI) to work out measures to develop this market have largely failed.



- The growth rate of corporate bonds has generally been slowing since 2017 and marked its lowest rate in over a decade in May 2019 at 9.7%. On the other hand, bank lending grew 12.7% in the last year.
- Some of the measures announced in the Budget to deepen the market for long term bonds are-
 - Deepening markets for corporate bond repos, credit default swaps etc, with a specific focus on the infrastructure sector
 - o Foreign Portfolio Investors (or FPIs) will also be allowed to invest in debt securities issued by Infrastructure Debt Funds.
 - Credit Guarantee Enhancement Corporation, for which regulations have been notified by the RBI, will be set up in 2019- 20.
 - Establishment of a platform for listing social enterprises and voluntary organisations to raise capital as equity, debt or units like mutual funds.
 - There is also a proposal to increase minimum public shareholding in companies to 35 per cent from 25 per cent.

Issues with Corporate Bond Market in India

- **Underdeveloped:** While the domestic debt market in India amounts to about 67 per cent of GDP, the size of India's corporate bond market is just 16 per cent of GDP, compared with 46 per cent in Malaysia, and 73 per cent in South Korea.
- **Limited Investor Base:** marked by banks, insurance companies, pension retirement funds and now mutual funds.
 - A majority of the bonds issued by companies are privately placed with a select set of investors in India rather than through a public issue; this is done to both save time as well as avoid greater disclosures.
 - The Foreign Portfolio Investors (FPIs) are now prominent buyers of top-rated bonds given the attractive returns especially in the backdrop of a strong rupee. Most of these investors do not trade but hold these investments until maturity.
- **Low Liquidity:** due to few buyers in the market or market makers who offer buy or sell quotes constantly. There is little or no incentive for market making.
- Lack of trading platforms: such as available for government securities, which restrict the availability of corporate bonds and their trading.

- Lack of confidence in corporate bonds: due to
 - Weakening balance sheets of the companies in India creating suspicion on their growth potential.
 - o Insufficient credit risk protection instruments like Credit Default Swaps (CDS).
- Lack of standardization across states: for providing a uniform architecture to them, like stamp duties on corporate bonds.

Need of a Corporate Bond Market in India

- Pressure on banking sector: In the absence of a well-functioning corporate bond market, the burden of financing infrastructure projects is more on banks and the general government. This, in turn, puts lenders like the banks under pressure as reflected in the rising non-performing assets (NPAs).
 - Eventually, this not only results in inefficient resource allocation but also weakens the bank balance sheets.
- More options: A mature corporate bond market enables companies to raise funds across different maturities including for infrastructure projects with long gestation periods. Retail investors will also get a chance to invest in such projects via debt funds.
- A well-developed corporate bond market is essential for the efficiency and stability of a country's financial system and the overall growth of its economy.

Major Recommendations of H.R. Khan Committee on Development of Corporate Bond Market in India

- Standardization of corporate bond issuance- in terms of parameters like basis for yield calculation, by regulators like SEBI.
- Broaden the scope of investors- such as by amending the FEMA regulations to allow investment by FPIs in unlisted debt securities.
- Protection of the investors- The RBI and other regulators
 must give timely clarification on credit default swap and
 other security instruments. The Credit Rating Agencies may
 be mandated to strictly adhere to the regulatory norms
 with regard to timely disclosure of defaults on the stock
 exchanges and their own website.
- Enabling trading of bonds- Stock exchanges may operationalize market-making scheme in corporate bonds.
 Also a Corporate bond index may be introduced by the Stock Exchanges/other entities.
- **Infrastructure-** by expanding the scope of the Electronic Book Mechanism for private placement of debt securities.
- Encouraging corporates to tap capital market- Large corporates with borrowings from the banking system above a cut-off level may be required to tap the market for a portion of their working capital and term loan needs.

Way Forward

- A robust corporate conflict resolution mechanism will go a long way in building investor confidence in the
 product. Investors will look at corporate bonds as an attractive asset class if they are confident that conflicts
 can be resolved quickly and fairly.
- The corporates need to innovate their debt instruments using different mechanisms like greater securitization, credit enhancement and derivatives.
- There needs to be greater investor awareness on the availability of corporate bonds, the risks associated and the security measures present to secure the investments.
- The electronic bidding platform should be made more flexible to accommodate simultaneous issuances from one issuer, and the issuance time of about four days must be shortened.

3.6. DISINVESTMENT

Why in news?

The finance minister in the budget 2019-2020, highlighted that the government would not only reinitiate the process of strategic disinvestment of Air India, but would offer more CPSEs for strategic participation by the private sector.

More on news

- Announcements in Budget 2019-2020-
 - The target for disinvestment receipts has increased to **Rs 1.05 trillion for FY20**, from Rs 90,000 crore in the interim Budget earlier this year.
 - The government's stake in non-financial public sector units (PSUs) can go below the majority stake of 51 per cent. Instead of holding a direct stake of 51 per cent in PSUs, "government-controlled institutions" can chip in the remaining sum, which the government will look to divest.

 The Government is looking for asset monetisation from land and property of various PSUs. The Department of Investment and Public Asset Manage ment is in the process of appointing a panel of six transaction advisors who will help it with sale of noncore assets of PSUs.

Methods of Disinvestment

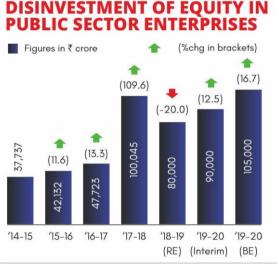
- Stock market: Initial Public Offering (IPO), Further Public Offering (FPO), and Offer for sale (OFS) offer are such methods through the stock markets.
- Institutional Placement Program (IPP): only Institutions can participate in the offering.
- Exchange Traded Fund (ETF)- it allows simultaneous sale of government stake in various CPSEs across diverse sectors through single offering. It provides a mechanism to monetize its shareholding in those CPSEs, which form part of the ETF basket. Currently, it consists of (i) CPSE-ETF and (ii) Bharat-22 ETF

• Strategic Disinvestment:

- It is the sale of substantial portion of the Government shareholding of a central public sector enterprise (CPSE) of up to 50%, or such higher percentage along with transfer of management control.
- It intended for efficient management of Government investment in CPSEs. Various programmes like addressing issues such as capital restructuring, dividend, bonus shares, made as part of this policy.
- O Progress was made in respect of the 28 cases of Strategic Disinvestment approved by the Government, which are at different stages, with three companies strategically sold off during FY 2018-19.

About Disinvestment

- **Disinvestment** refers to the government selling or liquidating its assets or stakes in PSE (public sector enterprise).
- The Department for investment and public asset management (DIPAM)
 under Ministry of finance is the nodal agency for disinvestment
- The new economic policy 1991 indicated that PSUs had shown a negative rate of return on capital employed due to-
 - Subsidized price policy of public sector undertakings;
 - Under–utilisation of capacity;
 - Problems related to planning and construction of projects;
 - Problems of labour, personnel and management; and
 - Lack of autonomy.
- In this direction, the Government adopted the 'Disinvestment Policy' with main objectives
 - o To reduce the financial burden on the Government
 - To improve public finances
 - o To introduce, competition and market discipline
 - To fund growth
 - To encourage wider share of ownership
 - To depoliticise non-essential services



Arguments in favour of Disinvestment

- Divestment is expected to fill in some of the gaps in tax revenue.
- Trade unionism and political interference often lead to halting of PSUs projects thereby hampering the efficiency in long run.
- Problem of disguised unemployment and outdated skill in PSUs employee are the major cause of inefficiency.
- Private players work out-of Red Tapism bureaucratic mentality and focus on performance-driven culture and effectiveness.
- More robust competitive bidding leads to competition in private sectors to participate in PSUs.
- Moreover, it ensuring that product service portfolio remains contemporary by developing/ acquiring technology.

Arguments against Disinvestment

- It is against the socialist ideology of equal distribution of resources amongst the population.
- It will lead to monopoly and oligopolistic practices by corporates.
- Proceedings of disinvestment had been used to cater the fiscal deficit of the state, which would lead unhealthy fiscal consolidation.
- Private ownership does not guarantee the efficiency (Rangarajan Committee 1993).
- Disinvestment exercise had been done by undervaluation of public assets and favouritism bidding, thereby, leading to loss of public exchequers.
- Private ownership might overlook developmental region disparity in order to cut the cost of operation.

Some Issues in Disinvestment

- Targets are exceeded but individual PSUs face poor response- e.g. against the target of Rs 80,000 crore in 2018-19 government received Rs 85,000 crore. However, the government had to defer the disinvestment of Bharat Earth Movers (BEML), Pawan Hans (PHL) among others.
- Lack of balance in different methods- the receipts from the initial public offering (IPO) is a paltry Rs 1,900 crore, whereas over Rs 45,000 crore came from ETFs-index funds.
- Lack of interest by private players- Large-scale debts accumulated by the PSUs make them unattractive for potential buyers. E.g. Air India disinvestment efforts proved to be a failure.
- Opposition from Labour Unions- owing to the potential threats of losing their jobs due to increasing privatisation.

Steps taken to promote Disinvestment

- **Fast tracking** of Approvals & Procedures- Creating a pipeline of proposals for CPSEs, which at present, are at different stages of approval.
- Focus on Asset Monetisation
 - o Identified non-core assets of CPSEs under Strategic Disinvestment.
 - Alternative Mechanism (AM), Inter-ministerial Group (IMG) and Consultative Groups have been notified
 - Hiring of intermediaries for Asset Monetisation Cell started.
- Debt- ETF
 - o It was announced in the interim Budget 2019-20.
 - DIPAM is in the process of creating a Debt-ETF to enable CPSEs to access the debt/ bond market to partially meet
 the capital expenditure needs by leveraging their aggregate strength.

3.7. GOVERNMENT E-MARKETPLACE

Why in news?

Recently, the Steel Authority of India Limited (SAIL) becomes the first Central Public Secter Enterprise to enter into MoU with the Government e-Marketplace (GeM).

Background

- The Government e Marketplace (GeM), launched in 2016, is an online market platform to facilitate procurement of goods and services by various Ministries and agencies of the Government.
 - It owes its genesis to the recommendations of two Groups of Secretaries made to the Prime Minister in January 2016.
 - The portal was developed by the Directorate General of Supplies and Disposals (DGS&D) with technical support of NeGD (Meity).
 - It has been envisaged by Government of India as the National Procurement Portal of India and is directly monitored by the PMO office.



- Procurement on GeM has been authorized by General Financial Rules by making necessary changes in government rules.
- o 24 States and UTs have signed a formal MoU with GeM to formalize this arrangement.
- Before the GeM, the government bodies used to procure goods and services based on fixed-rate contracts and tenders through the director-general for supplies and disposal (DGS&D).
- The GeM leverages technology to make government procurement contact-less, paperless and cashless.
 - o Based on its stellar performance, it was awarded the South Asia Procurement Innovation Award in 2016.
 - o Recently, it also launched a service for the original equipment manufacturers (OEM) of the goods that are procured through the portal to help them track the movement of their products.

Issues with the procurement process before GeM-

- **Decentralised Procurement-** India spends an estimated 20% of GDP on public procurement and most of it was procured in a decentralized manner.
 - o But these purchases in small quantities lose the benefits of economies of scale.

- Also, they are vulnerable to malpractices because it is very difficult to monitor thousands of small transactions.
- The Small suppliers, too, find it difficult to reach buyers in other parts of the country without layers of intermediaries, pushing up their costs.
- Lack of diverse options for procurement- due to limited product categories (160-400) and services were not offered. It also led to inflated pricing for 1-2 years.
- **Small domain of prospective sellers-** due to limited base of 4000 vendors. Also, the registration and tendering process was opaque and time-consuming, with the possibility of vendor buyer nexus.
- The payment was done manually with long timelines (1-6 months).

Advantages with GeM

- **Brought a transparent procurement regime-** by eliminating human interface in vendor registration, order placement and payment processing, to a great extent. Being an open platform, GeM offers no entry barriers to bonafide suppliers who wish to do business with the Government.
 - Seamless processes and online time-bound payment has given confidence to the vendors and reduced their 'administrative' cost involved in pursuing officers for timely payment.

• Reduction in inefficiencies-

- by replacing the archaic DGS&D with a staff of more than 1,800 to a lean, tech-led GeM which has just 50 employees.
- by eliminating multiple levels of manual, sequential verification and decision-making, leading to dramatic reductions in lead-time in government procurement. It has brought down the delivery time from 30-60 days earlier to 10-15 days.
- Vendor registration time has shrunk from 30 days to under 10 minutes.
- **Broadened the scope of procurement-** as it has brought a unique feature by offering both products and services on GeM. Product categories have multiplied from under 400 in the early months to 3,500 now.
- Has brought machine-driven, competitive pricing
 - o Instead of procurement rates fixed for one or two years, now it's dynamic and market-linked.
 - It has led to cheaper procurements. E.g. As a category, automobile has been the biggest hit, with an instant 12 per cent discount.
 - o It has led to **aggregating purchases**. E.g. five states together bought 1 lakh smart phones, which helped the government to negotiate for bigger discounts.
- Has promoted entrepreneurship and created jobs- The vendor base has become more diverse and inclusive, with an emphasis on supporting startups and MSMEs. E.g. a small company selling patented nasal filters to tackle air pollution got a bulk order from traffic police in Delhi and Chandigarh, due to GeM.
 - o It has eliminated intermediaries and guaranteed prompt release of payment.
- Has brought new rating system and comparison
 - o Initially, prices on GeM were higher than other e-commerce sites like Flipkart. Now a tool has been introduced, where prices on GeM could be easily compared with those on other ecommerce sites.

Challenges with GeM

- Implemented in a short time span- the government had to come with various versions like GeM 1.0, GeM 2.0 and GeM 3.0. The resistance to change by various stakeholders was not addressed and the renewal of rate contracts was stopped arbitrarily.
- Lack of access in remote areas- Although the rates and timelines have come down and the system is stabilising but in remote areas where order is small, delivery is an issue.
- Platform can be made more user-friendly- The small businesses find it hard to use the platform due to complex user interface of the portal.
- **Issues of counterfeits-** as there are instances of fake product delivery. Recently, the government has brought some provisions where after three such instances those vendors can be banned. But it needs to be streamlined further.

Way Forward

• The government needs to address the issues reported by the industry, especially the small players, to effectively use the platform.

- By expanding the scope of GeM further, the government's flagship schemes like Make in India and Start Up India can also witness growth.
- The GeM has set an ambitious target to achieve Gross Merchandise Value (GMV) equivalent to 4-5% of India's GDP. If 15-25 % savings are realized on this volume of procurement, it will free up enormous sums, which the government can use to finance its development and poverty alleviation programs.
- If pursued to its logical conclusion, GeM would eventually emerge as the National Public Procurement Portal, keeping in tune with the Global best practices.

3.8. ROAD SAFETY

Why in news?

As per the data placed by the Government in the Parliament, road accidents in India killed 400 or more deaths, on a daily average, in each of the three years between 2015 to 2017.

About Road Safety

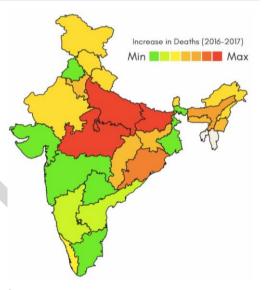
- Road safety has become a serious **public health issue** in India, given the increasing number of casualties due to road accidents.
- There are serious costs associated with road accidents such as-
 - Economic Cost: Planning Commission of India stated that over 3% of India's GDP is lost to road accidents annually, and this amounted to 3.8 lakh crore rupees in 2016.

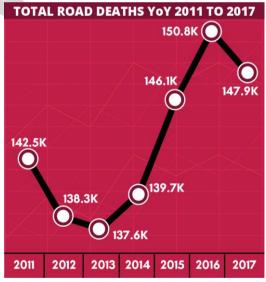
Social Cost:

- ✓ Pedestrians constitute 19 percent of total deaths in road accidents in India. They are the most vulnerable road users as they have lesser protection in case of road accidents.
- ✓ Loss of family member, especially earning member leads to poverty and social distress. Moreover, disabilities occurred in accident lead to loss of human productivity and stigma.
- Administrative Cost: includes traffic management, enforcement of law, resource costs (clearance of damage property) and insurance administration.
- Thus, it is crucial that road safety is addressed on an urgent basis. Further, in many of the larger states, deaths due to road accidents have increased in recent times.

Issues in addressing road safety

- Increasing number of vehicles on roads in many areas- due to following factors like increasing urbanisation and migration in the country.
- Increasing vulnerability of pedestrians- due to factors such as-
 - Designated footpaths are routinely encroached by parked vehicles and shops especially in urban area, force the pedestrians to walk on roads.
- Indifference towards good Samaritan approach: There is a lack of helping hand approach among people at the time of accidents. This is due to consequential legal hearing and repeated appearances in the police station for investigation.
- **Needs coordination between different stakeholders-** In a federal set up much depends on efforts of States to mobilise data on road accidents.
 - World Health Organisation (WHO) recommends countries to have a national urban maximum speed limit of 50 km/hour. But some states like Uttar Pradesh fall below this bracket with a 40 km/hour limit while those in Andhra Pradesh and Maharashtra can go up to 65 km/hour





- **Inadequate implementation of provisions-** by the enforcement agencies, due to which there is lower number of prosecutions of law-breakers. It does not allow **effective deterrent** to be created in the minds of violators.
- **Improper road engineering-** due to which the road infrastructure in India suffers from poor design quality, poor visibility leading to higher chances of accidents.

Steps taken to improve road safety in India

- **Pradhan Mantri Surakshit Sadak Yojana** launched with initial funding of about Rs 2,000 crore which will eliminate dangerous spot from highways.
- Recently government made it mandatory for two-wheeler from April 2019 onward to have Anti-Break lock
 System in order to improves control over the vehicle at the event of emergency braking.
- Government had signed the Brasilia declaration in 2015, committing to reduce road accident and fatality by half.
- The Union Government issued guidelines to be followed by hospitals, police and all other authorities for the protection of **Good Samaritans**.
- Draft National Action Plan aimed at halving number of road accident deaths by 2020.
- Passage of Motor Vehicle (Amendment) Act, 2019.

Suggestions to enhance road safety include

- Policy shift towards applied scientific study for roads instead of widening and expending the length and coverage of road is need of hour. A combination of scientific investigation of road crashes, rigorous data analysis and interventions across engineering, enforcement, education, and trauma care are the key to road safety in India.
 - S. Sunder committee 2007 on road safety highlighted the need for scientific study of road infrastructure, which includes effective road engineering solutions at the design stage, rectification of accident hot spots etc.
 - It also advocated the establishment of Directorate of Road Safety and Traffic Management for advocacy in changing road safety scenario.
- Safe system approach of World Health Organisation recognised that people' role in road safety cannot be eliminated completely by penalisation methods, rather the policy approach should be shifted towards education and awareness for all the strata of society.
- Modernise the vehicle technology such as collision-avoidance systems,

Motor Vehicle (Amendment) Act, 2019

The act has amended the Motor Vehicles Act, 1988 to provide for road safety. It has been passed in the Parliament. Some of its key provisions are-

- Compensation for road accident victims: The central government will develop a scheme for cashless treatment of road accident victims during golden hour. The Bill defines golden hour as the time period of up to one hour following a traumatic injury, during which the likelihood of preventing death through prompt medical care is the highest.
- Compulsory insurance: The Act requires the central government to constitute a Motor Vehicle Accident Fund, to provide compulsory insurance cover to all road users in India.
- It sets up a **National Road Safety Board** that will advise the government on road design and motor vehicle safety.
- **Good samaritans**: The Act defines a good samaritan as a person who renders emergency medical or non-medical assistance to a victim at the scene of an accident.
- Offences and penalties: The Act increases penalties for several offences under the Act. For example, the maximum penalty for driving under the influence of alcohol or drugs has been increased from Rs 2,000 to Rs 10,000.
- Recall of vehicles: The Act allows the central government to order for recall of motor vehicles if a defect in the vehicle may cause damage to the environment, or the driver, or other road users.
- (semi-)autonomous vehicles, stability control, improved road-vehicle interaction, automatic braking systems and air cushion technology and speed limiters on fleet vehicles.
- Good transport and National Freight Policy should be implemented to ease-out the traffic burden on passenger vehicles.
- Teaching **life-saving first-aid** to people likely to be first on the scene of a road traffic accident could have a similar effect.

- According to the WHO, a project to teach first-aid skills to people in parts of Cambodia and in northern lraq has seen encouraging results in landmine-related deaths. With just basic supplies and no ambulances, mortality fell from 40% to 9%.
- For effective road safety in the country, new policies and actions should be based on Brasilia Declaration of 2015, which call for rethinking the transport policies in order to favour more sustainable methods and modes of transport.

3.9. MULTIDIMENSIONAL POVERTY INDEX (MPI)

Why in News?

Recently, 2019 global Multidimensional Poverty Index (MPI) was released.

About Multidimensional Poverty Index (MPI)

- It was developed in 2010 by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP).
- The global Multidimensional Poverty Index (MPI) is an international measure of acute multidimensional poverty covering over 100 developing countries.
- The MPI goes beyond income as the sole indicator for poverty, by exploring the ways in which people experience poverty in their health, education, and standard of living. It captures both the incidence and intensity of poverty.
 - The MPI assesses poverty at the individual level.
 - If someone is deprived in three or more of ten (weighted) indicators, the global index identifies them as 'MPI poor', and the extent – or intensity – of their poverty is measured by the percentage of deprivations they are experiencing.
- The global MPI can be used to create a comprehensive picture of people living in poverty, and permits comparisons both across countries and world regions, and within countries by ethnic group, urban/rural area, subnational region, and

Dimensions of Poverty	Indicator	Deprived if living in the household where	Weight
ر الاعالله Health	Nutrition	An adult under 70 years of age or a child is undernourished.	1/6
	Child mortality	Any child under the age of 18 years has died in the five years preceding the survey.	1/6
Education	Years of Schooling	No household member aged 10 years or older has completed six years of schooling.	1/6
	School Attendance	Any school-aged child is not attending school up to the age at which he/she would complete class 8.	1/6
	Cooking Fuel	The household cooks with dung, wood, charcoal or coal.	1/18
	Sanitation	The household's sanitation facility is not improved (according to SDG guidelines) or it is improved but shared with other households.	1/18
Standard of living	Drinking Water	The household does not have access to improved drinking water (according to SDG guidelines) or safe drinking water is at least a 30-minute walk form home, round trip.	1/18
	Electricity	The household has no electricity.	1/18
	Housing	Housing materials for at least one of roof, walls and floor are inadequate: the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials.	1/18
	Assets	The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike or refrigerator, and does not own a car or truck.	1/18

age group, as well as other key household and community characteristics.

- It **complements the international \$1.90** a day poverty rate by showing the nature and extent of overlapping deprivations for each person.
- The **2019 update of the global MPI** covers 101 countries—31 low income, 68 middle income and 2 high income.

India specific Findings

Improvement

 India lifted 271 million people out of poverty (640 million to 369 million) between 2006 and 2016, recording the fastest reductions in the multidimensional poverty index values during the period with strong improvements in areas such as "assets, cooking fuel, sanitation and nutrition.

- India's MPI value reduced from 0.283 in 2005-06 to 0.123 in 2015-16.
- Among the four Indian states with the most acute MPI — Bihar, Jharkhand, Uttar Pradesh and Madhya Pradesh — Jharkhand has made the most progress.
- India **reduced**:
 - ✓ **deprivation in nutrition** from 44.3% in 2005-06 to 21.2% in 2015-16,
 - ✓ child mortality from 4.5% to 2.2%,
 - ✓ people deprived of cooking fuel from 52.9% to 26.2%,
 - ✓ **deprivation in sanitation** from 50.4% to 24.6%,
 - ✓ deprivation of drinking water from 16.6% to 6.2 %,
 - ✓ access to electricity as deprivation from 29.1% to 8.6%,
 - ✓ housing from 44.9% to 23.6%
- Overall, India was among three countries where poverty reduction in rural areas outpaced that in urban

areas is an indicator of propoor development.

Limitations of MPI

- The indicators may not reflect capabilities but instead reflect outputs (such as years of schooling) or inputs (such as cooking fuel).
- The health data are relatively weak and overlook some groups' deprivations, especially for nutrition.
- some careful cases judgments were needed to address missing data.
- Intra-household inequalities

Global Findings

Across 101 countries, 1.3 billion people -23.1 %- are multidimensionally poor out of which half of the multidimensionally poor people are children under age 18 and third are children under age 10.

What does MPI value shows?

This value varies from 0 to 1.

The MPI value summarizes information on

multiple deprivations into a single number.

It shows the proportion of deprivations that a country's poor people experience out of the

total possible deprivations that would be

experienced if every person in the society were

It is calculated by multiplying the poverty

poor and deprived in every indicator.

headcount by the intensity of poverty.

- Children are more prone to multidimensional poverty than adults. Multidimensionally poor children are concentrated more in the Sub-Saharan Africa and the South Asia. These two regions account for 85 per cent of multidimensionally poor population of the world.
- Two-thirds of multidimensionally poor people live in middle-income countries.
- There is little or no association between economic inequality (measured using the Gini coefficient) and the MPI value.
- The report identifies 10 countries, with a combined population of around 2 billion people, to illustrate the level of poverty reduction, and all of them have shown statistically significant progress.
 - The 10 countries are Bangladesh, Cambodia, Democratic Republic of Congo, Ethiopia, Haiti, India, Nigeria, Pakistan, Peru and Vietnam.
- may be severe, but these could not be reflected.
- MPI goes well beyond a headcount ratio to include the intensity of poverty, it does not measure inequality among the poor, although decompositions by groups can be used to reveal group-based inequalities.
- Estimates presented are based on publicly available data and cover various years between 2007 and 2018, which limits direct cross-country comparability.

3.10. CORPORATE SOCIAL RESPONSIBILITY (CSR)

Why in news?

Recently, President's assent was given to the Companies Amendment Act, 2019 to provide specific penal provision in case of non-compliance of Corporate Social Responsibilities Rules.

About Corporate Social Responsibility

The Companies Act, 2013 is a landmark legislation that **made** India the first country to mandate and quantify CSR **expenditure**. The inclusion of CSR is an attempt by the government to engage the businesses with the national development agenda.

CSR is a concept that suggests that it is the responsibility of the corporations operating within society to contribute towards economic, social and environmental development that creates positive impact on society at large.

Primary objective of CSR: To promote responsible and sustainable business philosophy at a broad level and encourage companies to come up with innovative ideas and robust management systems.

- Section 135 of the Act lays down rules for CSR activity in India.
 - It mandates that every company, private limited or public limited, which either has a net worth of Rs
 500 crore or a turnover of Rs 1,000 crore or net profit of Rs 5 crore, needs to spend at least 2% of its
 - average net profit for the immediately preceding **three financial years** on CSR activities.
 - The CSR activities in India should not be undertaken in the normal course of business and must be with respect to any of the 17 activities of CSR mentioned in Schedule VII of the act.
- Recently, the report of a High-Level Committee (HLC) on Corporate Social Responsibility, set up under Injeti Srinivas in 2018 to review the existing framework submitted its report.

Findings of the HLC

- CSR expenditure by companies: The total CSR expenditure by companies has increased substantially by 44% from the year 2014-15 to 2015-16 and thereafter marginally declined in the year 2016-17. It has further dipped by 6.9% in the year 2017-18.
- CSR compliance: The compliance percent has decreased from 72% in 2016-17 to 57% in 2017-18. Some of the major reasons reported for underspending the prescribed amount on CSR are:
 - Problems in identifying a suitable project,
 - Selection of suitable implementing agency
 - Multi-year projects, etc.

Major Highlights of the Amendment Act 2019

- The Act mandates that companies transfer unspent CSR money in a financial year to an **escrow account** meant for CSR for three years, after which any unspent amount must be transferred to a fund specified by the government.
- Strengthening enforcement provisions that enable the SFIO (serious Fraud Investigation Office) to ensure speedy and more effective enforcement, including actions of disgorgement.
- Act also highlights the importance of companies having verifiable registered physical addresses and makes it mandatory that companies have a physical address.
- The Act aims for declogging the National Company Law Tribunals (NCLTs) through the shifting of routine matters, from the NCLT to the central government.
- The Act also recategorizes 16 compoundable offences, such as failure to file returns and issuance of shares at a discount, as civil defaults where adjudicating officers of the central government may levy penalties.

CSR: Examples in India

- The Tata Group conglomerate in India carries out various CSR projects, most of which are community improvement and poverty alleviation programs. Through self-help groups, it is engaged in women empowerment activities, income generation, rural community development, and other social welfare programs.
- **Ultratech Cement,** India's biggest cement company is involved in social work across 407 villages in the country aiming to create **sustainability and self-reliance**.
- The ITC's e-Choupal program, aims to connect rural farmers through the internet for procuring agriculture products, covers 40,000 villages and over four million farmers. Its social and farm forestry program assists farmers in converting wasteland to pulpwood plantations.
- CSR expenditure across areas or subjects: Out of the total expenditure on CSR activities, the projects related
 to education and health have received maximum CSR funds almost every year post 2014-15 followed by
 projects related to rural development.
- Contribution to Central Government funds: At present, CSR funds can be contributed to PM National Relief
 Fund, Swachh Bharat Kosh, Clean Ganga Fund and any other fund set up by Central Government. The
 contributions to these funds have been in small proportion (approx. 5.6%) of the total CSR expenditures for
 the years 2014-15 to 2017-18.
- Local area spending & Geographical disparity in CSR: A major share of the total CSR fund available in a particular year is getting distributed in a few states, mainly due to the location of the Companies.
 - A state-wise analysis of CSR expenditure reveals that the states like Maharashtra, Karnataka, Andhra Pradesh, Gujarat, Tamil Nadu and Delhi have received approximately 40 % of the total expenditure on CSR, whereas States like Jharkhand, Bihar, Chhattisgarh and Uttar Pradesh are receiving only 9% of the total expenditure towards CSR.
 - The **North East Region** and **areas affected by Left wing extremism** are receiving a miniscule proportion of the total CSR expenditure.

Key Recommendations of the HLC-2018

Applicability of the CSR Provisions:	Provisions of CSR need to be applicable across all business entities and there should be a level playing field.
CSR Activities in Local Areas:	The emphasis on local area in the Act should not be treated mandatory in nature. Companies should engage in CSR activities by balancing local area preference with national priorities.
Schedule VII of the Act	It should be mapped and aligned largely with SDGs and some important items such as senior citizens' welfare, disaster management, and heritage be additionally included to develop an SDG+ framework.
Contribution to Central Government funds	This provision should be discontinued as CSR spend. However, a specific designated fund may be created for transfer of unspent CSR funds lying with the company beyond the proposed 3-5year time limit.
Issues related to Reporting for CSR:	Enhanced disclosures should be made for better information dissemination with respect to selection of projects, locations and implementing agencies to facilitate better monitoring.
CSR Audit:	CSR may be brought within the purview of statutory financial audit, by making details of CSR spending as part of the financial statement of a company.
Creation of 'Social Impact Companies'	To express object of pursuing social outcomes, while being permitted to achieve conditional profit which can be distributed.
Tax Benefits for CSR Activities:	All activities listed under Schedule VII to enjoy uniform tax benefit.
Third party assessment of CSR Projects:	5% of CSR mandated companies be identified on a random basis for third-party assessments on a pilot basis.

3.11. DRAFT MODEL TENANCY ACT, 2019

Why in news?

Ministry of Housing and Urban Affairs (MHUA) released the draft Model Tenancy Act, 2019.

About the Draft Model Tenancy Act

 It aims to establish a Rent Authority for regulating renting of premises in an efficient and transparent manner and to balance the interests of owner and tenant by establishing adjudicating mechanism for speedy dispute redressal and to establish Rent Court and Rent Tribunal to hear appeals and for matters connected.

Need for the Act

- As per the census 2011 about 1.1 crore houses are lying vacant thus, the Model Act would bring these into the rental market, and would promote the growth of the rental housing segment.
- The existing rent control laws are restricting the growth of rental housing and discourage owners from renting out their vacant houses due to fear of repossession.
- Therefore, the Act will bring in transparency and accountability in the existing system and balance the interests of both the property owner and tenant in a judicious manner.
- It will promote inclusive and sustainable ecosystem to various segments of society including migrants, formal and informal sector workers, professionals, students and urban poor.
- It will notify the rules for residential and non-residential premises and further to develop the policies to
 promote balanced rental housing by developing different options of rental housing like individual units,
 dormitories, hostels, co-living, co-housing, paying guest and employee housing and outline the roles of
 various stakeholders.

Important Provisions of the Act: Existing Challenges and Solution

- Addressing the issue of Security deposit: The Draft tries to address the most ambiguous issue of the upper slab/limit of security deposit that can be demanded by a landlord. At present, the security deposit amount is, typically, about two or three times the monthly rent in cities like Delhi, but it goes up to 10-12 months of the monthly rent in cities like Mumbai and Bengaluru.
 - The **draft Act** proposes to **cap the security deposit** to a maximum of **two months** of rent in case of residential properties.
- **Amount of rent:** In case of tenancies, which are governed under the existing rent control legislations, the landlord can't increase or determine the rent without the approval of the rent control tribunals.
 - The draft Act tries to address the issue of how rent can be increased.

- Vacation of house: There are only limited grounds through which a landlord can evict a tenant as the present rules favour tenants more.
 - The 2019 Act seeks to **penalize recalcitrant tenants** for refusing to move out of their rental properties after the agreed-upon rental period expires.
- Rent agreement: The draft Act also makes it mandatory for tenants and landlords to enter into a written agreement while taking or giving a property on rent.
- **Grievance redressal mechanism:** As proposed by the model Act, it comprise of the rent authority, rent court and rent tribunal, in cases of disputes.
- Obligations on both the Parties: A landlord cannot cut off or withhold essential supplies or services such as electricity and water under the new Act.

Way Ahead

With nearly 30% of households in urban areas staying in rented accommodation, this regulation will have a significant impact on the rental market. For the past several years, yield on residential investment has not been commensurate with the risks involved with the rental housing sector. Next step would be to convince states to adopt this model Act.

The need of the hour is to **provide an enabling framework** for emerging business models like co-living, while providing a **time-bound dispute resolution mechanism** for traditional tenancy formats. The government has an opportunity to make this a more comprehensive and enabling legislation to achieve the **Housing for All objective by 2022.**

3.12. FOOD SECURITY- FUTURE OF FOOD

Why in news?

The report titled "World Resources Report:
Creating a Sustainable Food Future" was coissued by the World Bank, UN Environment
Programme and UN Development Programme.
The report offers solutions to ensure we can feed
10 billion people by 2050 without increasing emissions, fueling deforestation or exacerbating poverty.

About WRI

- The World Resources Institute (WRI) is a global research non-profit organization that was established in 1982, that spans more than 60 countries.
- WRI's activities are focused on seven areas: food, forests, water, energy, cities, climate and ocean.

Findings of the WRI's Report

Feeding 10 billion people sustainably by 2050, then, requires closing three gaps:

- A 56 percent food gap between crop calories produced in 2010 and those needed in 2050.
- A 593 million-hectare **land gap** (an area nearly twice the size of India) between global agricultural land area in 2010 and expected agricultural expansion by 2050; and
- An 11-gigaton **GHG mitigation gap** between expected agricultural emissions in 2050 and the target level needed to hold global warming below 2oC (3.6°F), the level necessary for preventing the worst climate impacts.

Roadmap for a Sustainable Food Future

- Reduce Growth in Demand for Food and Other Agricultural Products:
 - Reduce food loss and waste: Approximately one-quarter of food produced for human consumption results in loss and waste all along the food chain, from field to fork. Reducing food loss and waste by 25 percent by 2050 would close the food gap by 12 percent.
 - Shift towards more sustainable diets: As incomes rise, people will increasingly consume more resource-intensive, animal-based foods. Consumption of ruminant meat has to be reduced drastically, as they are resource-intensive to produce, requiring 20 times more land and emitting 20 times more GHGs per gram than common plant proteins.
 - Achieve replacement-level fertility rates: The food gap is mostly driven by population growth, thus, RLFR would close the land gap by one quarter and the GHG mitigation gap by 17 % while reducing hunger.

- Increase livestock and pasture productivity: Demand for animal-based foods is projected to grow by 70 % by 2050 therefore need of boosting pasture productivity. Actions farmers can take include improving fertilization of pasture, feed quality and veterinary care; raising improved animal breeds; and employing rotational grazing.
- Enhance the Fisheries Management:
 - One third of marine stocks were **overfished** in 2015, therefore, catches need to be **reduced** to allow wild fisheries to **recover** enough just to maintain the 2010 fish-catch level in 2050.
 - As wild fish catches decline, aquaculture production needs to more than double to meet a projected **58 percent increase in fish consumption** between 2010 and 2050.
- Improve soil and water management: Farmers can boost crop yields in degraded soils—particularly
 drylands and areas with low carbon—by improving soil and water management practices. For example,
 agroforestry, or incorporating trees on farms and pastures, can help regenerate degraded land and boost
 yields.
- Link productivity gains with protection of natural ecosystems: While improving agricultural productivity can save forests and savannas globally, in some cases it can actually cause more land clearing locally. Thus, infrastructure investments should not come at the expense of ecosystems. Report suggests:
 - Limit inevitable cropland expansion to lands with low environmental opportunity costs.
 - Reforest agricultural lands with little intensification potential.
 - Conserve and restore peatlands.
- Reduction of GHG's emissions from agricultural production: The emissions from agricultural production arise from livestock farming, application of nitrogen fertilizers, rice cultivation and energy use.
 - Of the Ruminant livestock emissions, the largest source is **"enteric methane,"** or cow burps. Increasing productivity of ruminants also reduces methane emissions along with new technologies which can reduce enteric fermentation.
 - Globally, crops absorb less than half the nitrogen applied as fertilizer, with the rest emitted to the atmosphere or lost as run off. **Increasing nitrogen use efficiency** thus, involves improving fertilizers and their management.
 - Adopt emissions-reducing rice management and varieties as rice paddies contributed at least 10 percent of agricultural production emissions, primarily in the form of methane.
 - o Increase agricultural energy efficiency through **shift to non-fossil energy sources and** reduced emissions through **improved manure management.**



4. SECURITY

4.1. UNLAWFUL ACTIVITIES (PREVENTION) AMENDMENT ACT, 2019

Why in news?

Recently, the **Unlawful Activities (Prevention) Amendment Act, 2019** was passed in the Parliament of India.

Background

- The Unlawful Activities (Prevention) Act 1967
 was enacted to provide for the more effective
 prevention of certain unlawful activities of
 individuals and associations and for matters
 connected therewith.
 - It was enacted after the Indo-China war and threat posed by the DMK contesting elections in Tamil Nadu with secession from India being part of their manifesto.
- Owing to the changing nature of crime and need to have legal provisions to effectively deal with them, amendments were required.
 - Its scope has been expanded and evolved over various amendments (Refer the box).
- This Amendment Act 2019 has also incorporated some of the aspects.

Evolution of UAPA, 1967

- Amendments in 2004- It criminalised raising of funds for a terrorist act, holding proceeds of terrorism, membership of a terrorist organization, and support given to a terrorist organization by inserting specific chapters.
- Amendments in 2008- It enlarged the scope of the provision of "funds" to ensure a broader coverage of the financing of terrorism offences.
 - The definition of property was expanded to bring the legislation in line with the requirements of the International Convention for the Suppression of the Financing of Terrorism (CFT).
 - A new section 51A was inserted to give effect to the United Nations Security Council Resolutions 1267 and 1373 and to establish a mechanism for "freezing, seizing or attaching funds".
 - After the Mumbai attacks, more amendments were adopted which brought provisions similar to POTA and TADA regarding maximum period in police custody, incarceration without a charge sheet and restrictions on bail.
- Amendments in 2012- It further expanded the already vague definition of "terrorist act" to include offences that threaten the country's economic security.

Key Amendments in the legislation

- Expands the scope of terror entities- Previously the central government may designate an organisation as a terrorist organisation, if it, prepares or commits or participates or promotes or otherwise involved in terrorism
 - Now the government is empowered to designate individuals as terrorists on the same grounds.
- **Approval for seizure of property** Earlier an investigating officer was required to obtain the prior approval of the Director General of Police to seize properties that may be connected with terrorism.
 - o Now, if the investigation is conducted by an officer of the National Investigation Agency (NIA), the approval of the Director General of NIA would be required for seizure of such property.
- **Empowering NIA**: Earlier, the investigation of cases may be conducted by officers of the rank of Deputy Superintendent or Assistant Commissioner of Police or above.
 - This Bill additionally empowers the officers of the NIA, of the rank of Inspector or above, to investigate
 cases.
- Insertion to schedule of treaties: There were nine treaties listed in a schedule (like Convention for the Suppression of Terrorist Bombings (1997), and the Convention against Taking of Hostages (1979)) to the Act, according to which the Act defines terrorist acts to include acts committed under those treaties.
 - This Bill adds the International Convention for Suppression of Acts of Nuclear Terrorism (2005) to the list.

Some other laws to prevent terror activities

- National Safety Act (NSA), 1980
- Armed Forces (Special Powers) Act (AFSPA), 1958
- Many states have their own anti terror laws such as the Maharashtra Control of Organised Crime Act, 1999; Chhattisgarh Special Public Security Act, 2005; Jammu and Kashmir Public Safety Act, 1978; and Andhra Pradesh Public Security Act, 1992.

Need and Benefits of these amendments

• **Increasing threats of terrorism-** especially emanating from the cross border infiltration, which have caused multiple civilian as well as defence causalities in India.

- Many individuals escaped the radar- Not designating individuals as terrorists, would give them an
 opportunity to circumvent the law and they would simply gather under a different name and keep up their
 terror activities.
 - The UN along with several other countries, have provisions in their laws to designate individuals as terrorists. E.g. India itself was not able to designate Masood Azhar as a terrorist even though India lobbied for the same in the UN Security Council.
 - Further, there are various **lone wolfs** which do not belong to any organisation and carry out attacks. They will be brought under the purview of this act now.
- **Delay in the current process-** the law required that NIA take prior permission from the respective state DGP to attach the proceeds of terrorism. This delays the process as often such properties are in different states.
 - When NIA takes up a case having international and inter-state ramifications, all the facts pertinent to the case are with the NIA, and not with the state police.
- **Requirement of Human Resources-** By empowering officers with the rank of inspectors and above to investigate, the amendment seeks to solve the human resource crunch in the NIA.
 - The inspector rank officers have, over time acquired sufficient proficiency to investigate UAPA related cases.
 - This move would quicken the delivery of justice in UAPA related cases, which are reviewed by senior officers at various levels.

Concerns with the amendment

- **Draconian Provisions** The Central Government will be having the power to declare an individual as 'terrorist', which potentially dangerous because it will empower officials of Union Ministry to brand any person as a terrorist without following due process.
 - The only remedy available to the person is to make an application to the Central Government, which will again be reviewed by a committee formed by the Government itself.
 - The individual may face harassments in the form of social boycott, expulsion from job, hounding by media and perhaps attack from the self-proclaimed vigilante groups.
- **Potential of misuse-** The terms terrorist propaganda, terrorist literature etc. are vague terms having a potential of being misused by the authority. When a law is based on such loose concepts, officials may find it convenient to slap it against anybody.
 - There are instances of slapping UAPA against people for merely possessing revolutionary literature (the case of Anand Teltumbde).
 - o Many human rights activists, writers and journalists may run the risk of being branded as terrorists.
- Goes against the judicial prudence- if a person is labelled as 'terrorists merely on the basis of speech and thought. Rather it should be considered only if such speech gives rise to direct and imminent violence.
 - o In State of Kerala vs Raneef, the Supreme Court observed that one cannot be penalized for merely belonging to an unlawful organization if there is no active participation.
 - o Recently, a division bench of High Court of Kerala upheld the compensation of Rs. 10 lakhs ordered by a single bench to a man who was illegally arrested on grounds of possessing Maoist Literature.

Way Forward

- Safeguards against misuse- The Act have provisions for four level scrutiny before any decision is taken on designation of an individual as a terrorist. Proper legal and concrete evidence has to be there to support this and there will be close scrutiny at every level.
 - The different agencies of state should ensure that **due process of law** is applied while dealing with various cases under this legislation.
- **Need to ensure state of the art training-** of young officials as to make them competent in tackling complex cases.
- Need for a central agency for overseeing evidence collection- so as to aid investigation process, especially when cases need to connect dots across the borders.
- The primary duty of the state is to **secure the lives and property** of its citizens and this amendment empowers the state in doing so.

4.2. NIA (AMENDMENT) ACT, 2019

Why in news?

The Parliament recently passed the **National Investigation Agency (Amendment) Act 2019**, which seeks to expand the powers and jurisdiction of the NIA.

Background

- The NIA Act, 2008, governs the functioning of India's premier counterterror agency, the National Investigation Agency, which was brought in the wake of the 26/11 Mumbai terrorist attacks.
 - o It makes NIA the only truly federal agency in the country, along the lines of the FBI in the United States, and more powerful than the CBI.
 - O It has various advantages over other investigation agencies such the Central Bureau of Investigation (CBI), which has to seek the permission of a state government before investigating a case against a central government employee in that state. Whereas, the NIA has powers to take suo motu cognisance of terrorist activity in any part of India and to register a case, to enter any state without needing permission from its government, and to investigate and arrest people.
- NIA has a good performance track as out of 272 cases registered, charge sheets have been filed in 199 cases; prosecution is over in 51 cases and convictions has been achieved in 46 cases.
- However, there were some issues which impacted the working of NIA like-
 - The NIA can only investigate cases, which are listed in the Act's schedule, which largely deal with the security and integrity of the country. This means the NIA cannot probe murder and rape cases, which come under the Indian Penal Code (IPC).
 - o The NIA cannot investigate the offences committed outside India.
- To address these concerns, this amendment bill was brought in the Parliament.

Key Amendments

- **Enhances the scope of Offences:** which are mentioned in the schedule to the Act, such as the Atomic Energy Act, 1962, and the Unlawful Activities Prevention Act, 1967.
 - This amendment enhances this scope to include other offences like human trafficking; offences related to counterfeit currency or bank notes; manufacture or sale of prohibited arms; cyber-terrorism; offences under the Explosive Substances Act, 1908.
- **Enhances the jurisdiction of the NIA:** as the officers of the NIA will have the power to investigate scheduled offences committed outside India, subject to international treaties and domestic laws of other countries.
 - The Union government may direct the NIA to investigate such cases, as if the offence has been committed in India.
 - o The Special Court in New Delhi will have jurisdiction over these cases.
- Additional Provisions for Special Courts: The NIA Act allowed the central government to constitute Special Courts for the trial of scheduled offences.
 - Now the central government may designate Sessions Courts as Special Courts for the trial of scheduled offences, but in consultation with the Chief Justice of the High Court under which the Sessions Court is functioning.
 - When more than one Special Court has been designated for any area, the senior-most judge will distribute cases among the courts.
 - o Further, state governments may also designate Sessions Courts as Special Courts for the trial of scheduled offences.

Arguments in favour of this amendment

- **Increase in terror attacks-** after the Prevention of Terrorism Act (POTA) was repealed and with these lacunae in the NIA act, the agencies were inadequately armed to deal with such activities.
- **Presence of ambiguity weakened the case-** So far, the NIA could apply the sections to an accused only if the principal offence is part of its Schedule. Now, it can prosecute people in standalone cases under these Acts. For example, a person being prosecuted under UAPA could be slapped with Arms Act sections, but the NIA so far could not prosecute him under the Arms Act alone.

- Presence of such powers with all major agencies- of the world such as the FBI of the US. It was able to prosecute David Coleman Headley in the 26/11 attacks because they had powers to register a case in a terror attack that had happened in a foreign country.
 - On the other hand, this lacuna was a reason why the case against the Italian Marines who had shot dead an Indian fisherman off the coast of Kerala in 2012 was not investigated properly. The offence had taken place in international waters, and thus NIA had no jurisdiction
- Help in faster adjudication- Earlier, setting up special courts in any state would take six to nine months since
 a proposal had to be made, High Courts' concurrence had to be obtained, a judge had to be nominated, and
 a court had to be set up. With existing sessions courts allowed to function as special courts, trial can start
 immediately.

Arguments against this amendment

- Potential of Misuse- several opposition leaders criticised the bill and accused the government of using
 investigating agencies for "political vendetta". Some MPs said the anti-terror law is misused at times to
 target members of a particular community.
- **Judiciary is already overburdened-** and by designating the session's courts as special courts, it would take away its attention from usual business of the courts.

Way Forward

The functioning of NIA should not depend on political mandate, but on rule of law. It must be ensured that human rights are secured.

4.3. PREVENTION OF MONEY LAUNDERING ACT (PMLA)

Why in News?

Recently, Government made the **Prevention of Money Laundering Act, 2002** law stricter via a recent amendment made to the Act through the Finance Act of 2019.

New amendment

- The definition of "proceeds of crime" has been widened which now includes properties and assets created through any criminal activity even if it is not under the Prevention of Money Laundering Act (PMLA) and it will now be considered as "relatable offence".
- Other amendments have also been brought in to remove the grey areas and ambiguity in PMLA Act.

Framework for prevention of money laundering

 Statutory framework: It includes enactment of the Prevention of Money Laundering Act (PMLA) 2002

About Money laundering

- According to INTERPOL, Money laundering is concealing or disguising the identity of illegally obtained proceeds so that they appear to have originated from legitimate sources.
- It is frequently a component of other, much more serious, crimes such as drug trafficking, robbery or extortion.
- Some of the common methods of money laundering are Bulk Cash Smuggling, Shell companies and trusts, Round-tripping, Hawala, False invoicing etc.
- The advent of cryptocurrency, such as bitcoins, has exacerbated this phenomenon.

Impact of Money Laundering

- Damage to reputation of financial institutions and market:
 - Weakens the "democratic institutions" of the society
- **Criminal activities:** Provides opportunity to criminals to hijack the process of privatisation
- Economic Impact:
 - $\circ \quad \text{Destabilises economy of the country causing financial crisis}$
 - Policy distortion occurs because of measurement error and misallocation of resources
 - o Discourages foreign investors
 - o Encourages tax evasion culture
 - Results in exchange and interest rates volatility
 - Contaminates legal transaction.
- Institutional framework: It involves mainly two bodies:
 - Enforcement Directorate for investigation and prosecution of cases under the PML.
 - Financial Intelligence Unit India (FIU- IND) for receiving, processing, analysing and disseminating
 information relating to suspect financial transactions as well as for coordinating and strengthening
 efforts of national and international intelligence, investigation and enforcement agencies against money
 laundering.

International coordination:

- Financial Action Task Force (FATF): It is an inter-governmental body established with the objective to set standards and promote effective implementation of legal, regulatory and operational measures to combat money laundering and terrorist financing and other related threats to the integrity of the international financial system.
- Asia Pacific group: It works with countries in the Asia-Pacific to generate wide regional commitment to implement anti-money laundering policies and initiatives and secure agreement to establish a more permanent regional anti-money laundering body.
- Basel Committee on Banking Regulations and Supervisory Practices issued a statement of principles
 which aims at encouraging the banking sector to adopt common position in order to ensure that banks
 are not used to hide or launder funds acquired through criminal activities.
- India is also signatory to the International Convention for Suppression of Financing of Terrorism (1999);
 the United Nation Convention against Transnational Organised Crime (2000); and United Nation Convention against Corruption (2003).

About Prevention of Money Laundering Act (PMLA) 2002 Act

Objective

- To prevent and control money laundering
- o To confiscate and seize the property obtained from the laundered money; and
- o To deal with any other issue connected with money laundering in India.
- **Defines offence of money laundering:** As whosoever directly or indirectly attempts to indulge or knowingly assists or knowingly is a party or is actually involved in any process or activity connected with the proceeds of crime and projecting it as untainted property shall be guilty of offence of money-laundering.
- Expanded the reach of the Act by adding many more crimes under various legislations: It identifies certain offences under the IPC, the Narcotic Drugs and Psychotropic Substances Act, the Arms Act, the Wild Life (Protection) Act, the Immoral Traffic (Prevention) Act and the Prevention of Corruption Act, the proceeds of which would be covered under this Act.
- Prescribes obligation of banking companies, financial institutions and intermediaries: For verification and maintenance of records of the identity of all its clients and also of all transactions and for furnishing information of such transactions in prescribed form to the Financial Intelligence Unit-India (FIU-IND)
- **Cross border money Laundering**: It allows Central Government to enter into an agreement with Government of any country outside India for enforcing the provisions of the PMLA, exchange of information for the prevention of any offence under PMLA.
- **Special Courts:** They have been set-up in a number of States / UTs by the Central Government to conduct the trial of the offences of money laundering.
- It prescribes for formation of a three-member **Adjudicating Authority** for dealing with matters relating to attachment and confiscation of property under the Act.

Challenges in tackling money laundering

- Predicate-offence-oriented law: This means a case under the Act depends on the fate of cases pursued by
 primary agencies only such as the CBI, the Income Tax Department or the police. (Predicate offence- any
 offence that is component of more serious offence)
- **Growth of Technology**: The enforcement agencies are not able to match up with the speed of growing technologies.
- Non-fulfilment of the purpose of KYC Norms: KYC norms does not cease or abstain from the problem of
 Hawala transactions as RBI cannot regulate them. Also, the increasing competition in the market is forcing
 the Banks to lower their guards and thus facilitating the money launderers to make illicit use of it in
 furtherance of their crime.
- Widespread act of smuggling: there are a number of black market channels in India for the purpose of selling goods offering many imported consumers goods such as food items, electronics etc. which are routinely sold.
- Lack of comprehensive enforcement agencies: Separate wings of law enforcement agencies dealing with money laundering, cyber crimes, terrorist crimes, economic offences etc lack convergence among themselves.

• Tax Heaven Countries: They have long been associated with money laundering because their financial secrecy laws allow the creation of anonymous accounts while prohibiting the disclosure of financial information.

Way forward

- **Enlist common predicate offences**: to solve the problem internationally particularly keeping in mind the trans-national character of the offence of money laundering.
- **Awareness and education:** To infuse a sense of watchfulness towards the instances of money laundering which would also help in better law enforcement as it would be subject to public examination
- **Proper Coordination between centre and States:** The more decentralised the law would be the better reach it will have.
- Law in every country: The key to making an impact in money laundering is to get all of the countries of the world to enact and enforce the same laws dealing with money laundering so the criminals have nowhere to go.
- Special cell dealing with money laundering activities: It should be created on the lines of Economic Intelligence Council (EIC) exclusively dealing with research and development of anti-money laudering. This Special Cell should have link with INTERPOL and other international organizations dealing with money laundering. All key stakeholders, like, RBI, SEBI etc. should be a part of this.
- There is a requirement to have a **convergence of different enforcement agencies**, sharing of information is necessary.
- Laws in line with conventions: Countries should criminalise money laundering on the basis of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988 (the Vienna Convention) and the United Nations Convention against Transnational Organized Crime, 2000 (the Palermo Convention)

4.4. POLICE REFORMS

Why in news?

The **Bihar police** is bifurcating its Police forces on the lines of investigation and law and order, as per the **directives given by the Supreme Court** under the landmark **Prakash Singh Case in 2006.**

Why India needs urgent police reforms?

- Ever increasing threat: Internal security is very much a prerogative of police and efficient policing is needed in order to tackle these threats. With the advancement in technology, newer versions of threats are continuously arising in the form of cyber-attacks, bank frauds, and organised crimes, which need to be tackled in a more specialised manner. Against all these security threats, the first line of defence is the police system.
- Myriad deficiencies in the Police Investigation: Crime investigation requires skills and training, time and resources, and adequate forensic capabilities and infrastructure. The Law Commission and the 2nd ARC have noted that state police officers often neglect this responsibility because they

The Seven Directives given by the Supreme Court

- Constitute a State Security Commission (SSC) to:
 - Ensure that the state government does not exercise unwarranted influence or pressure on the police
 - o Lay down broad policy guideline and
 - Evaluate the performance of the state police
- Ensure that the DGP is appointed through merit based transparent process and secure a minimum tenure of two years.
- Ensure that other police officers on operational duties (including Superintendents of Police in-charge of a district and Station House Officers) are also provided a minimum tenure of two years.
- Separate the investigation and law and order functions of the police.
- Set up a Police Establishment Board (PEB) to decide transfers, postings, promotions and other servicerelated matters of police officers of and below the rank of Deputy Superintendent of Police.
- Set up a Police Complaints Authority (PCA) at state level to inquire into public complaints against police officers of and above the rank of Deputy Superintendent of Police in cases of serious misconduct.
- Set up a National Security Commission (NSC) at the union level to prepare a panel for selection and placement of Chiefs of the Central Police Organisations (CPO).

are understaffed and overburdened with various kinds of tasks.

They also lack the training and the expertise required to conduct professional investigations.

Increasing interference the by government: As per the police laws, both the Central and State police forces come under the superintendence and control of political executives. This enables the executives to reduce the police to mere tools in the hands of political leaders to fulfil their vested interests.

Inadequate Police infrastructure:

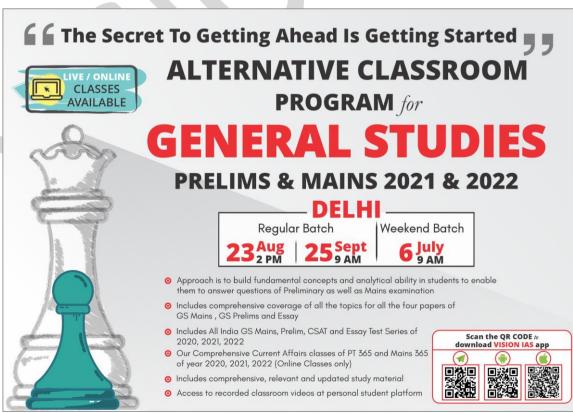
- Shortage of Personnel: There is a huge manpower shortage in the police department. The police-population ratio, currently 192 policemen per lakh population, is less than what is recommended by UN i.e. policemen per lakh population.
- Overburdening of work: A grave
 - challenge for the police force, it not only reduces the effectiveness and efficiency of the police personnel but also leads to psychological distress.
- o Inadequate weaponry: The Comptroller and Auditor General (CAG) in its report also highlighted that the force continues to depend on obsolete, outdated and unserviceable weapons. This was attributed to the **slow weapon acquisition process** from ordnance factories.
- Police-Public Relations: Police requires the confidence, cooperation and support of the community to prevent crime and disorder.
 - The 2nd ARC has noted that police-public relations is in an unsatisfactory state because people view the police as corrupt, inefficient, politically partisan and unresponsive.

Conclusion

Police Forces need operational freedom to carry out their responsibilities professionally while being held accountable for poor performance or misuse of power. It is time that we freed the police from the clutches of political masters and transform it from 'Ruler's Police' to 'People's Police.'

Status of implementation of SC directives

- A recent study by the Commonwealth Human Rights Initiative (CHRI) has stated that more than a decade after the passage of the SC directives, the Centre and all states are still **not in compliance** with them.
- Only 18 states have passed new Police Acts since 2006, and while others have issued government notifications, not a single one has incorporated the directives in full conformity with the Court's scheme. For instance:
 - As for compliance on constitution of the SSC, 27 out of 29 states have constituted an SSC however without fulfilling the various conditions laid down by the directives
 - 23 states ignored guidelines on appointment of DGPs
 - Separation of investigation and law and order wings not undertaken by more than 10 states
 - formed **Police Complaint** No state Authority accordance with directive



5. ENVIRONMENT

5.1. JAL SHAKTI ABHIYAN

Why in news?

Recently, the Union Government launched the Jal Shakti Abhiyan, a camp aign for water conservation and water security.

Background

- Given the increasing water stress in the country, the government is aiming to create a jan-andolan along the lines of the Swachh Bharat Mission, to save water and secure the future.
 - The government also aims at providing drinking water to every household on priority and in a sustainable manner.
- Jal Shakti Abhiyan will run through citizen participation in two phases-
 - Phase I: 1st July to 15th September 2019 (all States)
 - o Phase II: 1st October to 30th November 2019 (States with retreating monsoon)
- The **focus** of the campaign will be on **water stressed districts and blocks** with various focus activities as shown in the figure.
- There is **no additional funding** or specific targets for the campaign to achieve.

Plan of Implementation under the Jal Shakti Abhiyan

- It will be a collaborative effort of various Ministries of the Government of India and State Governments, being coordinated by the Department of Drinking Water and Sanitation.
- Teams of officers from the central government will visit and work with district administration in water stressed blocks in 256 districts, to ensure important water conservation interventions
 - The Centre issued an 18-point to-do list to all officers deputed as Central Nodal Officers/Central Prabharis.
 - A WhatsApp group is to be created immediately involving all central and district teams for a 'seamless interaction'.
- The conservation efforts will be supplemented by initiatives like developing Block and District Water Conservation Plans and 'Krishi Vigyan Kendra Melas' to promote efficient water use for irrigation and better crop choices.
- A large-scale communications campaign alongside the JSA involving mass mobilisation of different groups including school students, swachhagrahis, Self Help Groups, Panchayati Raj Institution members, among various others.
- In urban areas, plans with time-bound targets will be developed for wastewater reuse for industrial and agricultural purposes.
 - Plans will be developed for at least one urban water body for groundwater recharge in the block or the city.

Some facts on the status of water in India

- As per NITI Aayog report, nearly 600 million Indians face "high to extreme water stress" and 75% households do not have drinking water on their premises.
- India's annual per capita availability of water fell from 1,820 cubic meters in 2001 to 1,545 cubic meters in 2011, which may further fall to 1,341 cubic meters in 2025.
 - This is against the rising water demand in the country, which is likely to double by 2030.
- Some reports have also indicated that 21 cities, including New Delhi, Bengaluru, Chennai, and Hyderabad, are set to run out of groundwater by 2020, affecting an estimated 100 million people.
- India uses the largest amount of groundwater.
 - o India is also the third largest exporter of groundwater.
- 70% of drinking water is contaminated.



- Scientists and IITs will also be mobilised at the national level to support the teams.
- 3D Village Contour Maps may be created and made accessible for efficient planning of interventions

Convergence with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

- MGNREGA will drive the JSA in the rural sector, pumping in Rs 15,000 crore in the first phase of the campaign between July and September.
- A detailed plan of **over 200,000 works** to be taken up for water conservation in nearly 1,100 water-stressed districts has been drawn.
 - Under MGNREGA, rules mandates that 60 per cent of its expenditure is on national resource management and accordingly it has a target for construction of farm ponds, rain-water harvesting, reuse of water, watershed development, and intensive forestation for water conservation.
 - A team of engineers will also head to the villages to study the quality of such assets created under the MGNREGA and suggest ways to make structures technically sound
- The villages in all the water-stressed areas would also hold a **special pani panchayat** to identify and find solutions to water problems.

Progress of the Campaign

Recently, a review of the JSA was taken up by the Cabinet Secretary, which found that-

- The movement involved 1.54 lakh water conservation and rainwater harvesting measures, 1.23 lakh watershed development projects, over 65,000 reuse and recharge structures and rejuvenation of 20,000 traditional water bodies.
- It saw an estimated 2.64 crore people participating in it.
- It has led to an increase in groundwater level, surface water storage capacity, soil moisture in farmlands and increased plant cover.
 - About 4.25 crore saplings were planted as a part of the efforts.

Issues with Water Conservation in India

- Lack of awareness among citizenswhich has led to overexploitation of water resources without paying much heed to the necessity of water conservation.
- Poor government policies- Largely, governments have been hesitant to rationalize water fee on the residents. Further, in some states water freebies are rolled out. There is also an hesitation towards the rationalisation of power pricing for agriculture.
- Increasing water pollution- Release
 of chemicals and effluents into
 rivers, streams and ponds, the case
 in point being the Ganga River,
 which the government has not
 been able to clean.

Other Steps taken by the government towards water conservation

- The Union Government has setup a **Jal Shakti Ministry**, a dedicated ministry overseeing various issues related to water.
 - o It will work with states to ensure that every rural house gets water by 2024 under the **Jal Jeevan Mission**.
 - It will also overlook the flagship Nal se Jal scheme that aims to provide piped water supply for every household.
- Composite Water Index by NITI Aayog evaluates states on their water utilisation potential.
- The Central Ground Water Authority (CGWA) notified revised guidelines for ground water (GW) extraction to be effective from 1st June 2019
- National Water Informatics Centre setup as a repository of nationwide water resources data and provide latest and reliable water data through web-based India Water Resources Information System (India-WRIS) on a GIS platform in Public Domain.

Related news

- Recently, the Meghalaya became the first state to approve a draft water policy. The state has brought the Integrated State Water Policy of Meghalaya, which intends to achieve sustainable development, management and use of Meghalaya's water resources with community participation.
- Unscientific Agriculture- Indian agriculture accounts for about 90% of the country's annual domestic water consumption. However, excessive cultivation of water-intensive crops such as rice, wheat and sugar cane has exacerbated the water scarcity. E.g. As much as 70% of water delivered through India's limited irrigation infrastructure goes to water sugar cane fields in some states. It has resulted in depletion of groundwater at the rate of 10-25 mm per year between 2002 and 2016.
- Lack of water reuse- there is a lack of wastewater treatment facilities to treat the wastewater of a growing population.

Steps, which should be taken

- Grassroots water conservation efforts must be used in other parts, such as,
 Dong Bundh System in the North East, which ensures availability of drinking and irrigation water.
- To cause a shift in behaviour, local governments need to offer incentives, such as higher crop prices for farmers

Successful Case Studies on Water Conservation

- Community Managed Water Supply Programme (Gujarat): It aims to supply the village community with adequate, regular and safe water through household-level tap water connectivity, including households of people from backward communities.
- Madhya Pradesh's 'Bhagirath Krishak Abhiyan': It has resulted in the construction of thousands of farm ponds to boost irrigation potential, through the efforts of local farmers, government officers, and financial institutions such as NABARD.
- **choosing crops wisely**, and demonstrating water conservation in farming.
- o The government may also give monetary rewards to farmers for saving water and power for irrigation.
- Governments also need to start **charging commercial rates for electricity usage** by big farmers, who can afford to pay, making it more expensive as usage increases, so there is motive for water conservation.
- Water treatment and reuse practices should be adopted from the countries like Israel and Singapore.
 - o Israel converts 90% of its sewage into water, which is then diverted for irrigation.
- Need to educate people at village-level about the importance of saving water, showing them effective ways and techniques and how they can play a leading role in taking the initiatives forward.
- Government can outsource infrastructure maintenance and upkeep to private parties whose fees will be linked to service standards and consumer rankings, to overcome the poor water management by Municipalities.
- Households that use more water than the individual cap, should be asked to pay at least four times more for
 the excess water. Those who use less than the allocated amount should be allowed to sell their unused
 water rights back to the municipality, or save it for occasions when they may need the extra water, ranging
 from holiday guests to special occasions or emergencies.
- Government could offer **green tax offsets** to large residential blocks, schools, hospitals, hotels and commercial complexes that reduce water usage both by innovating and by recycling waste water for gardens, toilets and other facilities needing non-potable water.

5.2. FLOOD

Why in news?

Different parts in many states like Maharashtra, Karnataka, Andhra Pradesh, Kerala, Chattisgarh have been reeling under floods.

Reasons of recent floods in these states-

- Climate Change- Rise in average global temperatures have led to a worrying trend of no rain for long periods and then a sudden bout of excessive rainfall. 40 million hectares out of a geographical area of 3290 lakh hectares is prone to floods in country.
 - Incessant rainfall: in all these regions.
 - Overflowing Rivers- e.g. Periyar, Manimala, Muvattupuzha, Chaliyar and Pamba in Kerala.
- Deep Depression- in the Bay of Bengal, which crossed the Odisha coast causing heavy rainfall.

NDMA Guidelines on Management of Flood

- Shifting the focus to preparedness by implementing Flood Management Plans.
- Ensuring regular monitoring of the effectiveness and sustainability of various structures and taking appropriate measures for their restoration and strengthening.
- Continuous modernization of flood forecasting, early warning and decision support systems.
- Ensuring the incorporation of flood resistant features in the design and construction of new structures in the flood prone areas.
- Drawing up time-bound plans for the flood proofing of strategic and public utility structures in flood prone areas.
- Improving the awareness and preparedness of all stakeholders in the flood prone areas.
- Introducing appropriate capacity development interventions for effective Flood Management (including education, training, capacity building, research and development, and documentation.)
- Improving the compliance regime through appropriate
- **Backwater flooding-** leading to Krishna river flowing 4 to 5 ft higher than normal in Karnataka.
- **Dam Mismanagement**: There was an instant release of water from dam due to heavy rain, as dam reservoirs were not emptied before the onset of rain, flooding the nearby regions at a much faster rate than expected.

- **Encroachment of river basin-** several habitations are situated close to the water bodies and are almost at the river level.
- **Issues of Coordination** e.g. Maharashtra and Karnataka have traded charges over the management of floodwater flowing across the two States' borders.

Impact of floods

- Loss of human and cattle lives e.g. 12 people lost their lives a boat capsized in Sangli, Maharashtra.
- Landslips/ Landfalls- are triggered due to heavy rains which create further damage to life and property.
- Displacement and other losses-
 - Wide- spread damage to crops.
 - Large parts of these states remain inundated.
 - o Schools, Hospitals remain shut
 - o Electricity and telephone lines snapped
 - o Collapse of road links and train services. Kochi Airport has been shut due to this.
- Loss of Soil Fertility: Flood cause heavy damages to topsoil, which takes time to be restored to its natural state.
- Post-disaster effects- like public health issues due to sanitation issues, post-traumatic stress disorder etc.

Steps taken by various governments-

- **Deployment of forces** including from NDRF (National Disaster Response Force), SDRF, Army and Navy, apart from State emergency services.
- **Draft River Regulation Zone Rules** formulated with the help of independent experts, were circulated by the ministry of environment, forests, and climate change (MoEFCC) for demarcation of active floodplains, high flood lines, and high to low impact zones, and then limiting development within these zones.
- Enforcement of Coastal Regulation Zone Regulations

Way Forward

- Short term preventive measures aiming to build capacity for mitigation of disaster can be adopted:
 - Structural measures
 - ✓ Building embankments, floodwalls, flood levees.
 - ✓ Natural Detention basin.
 - ✓ Channel improvement through dredging and other channel deepening measures.
 - ✓ Diversion of floodwater through storm drainage system.
 - ✓ Catchment area afforestation especially in the upstream areas of river more prone to soil erosion and landslides.

Non-structural measures

- Flood forecasting and warning system Nearly 60% telemetry stations are non-operational, according to CAG report. CWC should modernize it especially in the North-eastern Region using sensor based instruments, satellite monitoring etc.
- ✓ Flood hazard zoning This will help to identify the flood hazard prone zones and help to prioritize flood control process. Data should include experiences of NDRF & studies by CWC
- ✓ Regulation of reservoirs
- ✓ Strategic environment assessment of development activities in flood prone areas, as followed in several countries
- ✓ Strengthening planning authorities like the Brahmaputra Board and flood control departments by staffing them with scientists from various disciplines.

• Building resilience through following measure

- o Creation of crisis-proof health infrastructure and stockpiling dry rations and medicines
- Sanitation through elevated toilets, ecosanitation units, elevated dugwells or tubewells with iron filter, in the flood-prone areas of North Bihar and Northeast.

Dam Safety Bill, 2019

- The Bill applies to all specified dams in the country.
- The National Dam Safety Authority will be headed by an officer, not below the rank of an Additional Secretary, who will be appointed by the central government.
- The constitution of State Committees on Dam Safety by state governments.
- Owners of specified dams are required to provide a dam safety unit in each dam.
- The bill provides for **offences and penalties** against violations of its provisions.

- Efficiently utilizing disaster relief funds with states as Center asks them to set off the unutilised portion when making fresh claims during relief
- o Increasing coordination and adequate training at the ground level to implement NDMP (national disaster management plan), which covers all aspects of disaster management.
- Speedy relief and rehabilitation Post-disaster such as
 - o Actions on the ground: short-term housing, food, safe water
 - Access to health care and counselling services to enable coping with disaster mentally
 - o Providing adequate number of boats to enhance access to developmental activities

5.2.1. URBAN FLOODING

Why in news?

Recently, torrential rains have brought Mumbai to a grinding halt, reigniting the discussion on Urban Flooding in India.

Background

- Urban flooding is caused when there is intense and/or prolonged rainfall, which overwhelms the capacity of the drainage system.
 - It is significantly different from rural flooding urbanisation leads to developed catchments which increases the flood peaks from 1.8 to 8 times and flood volumes by up to times. Consequently, flooding occurs very quickly due to faster flow times, sometimes in a matter of minutes.
- There has been an increasing trend of urban flood disasters in India in recent years whereby major cities like Mumbai, Chennai have been severely affected.

NDMA Guidelines on Urban Flooding

- Create a National Hydro-meteorological Network- for providing early warning in all urban centres to effectively deal with the problem of urban flooding
- Use of **Doppler Weather Radars** to be expanded to cover all urban areas in the country
- An inventory of the existing storm water drainage system to be prepared. The inventory will be both watershed based and ward based.
- Catchment to be the basis for planning and designing the storm water drainage systems in all ULBs
- Every building in an urban area must have **rainwater harvesting** as an integral component of the building utility.
- Low-lying areas in cities have to be reserved for parks and other low-impact human activities.
- **Encroachments** on the drain should attract penal action.
- **Pre-monsoon desilting** of all major drains to be completed by March 31 each year.
- **Urban Flooding** has to be dealt as a **separate disaster**, de-linking it from riverine floods, which affect the rural areas.
- Suitable interventions in the drainage system like traps, trash racks can be provided to reduce the amount of solid waste going into the storm sewers.
- **Inlets** to be provided on the roads to drain water to the roadside drains and these has to be designed based on current national and international practices.
- Concept of **Rain Gardens** to be incorporated in planning for public parks and on-site storm water management for larger colonies and sites those are to be developed.
- Flood hazard assessments should be done on the basis of projected future scenarios of intensities and duration of rainfall and land use changes.
- Global climate change is resulting in changed weather patterns and increased episodes of high intensity rainfall events occurring in shorter periods of time, which has slated as the major reason behind this increasing frequency of urban flooding.

Reasons behind Urban flooding-

Environmental Factors

- o Heavy and unexpected rainfall. e.g. Srinagar floods.
- Synchronization of runoffs from various parts of watershed.
- o Bursting of glacial lakes. E.g. Chorabari Glacier in Uttarakhand.
- o Small-scale storms

Anthropogenic Factors-

Poor Urban Planning- the reluctance of states to enact zoning has led to increase in encroachment on floodplains, sometimes authorised and duly approved by planning authorities

- ✓ **Encroachment of floodplains-** e.g. Much of the Mumbai's exurban growth has been in townships along the River Ulhas, with little regard for the integrity of the river system.
- ✓ **Maharashtra deleted its River Regulation Zone policy in 2015** a decision now being protested by residents near the Ulhas River and decided to build a new airport in Navi Mumbai on low-lying land.
- ✓ Inefficient management of religious gathering like Kumbh Mela in Nasik. This results in unwanted concretisation of rivers, which narrows down their channels.
- ✓ Surface sealing due to urbanization (which increases run-off)
- Deforestation- A March 2015 study prepared for the Mumbai Metropolitan Region Development Authority (MMRDA) reported that forest cover in the MMR had fallen from about a third of the total area in 1987 to 21% in 2015.
- Urban Heat Island Effect- Due to which rainfall in and around urban areas has increased.
- o Inadequate solid waste management- and its segregation at source. This results in blocking of drains.
- Slow implementation of Flood Management Projects like Narmada River Project which took 56years to complete.

Way Forward

- Integrated approach to sustainable urban planning by empowering Urban Local Bodies in decision making and planning of flood mitigation infrastructure. E.g. MMRDA's VCF to tap finances. Maharashtra will constitute a task force comprising local and global experts to study impact of climate change its cities
- Robust anti-encroachment laws.
- Sustainable slum management.
- Efficient Solid waste management and sewerage lines following Israel and Singapore modal and in line with SWM rules 2016.
- Flood water-draining network, in line with JNNURM vision.
- Urban planning It involves following
 - Building the storm drains and maintaining other drainage system.
 - Reviewing the protocol followed by State governments in controlling flows from dams and reservoirs.
 For ex-much of the waters in Rajasthan this year or Chennai in 2015 flowed from a dam that was opened to relieve pressure
 - o **Inter-state cooperation or dialogue** as opening up of dams in upstream areas such as Arunachal Pradesh become a problem for Assam, since the past seven years
 - o **Prevent encroachment** on the river basin & natural lakes to ensure natural flow of the water.

5.3. PAYMENT FOR ECOSYSTEM SERVICES

Why in news?

The results of the country's first-ever **Payment for Ecosystem Services (PES) agreement** in India have started showing up.

More on news

- The first ever PES agreement was signed between the Village Forest Development Society (VFDS) and the Palampur Municipal Council (PMC), Himachal Pradesh. Formalised in October 2010, it is a rural-urban engagement model for the sustainable supply of water and protection of the catchment area.
- A large part of the country's population is dependent for its livelihood on climate-sensitive sectors like agriculture and forestry. Any adverse impact on water availability threatens food security as well as causes the dieback of natural ecosystems, including species that sustain the livelihoods of rural households.
- Palampur's PES model is a step towards combating climate change impacts on water resources and can potentially be adapted for other natural resources in other parts of the country.

Payment for Ecosystem Services (PES) Agreement

- It involve payments to the managers of land or other natural resources in exchange for the provision of **specified ecosystem services** over-and-above what would otherwise be provided in the absence of payment.
 - Ecosystem services are the benefits we derive from the natural environment, such as, the provision of food, water, timber and fibre; underlying functions such as soil formation and nutrient cycling.

- Stakeholders enter into PES agreements on a voluntary basis and are in no way obligated to do so.
- Thus, PES provides an opportunity to put a price on previously un-priced ecosystem services like climate regulation, water quality regulation and the provision of habitat for wildlife and, in doing so, brings them into the wider economy.
- The novelty of PES arises from its focus on the 'beneficiary pays principle', as opposed to the 'polluter pays principle'.
- PES may be positive from a buyer's perspective if the payments are less than those associated with any alternative means of securing the desired service. For example, it may be less expensive for a water utility to pay land owners for improved catchment

management than to pay for additional water treatment.

UPSTREAM COMMUNITY Incentives stewards and providers e.g., cash, assistance of watershed services materials PROJEC' Balance upstream Payments and downstrem interests Downstream water users Beneficiaries of vatershed services Watershed services e.g., water purification, flood risk mitigation aquifer recharge, erosion minimization

• PES schemes may be positive from a seller's perspective if the level of payment received at least covers the value of any returns foregone as a result of implementing the agreed interventions. For example, a farmer may be willing to create ponds for enhanced water storage if the payments received at least cover the costs of doing so, including the costs associated with any lost agricultural production.

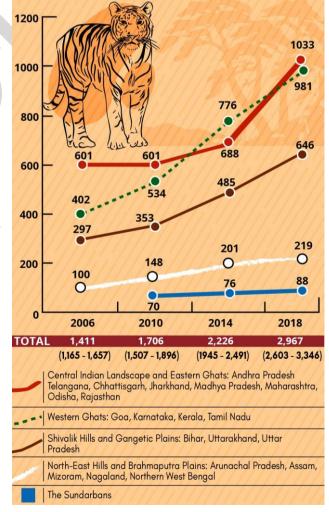
5.4. ALL INDIA TIGER ESTIMATE-2018

Why in News?

The four-year tiger census report, 'Status of Tigers, Co-pr edators, Prey and their Habitat, 2018' shows the **count of tigers in India, has risen to 2967**, in 2018 from 2,226 in 2014.

Findings of All India Tiger Estimate-2018

- **Biggest increase in tigers:** The biggest increase has been in **Madhya Pradesh** from 308 in 2014 to 526, in Karnataka from 406 to 524, in Uttarakhand from 340 to 442 and in Maharashtra from 190 to 312.
- Continuing loss of tiger-occupied areas: The net loss in tiger-occupied area to be 17,881 sq km or 20% of the tiger habitat in four years. However, a significant rise in numbers this time, however, is from nonprotected areas.
 - Tigers colonised 25,709 sq km new areas.
 - The decline was spread over three out of India's five tiger landscapes: The Shivalik, Western Ghats and the North East reported a loss of 469 sq km, 527 sq km and 6,589 sq km respectively; while Central India and the Sundarbans landscapes registered an increase of 7,532 sq km and 479 sq km respectively.



- Extirpation of tigers in 3 tiger reserves: Against the 33% jump in the national tiger population, the report recorded potential extirpation of tigers in three reserves. No tiger was recorded in Buxa (West Bengal), Dampa (Mizoram) and Palamu (Jharkhand) tiger reserves.
- Increase in prey base: A tiger breeds faster when there is good preybase. So if tiger numbers have increased, it also means the preybase, too, has improved.
- **Decline** in states: Chhattisgarh, Jharkhand, Odisha, Andhra Pradesh and Telangana have recorded a decline in their tiger populations.

Why the tiger population in India increased?

- Conservation efforts by the Forest **Department:** The success owes a lot to increased vigilance and conservation efforts by the Forest Department.
- **Increased Migration:** Healthy increases in core area populations eventually lead to migrations to areas outside the core; this is why the 2018 census has found tigers in newer areas. Over the years, there has been increased focus on tigers even in the areas under the territorial and commercial forestry arms of Forest Departments.
- Increased Vigilance: Organised poaching rackets have been crushed. There has been no organised poaching by traditional gangs in Central Indian landscapes since 2013.
- Improved conditions for breeding: Tigers are fast breeders when conditions are
- Rehabilitation of villages: The rehabilitation of villages outside core areas in many parts of the country has led to the availability of more inviolate space for tigers.

conducive.

- Better estimation: Also, because estimation exercises have become increasingly more accurate over the years, it is possible that many tigers that eluded enumerators in earlier exercises were counted this time.
- Success of various programmes: Various national and global efforts tiger conservation has contributed in protecting tiger's natural habitat as well saving tigers.

Indian Tiger or Royal Bengal Tiger (Panthera tigris)

- It is the tiger species native to India.
- The largest populations of Bengal tigers are in India, but there are some smaller groups in Bangladesh, Nepal, and Bhutan. It may also be present in areas of China and Burma.
- India is home to 80 per cent of global tiger population.
- Bengal tiger habitats usually are tropical rainforests, marshes, and tall grasses.
- The tigers are an "umbrella" species as by rescuing them, we save everything beneath their ecological umbrella - everything connected to them.

Conservation status of Tiger

IUCN Red List: Endangered

Wild life protection Act : Schedule 1

CITES: Appendix 1

Threat to Tiger in India:

- Habitats loss
- Poaching and Wildlife Crime
- Growing incidents of Man-Animal conflict

Tiger Reserve and National Park/Wildlife Sanctuary

- A National Park or Wildlife Sanctuary that is considered significant for protecting tigers can be additionally designated as a Tiger Reserve.
- A Tiger Reserve consists of a 'Core' or 'Critical Tiger Habitat', which is to be managed as an inviolate area,
- 'Buffer' or Peripheral area immediately abutting a Core area, which may be accorded a lesser degree of habitat protection.

Why is a tiger census needed?

- The tiger sits at the peak of the food chain, and its conservation is important to ensure the well-being of the forest ecosystem.
- The tiger estimation exercise includes habitat assessment and prey estimation.
- The numbers reflect the success or failure of conservation efforts.

Global Conservation Efforts

- Global Tiger Initiative (GTI): It was launched in 2008 as a global alliance of governments, international organizations, civil society, the conservation and scientific communities and the private sector, with the aim of working together to save wild tigers from extinction. In 2013, the scope was broadened to include Snow Leopards.
- Global Tiger Recovery Program (GTRP): It seeks to empower Tiger Range Countries to address the entire spectrum of threats, domestic as well as those that are transboundary in nature, and work toward increased financial sustainability through the integration of conservation objectives into development.
- Global Tiger Forum: It is an international collaboration of tigerbearing countries which has set a goal of doubling the count of wild tigers by 2022.
- TX2: Its goal was to double the number of wild tigers across their geographical areas. The WWF is implementing the programme in 13 tiger range countries.
- Conservation Assured Tiger Standards CA|TS: It is a set of criteria which allows tiger sites to check if their management will lead to successful tiger conservation. It is an important part of Tx2 programme.

Tiger Conservation Efforts in India

- **Project Tiger**: The Government of India launched the centrally Sponsored Scheme the 'Project Tiger' in 1973 for in-situ conservation of wild tigers in designated tiger reserves.
- **More tiger reserves in india:** An extremely important measure and one of the prime reasons for the success of Project Tiger; more tiger reserves in India would keep humans away from fledgling tiger populations.
- National Tiger Conservation Authority (NTCA): It is a statutory body established in 2006 under MoEFCC performing functions as provided in the Wildlife (Protection) Act, 1972. Presently It implements major tiger conservation initiatives like project tiger, Tiger conservation plan etc.
- Monitoring System for Tigers Intensive Protection and Ecological Status (M-STrIPES): It is a software-based monitoring system launched across Indian tiger reserves by the NTCA.

5.5. RHINO CONSERVATION

Why in news?

Recently, the **Special Rhino Protection Force (SRPF)** trained to combat poachers and understand animal behaviour was deployed in the Kaziranga National Park.

More on news

- The force has been raised by the initiative of both the central and state governments to control rhino poaching in tiger reserve.
- The process of setting up the special force was started in 2015 on the recommendations of the National Tiger Conservation Authority.
- The Assam government would be paying the salaries of the SRPF members and the amount would be reimbursed by the National Tiger Conservation Authority.

Greater One -horned Rhinos (Indian Rhino)

- The great one-horned rhino or Indian Rhino is the **largest** of the rhino species found commonly in Nepal, Bhutan, Pakistan and India, with India being home to 2,200 rhinos, or over 85 per cent of the population.
- Rhinos in India today are found in parts of Uttar Pradesh, West Bengal and Assam.
- According to World Wildlife fund data of 2012, Assam has 91 percent of total Rhino population of India which is mainly concentrated in Kaziranga National Park, and a few in Pobitara Wildlife Sanctuary.
- It is listed as **Vulnerable** on the IUCN Red List and is protected under the Schedule I of the Wildlife Protection Act. It is threatened by poaching, habitat destruction, flooding etc.
- The Indian rhinoceros is also **known to help** in seed dispersion, moving large tree seeds from forested areas to grasslands through excreta.
- The Indian Rhino is poached for its horn. Its poaching reached its peak however it has come down due to various efforts by the government and NGOs.
- Indian Rhino Vision 2020 (IRV 2020)
 - o Launched in 2005, it is an ambitious effort to attain a wild population of at least 3,000 greater one-horned rhinos spread over seven protected areas in the Indian state of Assam by the year 2020.
 - Kaziranga National Park in Assam, India, holds about 70% of the world population. This is worrisome for two reasons
 - ✓ the park may have reached its carrying capacity and might not be able to support any more rhinos;
 - ✓ the entire species' population could decimated because by a disease outbreak, natural disaster, or another acute threat.
 - o IRV 2020 aims to translocate Rhinos from Kaziranga National Park and Pabitora Wildlife Sanctuary to five other protected areas namely Manas, Laokhowa, Buracharpori-Kochmora, Dibrusaikhowa and Orang.
 - Translocations of Rhinos are being done in order to avert the risks associated with having an entire rhino population concentrated in one specific area.

5.6. DECLINE IN POPULATION OF GREAT INDIAN BUSTARD

Why in News?

The Ministry of Environment, Forests and Climate Change has initiated a project worth Rs 33.85 crore for the conservation and protection of the Great Indian Bustard. Only 130 such birds are left in India.

Reason for decline in population

- The biggest threat to this species is hunting, poaching, habitat erosion, 'greening' projects that transform arid grasslands to wooded areas, change of land use from grassland to farmland, fast moving vehicles and free-ranging dogs in villages
- In recent times, death due to collision with wind turbines and power transmission lines has emerged as major factor.

Conservation efforts

- Great Indian bustard is placed in Schedule I of the Indian Wildlife (Protection) Act, 1972, the highest degree
 of legal protection in the country.
- It is categorised as "critically endangered" by the International Union for Conservation of Nature (IUCN).
- Great Indian Bustard is Rajasthan's state bird. The state government has started "Project Godawan" for its conservation at Desert National Park (DNP) in Jaisalmer.
- It's one of the Species for the Recovery Programme under the Integrated Development of Wildlife Habitats of the Ministry of Environment and Forests.
 - The important objective of this programme is to build up captive population of Great Indian Bustard and to release the chicks in the wild for increasing the population.
 - Financial assistance is given for recovery programme of the species.

About Great Indian Bustard

- It is **endemic to Indian Sub-continent**, found in central India, western India and eastern Pakistan.
- Important Sites for the species are: Desert National Park Sanctuary (Rajasthan), Naliya (Gujarat), Warora (Maharashtra) and Bellary (Karnataka)
- Rajasthan has the highest population. It is thought to have completely disappeared from the states of Haryana, Punjab, Orissa, Uttar Pradesh, Tamil Nadu and Madhya Pradesh
- The habitat where it is most often found is arid and semi-arid grasslands, open country with thorn scrub, tall grass interspersed with cultivation. It avoids irrigated areas.
- It is considered as the flagship grassland species, representing the health of the grassland ecology.
- Recently Supreme Court has constituted a high-powered committee to urgently frame and implement an emergency response plan for the protection of Great Indian bustard.

5.7. EARTH OVERSHOOT DAY

Why in news?

Recently, a report by the **Global Footprint Network** has revealed that the **Earth Overshoot Day** has moved up by two months over the past 20 years and this year's date is the earliest ever.

About Earth Overshoot Day

- World Wide Fund for Nature (WWF)- Switzerland based International NGO, estd. in 1961 and engages in conservation of wildlife and natural habitat
- Global Footprint Network- It is an international nonprofit organization founded in 2003 to enable a sustainable future where all people have the opportunity to thrive within the means of one planet.
- It is the date when **humanity annual demand** on nature exceeds what Earth can regenerate over the entire year.
 - o It is calculated by **WWF** and **Global Footprint Network**.
- This year it has fell on **July 29**th, which is the earliest ever.
- It means on July 29, humanity will have used nature's resource budget for the entire year. It adds up all of people's competing demands for biologically productive areas food, timber, fibers, carbon sequestration, and accommodation of infrastructure.
- This means that humanity is currently using nature 1.75 times faster than our planet's ecosystems can regenerate. If we moved Earth Overshoot Day back 4.5 days every year, we would return to living within the means of one Earth before 2050.

5.8. CENTRE TO LAUNCH DEEP OCEAN MISSION

Why in news?

India will launch its ambitious 'Deep Ocean Mission' by October, 2019 to enter hitherto untapped 75,000 sq km of area in international waters to tap vast marine resources.

About Deep Ocean Mission (DOM)

- It aims to explore the depths of the Ocean for the possibilities of deep-sea mining.
- The mission proposes to explore the deep ocean similar to the space exploration started by ISRO about 35 years ago.
 - It would be an integrated programme where several scientific departments of the government such as ISRO, DBT, DST,

Poly-Metallic Nodules

- Polymetallic nodules, also called manganese nodules, are rock concretions formed of concentric layers of iron and manganese hydroxides around a core.
- It has been estimated that 380 Million Metric Tonnes of PMN are available at the bottom of the seas in the Central Indian Ocean.
- India is the first country to have received the status of a pioneer investor in 1987 and was allocated an exclusive area in Central Indian Ocean Basin by United Nations (UN) for exploration and utilization of nodules.
- The program on Poly metallic nodules was initiated at CSIR-NIO with the collection of the first nodule sample from Arabian Sea on board the first Research Vessel Gaveshani on 26 January 1981.
- DRDO and ICAR will work together for sustainable harnessing of ocean resources.
- Its focus will be on technologies for deep-sea mining such as under water vehicles, under water robotics and ocean climate change advisory services, among others.
- Two key projects planned under DOM include a **desalination plant, powered by tidal energy** and a **submersible vehicle** that can explore depths of at least 6,000 meters.

Advancements made-

- o A First Generation Mine-site (FGM) with an area of 18,000 Km² has been identified.
- A remotely operable submersible (**ROSUB 6000**) capable of operating at depths of 6,000 metres has already been developed and tested successfully up to 5,289 metres depth.
- Besides, a remotely operable in-situ soil testing equipment has also been developed for getting detailed geo-technical properties of the mining area at Central Indian Ocean Basin (CIOB).
- These technological developments were funded under an umbrella scheme of the government called
 Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART)

Significance of DOM for India

- India's Exclusive Economic Zone (EEZ) spreads over 2.2 Million sq.Km. EEZ are boundaries prescribed by the UNCLOS, which give special rights to a state regarding the exploration and use of marine resources.
- India has been allotted a site of 75,000 sq-Km in the Central Indian Ocean Basin (CIOB) by the UN International Sea Bed Authority for exploitation of Poly-Metallic nodules (PMN). The estimated polymetallic resource potential is about 380 million tones.
- Being able to lay hands on even 10% of that reserve can meet the energy requirement for the next 100 years.
- Researches and studies about the Ocean floor can help us to make informed decisions on Climate change.
- It will help in innovating technologies about the field from underwater vehicles to under water robotics, hence improving India's position in ocean research field.
- It will create huge jobs and business opportunities in Ocean science.
- The Mission will help in leveraging the blue economy for the country's overall economic growth.

5.9. RED MUD UTILISATION

Why in News?

In a step towards productive utilisation of bauxite residue, commonly known as the 'Red Mud', an interactive workshop called 'Waste to Wealth' was organized by Ministry of Mines.

What is red mud?

Red mud is a solid waste generated during the aluminium production by the Bayer process from bauxite.

- Global generation of red mud is more than 150 million tons and there exists a global inventory of more than 3 billion tons. Red mud generation in India is around 9 million tons per year
- Red mud contains impurities such as caustic soda and others minerals.
- It contains **six major constituents** Silicon, Aluminium, Iron, Calcium, Titanium and Sodium, apart from an array of minor elements.

The environmental problems associated with red mud are:

- Its high alkalinity makes it **extremely corrosive** and damaging to soil and life forms.
- Alkali seepage contaminates the groundwater.
- Problem associated with its storage. Vast area of land required for disposal.
- Alkaline airborne dust emissions.

Red mud utilisation

Development of suitable metallurgical process for metal recovery from red mud is important for bulk utilisation, value addition and moving towards zero waste. Due to its unique physical and chemical properties, red mud can be used in several aspects. Such as

Bayer Process

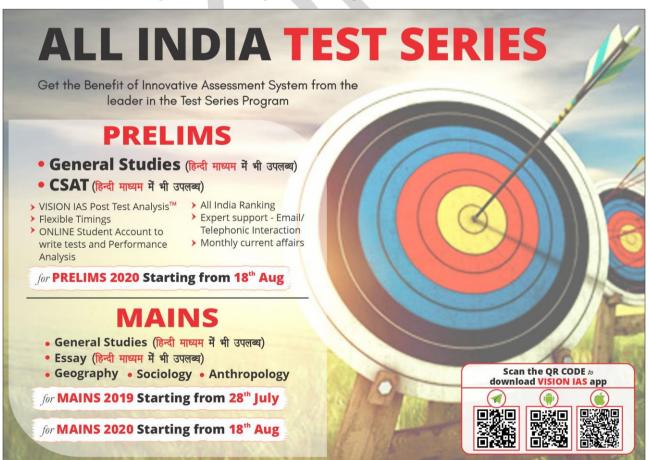
The Bayer process, invented in 1887, is

the primary process by which alumina is

This process is still used to produce nearly all of the world's alumina supply.

extracted from bauxite ore.

- For treatment of acidic soils and retaining of certain nutrients, such as phosphorus in agriculture
- For making crude and fine ceramics, such as tiles, floor tiles
- For making bricks
- As a component in making cement
- As an additive in ferrous metallurgy
- As a filler in rubber and plastic industry
- As pigment in production of paints
- As a feedstock for making water and sewage treatment agents.



6. SOCIAL ISSUES

6.1. THE MUSLIM WOMEN (PROTECTION OF RIGHTS ON MARRIAGE) ACT, 2019

Why in news?

President gave assent to the Muslim Women (Protection of Rights on Marriage) Act 2019. It will replace the 1986 Muslim Women (Protection of Rights on Divorce) Act, enacted after the Shah Bano Case.

Major Provisions of the 2019 Act:

- It invalidates the practice of instant triple talag (talaq-e-biddat) as void and illegal.
- It also makes instant triple talag a criminal offence with imprisonment up to three years and fine.
- It also provides to make the offence cognizable, if information relating to the commission of an offence is given to the Police, by the married Muslim woman upon whom talaq is pronounced marriage (A cognizable offence is one for which a
 - police officer may arrest an accused person without warrant.).

recourse to under secular law. or by any person related to her by blood or

- The Act also provides scope for reconciliation without undergoing the process of Nikah Halala if the two sides agree to stop legal proceedings and settle the dispute.
- Allowance: A Muslim woman against whom talaq has been declared, is entitled to seek subsistence allowance from her husband for herself and for her dependent children. The amount of the allowance will be determined by the Magistrate.
- Custody: A Muslim woman against whom such talaq has been declared, is entitled to seek custody of her minor children. The manner of custody will be determined by the Magistrate.

Arguments in favour of the Act

- Need for a stringent law: Supreme Court judgment of 2017 had recognised the discriminatory nature of triple talaq. The Muslim Women (Protection of Rights on Marriage) Act 2019 offers Muslim women recourse and access to protection of the law from the practice of arbitrary instant divorce.
 - Without a concrete law in place the hardwon cause of gender justice for Muslim women would not be actualised.
- Making it an offence, it will deter resorting to triple talaq, and provide redress for women in the form of a subsistence allowance and custody of children, besides getting the erring husband arrested.

The legislation brings India at par with other Muslim majority states including Pakistan and Bangladesh. This was long overdue for a country that has taken pride in its adherence to the principles of secularism, democracy, and equality.

About the Shah Bano Case

- The Shah Bano case was a milestone in the Muslim women's search for justice and the beginning of the political battle over personal law.
- A 60-year-old woman went to court asking maintenance from her husband who had divorced her. The court ruled in her favour. Shah Bano was entitled to maintenance from her ex-husband under Section 125 of the Criminal Procedure Code
- However, the then government enacted the Muslim Women (Protection of Rights on Divorce) Act, 1986. It gave, Muslim woman the right to maintenance for the period of iddat (about three months) after the divorce, and shifted the onus of maintaining her to her relatives or the Wakf Board.
- The Act was seen as discriminatory as it denied divorced Muslim women the right to basic maintenance which women of other faiths had

Changes made from the Original Bill of 2017

- The Act makes the offence cognisable only if the woman, or one related to her by blood or marriage, against whom triple talaq has been pronounced, files a police complaint.
- Second, the offence has been made compoundable, that is, the parties can settle the matter between themselves.
- And third, it provides that a magistrate may grant bail to the husband after hearing the wife.

These amendments will not only restrict the scope for misuse by preventing third parties from setting the criminal law in motion against a man pronouncing instant triple talaq against his wife, they will also leave open the possibility of the marriage continuing by allowing bail and settlement.

- Triple talaq has never been sanctioned even in Islamic scriptures. Despite disapproval from the highest quarters in Islam, and the fact that many Muslim countries following sharia laws also chose to reform it one way or another including making it penal in many cases.
- Personal laws of other religious communities, Hindus and Christians, have addressed some concerns relating to gender equality in matters of inheritance and polygamy. This legislation, hence presents an opportunity to put in place a civil code that steeped in equality—across faiths and gender.

and gender. Arguments against the Act

Various forms of Talaq/Separation

Instant triple talaq (talaq-e-bidat) was challenged in the court. In the practice **of talaq-e-biddat,** when a man pronounces talaq thrice in a sitting, or through phone, or writes in a talaqnama or a text message, the divorce is considered immediate and irrevocable, even if the man later wishes to re-conciliate.

- The only way for the couple to go back to living together is through a Nikah Halala, and then return to her husband.
- The practice of **talaq-e-biddat** has been viewed as abhorrent in theology but upheld as valid by law.

"Talaq-ul-sunnat": Under this, once the husband pronounces talaq, the wife has to observe a three-month iddat period during which the husband can arbitrate and re-conciliate with the wife. In case of cohabitation between the couple, during these three months, the talaq is revoked.

- However, when the period of iddat expires and the husband does not revoke the talag, the talag is irrevocable and final.
- It is considered to be the ideal form of dissolution of marriage contract among Muslims.

Nikah Halala: refers to practice under which a divorced Muslim woman has to marry another man and consummate the marriage and get a divorce. Only then can she be eligible to remarry her former husband.

- **Criminalising a civil wrong**: This Bill became the first instance in free India where criminal provisions have been brought into matters of marriage and divorce which are **civil matters**. It raises the question if a marital wrong, should lead to prosecutions and jail terms.
- Issue of proportionality: A three-year prison term, besides a fine, also raises the issue of proportionality. The Act violates constitutional rights as it stipulates three-year jail term for guilty Muslim men while non-Muslim men get only one year of jail term for a similar offence.
- **Issue of accountability**: The triple divorce law is bound to fail, especially in cases of oral triple divorce given by husbands when no one other than the couple was present, as discharging the burden of proof will be a massive task for the prosecution.
- There are concerns that the Act might lead to **more divorces and abandonment**. Issues remain as no husband on his return from jail is likely to retain the wife on whose complaint he had gone to prison.

Conclusion

- The passage of the Muslim Women (Protection of Rights on Marriage) Act, 2019 criminalising triple talaq is a moment of great import for gender equality and justice and for India's legislative history.
- However, a sound legal framework to deal with all issues arising from instant talaq needs to be revisited on the basis of the outcome of social response.
- The government should ask the Law Commission to review all personal/civil laws to address the gender
 inequities that persist in civil and personal laws across the board as India needs a non-sectarian, genderneutral law that addresses desertion of spouses.

6.2. TRANSGENDER PERSONS (PROTECTION OF RIGHTS) BILL, 2019

Why in News?

Recently, the Lok Sabha passed Transgender Persons (Protection of Rights) Bill, 2019

The Transgender Persons (Protection of Rights) Bill, 2019

Definition of a transgender person: The Bill defines a transgender person as one whose gender does not match the gender assigned at birth. It includes trans-men and trans-women (whether or not such person has undergone sex reassignment surgery or hormone therapy or laser therapy or such other therapy), persons with intersex variations, gender-queers, and persons with socio-cultural identities, such as kinnar and hijra.

- A person would have the right to choose to be identified as a man, woman or transgender, irrespective of
 sex reassignment surgery and hormonal therapy. It also requires transgender persons to go through a district
 magistrate and district screening committee to get certified as a trans-person.
- **Prohibition against discrimination:** It **prohibits discrimination** against a transgender person in areas such as education, employment, and healthcare.
 - No government or private entity can discriminate against a transgender person in employment matters, including recruitment, and promotion. Every establishment is required to designate a person to be a complaint officer to deal with complaints in relation to the Act.
- Right of residence: Every transgender person shall have a right to reside and be included in his household. If the immediate family is unable to care for the transgender person, the person may be placed in a rehabilitation centre, on the orders of a competent court.
- Welfare Measures: The Bill states that the relevant government will take measures to ensure their rescue
 and rehabilitation, vocational training and self-employment, create schemes that are transgender sensitive,
 and promote their participation in cultural activities.
- Healthcare: The Government shall take the following measures in relation to the transgender persons, namely:
 - a separate HIV surveillance Centres;
 - o to provide for medical care facility including sex reassignment surgery and hormonal therapy; pre and post sex reassignment surgery and hormonal therapy counselling;
 - to facilitate access to the transgender persons in the hospitals and other healthcare institutions and centres;
 - o provide comprehensive medical insurance schemes for transgendered persons.
- The Bill also has provisions for penalty and punishment which vary between six months and two years in cases of offences and sexual harassment against transgender persons. The offences include:
 - o forced or bonded labour (excluding compulsory government service for public purposes),
 - denial of use of public places,
 - o removal from household, and village,
 - o physical, sexual, verbal, emotional or economic abuse.
- National Council for Transgenders(NCT): It directs Central government to constitute a NCT headed by the Union Minister of Social Justice and Empowerment.
 - o The Council will advise the central government as well as monitor the impact of policies, legislation and projects with respect to transgender persons. It will also redress the grievances of transgender persons.
- A contentious provision that criminalised begging by transgender people has been removed from the Bill. The provision was part of the Bill when it was introduced by the previous government.

Issues with the bill

- The Bill has **not provided any self-identification rights**, promised by the NALSA judgment of 2014. There is a provision regarding **obtaining certificate of identity from District Magistrate**.
 - It is also contrary to international standards for legal gender recognition which call for separation of legal and medical processes of gender reassignment for transgender people.
- The **bill empowers the district magistrate to judge the "correctness" of the application** and decide whether to issue the change in gender certificate but does not give guidelines on how this decision should be made. Bill also mentions no provisions for an appeal or review of the decision taken by the District Magistrate.
- Bill does not provide for any reservations in the field of employment and education as directed by the Supreme Court in the NALSA verdict.
- The bill is silent on whether a trans person who holds a male or female gender certificate will have access to government welfare schemes and programs meant for transgender people.
- Certain criminal and personal laws that are currently in force only recognise the genders of 'man' and 'woman'. It is unclear how such laws would apply to transgender persons who may not identify with either of the two genders.
- It does not include the creation of institutions like the national and State commissions for transgenders, as well as transgender rights courts which were part of the earlier draft bill.

Way forward

- It is important to sensitize parents of transgender children and other members of the society with regards to the human rights of the transgender community.
- While various state governments formulated schemes for transgender communities, a National policy is an urgent need to ensure greater involvement of transgender persons in policy

formulation and program development.

- Tamil Nadu is taking steps for development of transgenders by providing them education. identity cards and subsidized food and free housing.
- Kerala government brought the 'State Policy for Transgenders in Kerala 2015' to provide the "right to live with dignity."
- Legal and the law enforcement systems need to be empowered and sensitized on the issues of Transgender community. Special Grievance Redressal Cells for their protection should be set up in all police
- stations. Government should amend criminal Procedure Code and the Indian Evidence Act, 1872 in order to make
- sexual crimes gender-neutral by including men and transgender people in addition to women

Recent judgment on status of transgender

- In 2014, the Supreme Court in NALSA vs union of India ruled that transgender people should be recognized as a third gender and enjoy all fundamental rights, while also being entitled to specific benefits in education and employment.
- In 2018, in a historic decision upholding privacy and non-discrimination of LGBT persons, the Supreme Court struck down the colonial-era law that criminalized consensual same-sex relations.
- Recently, Madras High Court, ruled that the term "bride" under the Hindu Marriage Act, 1955 includes transwomen. Further it directed the authorities to register a marriage between a man and a transgender woman.

6.3. SURROGACY BILL

Why in news?

Recently, the Surrogacy (Regulation) Bill, **2019** was passed in the Lok Sabha.

Background

- **Surrogacy** is the practice whereby one woman carries the child for another with the intention that the child should be handed over after birth. Such a surrogacy arrangement may altruistic or commercial in nature.
- government introduced Surrogacy (Regulation) Bill, 2016 in the Parliament, which was then examined by the standing committee.
- After the dissolution of last Lok Sabha, the bill lapsed and now this bill was brought to replace it.

Provisions of the Bill

Prohibition of Commercial Surrogacy-

More about Surrogacy

- Altruistic surrogacy- where the couple does not pay the surrogate mother any compensation other than the medical and insurance expenses related to the pregnancy.
- Commercial surrogacy- here compensation (in cash or kind) paid to the surrogate mother, which exceeds the reasonable medical expenses associated with the pregnancy.
- India has emerged as a surrogacy hub for couples from other countries and there have been reports concerning unethical practices, exploitation of surrogate mothers, abandonment of children born out of surrogacy, and rackets involving intermediaries importing human embryos and gametes.
- A study conducted in July 2012 put the surrogacy business at more than \$400 million with more than 3000 fertility clinics all over the country.
- The 228th report of the Commission of India had recommended prohibiting commercial surrogacy and allowing altruistic surrogacy by enacting suitable legislation.
- According to a Centre for Social Research (CSR), the reason driving the mothers to surrogacy is usually poverty and lack of education, which further ensures their inability to challenge the exploitation.
- which includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.
- o It also prohibits surrogacy for producing children for sale, prostitution or other forms of exploitation.
- But the bill allows Altruistic Surrogacy, where no such other monetary compensation is paid to the surrogate mother.
- o Other purposes where surrogacy is allowed- include for intending couples who suffer from proven infertility, for any condition or disease specified through regulations.

- Lays out various eligibility criteria-
 - For intending couple- who should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
 - ✓ The certificate of essentiality will be issued on grounds like proven infertility of one or both parents, order of parentage of the child passed by a Magistrate's court and an insurance coverage.
 - ✓ The eligibility criteria for the couple include-
 - Couple being Indian citizens and married for at least five years,
 - Aged between 23 to 50 years old (wife) and 26 to 55 years old (husband),
 - Do not have any surviving child (biological, adopted or surrogate),
 - Would not include a child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness.
 - o For surrogate mother- who should be a
 - ✓ Close relative of the intending couple,
 - ✓ Married woman having a child of her own,
 - ✓ 25 to 35 years old
 - ✓ Surrogate only once in her lifetime
 - ✓ Possess a certificate of medical and psychological fitness for surrogacy
- Establishment of Authorities- Both the central and state governments shall appoint one or more
 appropriate authorities, including the National and State Surrogacy Boards, within 90 days of the Bill
 becoming an Act. Apart from regulation of surrogacy clinics, they will enforce standards, investigate any
 breach of the provisions of the Bill and recommend modifications to the rules and regulations.
- Parentage and abortion of surrogate child: A child born out of a surrogacy procedure will be deemed to be the biological child of the intending couple. An abortion of the surrogate child requires the written consent of the surrogate mother and the authorisation of the appropriate authority. This authorisation must be compliant with the Medical Termination of Pregnancy Act, 1971. Further, the surrogate mother will have an option to withdraw from surrogacy before the embryo is implanted in her womb.
- The Bill specifies a range of offences and penalties for other contraventions of the provisions of the Bill.

Issues with the bill

- Leaves lot of stakeholders- including unmarried couples who want to have a baby through surrogacy, gay couples and single men and women.
 - The decision to keep live-in partners out of the purview of the Bill is indicative of the fact that the Bill is not in consonance with the present-day modern social milieu. Even the Supreme Court has given a legal sanctity to live-in relationships.
- Lack of clarity on altruistic surrogacy
 - o It only allows a "close relative" of the married couple to undertake "altruistic surrogacy", but it does not define the term "close relatives".
 - The Parliamentary Standing Committee observed that, definition of 'altruistic' surrogacy, cannot work in a patriarchal structure. The surrogate is likely to be coerced and will get nothing out of this arrangement, reinforcing the idea that a woman's body is not her own.
 - It drew attention towards the dynamic structure of Indian society wherein the decision-making power rarely rests with women and not so privileged or financially weak relatives who can be coerced into becoming surrogate mothers and the chances of coercion and exploitation are even more in case of close relatives, due to family pressures.
 - Altruistic surrogacy has failed in other countries, and has resulted in various other forms of assistance being given, though money may not be paid.
- · Banning commercial surrogacy may not be the solution-
 - A total ban on commercial surrogacy may push the industry underground and render surrogate mothers even more vulnerable.
 - Further efforts should have been focussed on addressing the concerns of exploitation not banning the source of livelihood for many poor women. Focus should have been on improve her work conditions, make the process safe and secure for her, improve the terms of her contract for her.

Conclusion

India is one of the biggest centres of Surrogacy in the world which requires a well-defined legal system governing the process for the protection of the surrogate mother, the child thus born and also of the rights of the parents involved.

- Provisions will prevent exploitation- of surrogate mothers and children born through surrogacy. A vast
 majority of surrogates are poor or illiterate women who may have only a weak grasp of their contractual
 rights.
- **Keeps the health of the mother a top priority-** by capping the surrogacy to only once in her lifetime as surrogacy cannot be a way out for women opting for surrogacy due to poverty and should not be allowed as a profession.

6.4. IS INDIA READY TO MEET SUSTAINABLE DEVELOPMENT GOALS?

Why in news?

Recently, the Comptroller and Auditor General of India (CAG) highlighted several concerns regarding the India's preparedness to achieve the UN Sustainable Development Goals (SDG).

Background

- The **2030 Agenda** for Sustainable Development consists of 17 Sustainable Development Goals (SDGs) and 169 associated targets.
 - o Each Government has to set its **own national targets** based on national circumstances and decide how global targets would be incorporated into national planning processes, policies and strategies.
 - India has also taken various measures towards the same-

Institutional	NITI Aayog mandated with task of coordinating and overseeing the implementation of SDGs.
Framework	 MoSPI responsible for preparation of National Indicator Framework.
	 States/Union Territories (UTs) involved in mainstreaming activities.
Dovetailing	• NITI Aayog undertook exercise for mapping all 17 Goals and 169 Targets with Ministries, Central
SDGs with	Schemes, related interventions.
Development	NITI Aayog prepared a 'Three Year Action Agenda' covering the period 2017-20 and 'Strategy for
Agenda	New India@75' covering the period upto 2022-23.
	• States at various stages of preparation of their Vision and Strategy documents and mapping of
	Goals/Targets.
Stakeholder	• Workshops/consultations at Regional, National and State levels organised for exchange of
Awareness	ideas/experiences and raising awareness on SDGs amongst stakeholders.
and	• Indian Parliament launched a 'Speaker's Research Initiative' 2 to provide SDGs related insights to the
Involvement	Members of Parliament.
Policy	 Institutional arrangements exist for both horizontal and vertical convergence.
Coherence	• Launching of 'Aspirational District Programme' in 112 backward districts across 27 States which is
	based "on the core principle of improvement in SDGs in backward districts of India for ensuring
	inclusive growth". These cover areas such as health & nutrition, education, financial inclusion,
	agriculture & water management and skill development.
Mobilisation	Government of India is implementing a nationwide Goods and Services Tax reform to optimize
of Resources	domestic resource mobilization.
	• Fiscal Responsibility and Budget Management being implemented for ensuring predictable and
	sustainable budgeting.
	Expenditure reforms implemented.
Monitoring	 Voluntary National Review3 (VNR) Report presented in the UN (July 2017).
and Reporting	National Indicator Framework (NIF) and Baseline data published in November 2018 and March
	2019 respectively for monitoring implementation of SDGs.
	High Level Steering Committee constituted (January 2019) to periodically review and refine NIF.
	• A 'SDG India Index: Baseline Report 2018' based on 62 Priority Indicators along with dashboard
	released (December 2018) for monitoring the progress of SDGs at the national and sub-national
	level.
	Development of indices such as Composite Water Management Index, Health Outcomes Index and
	School Education Quality Index.

- The CAG had taken the audit up with the overall objective of ascertaining 'Preparedness of the Government for the Implementation of SDGs' covering aspects such as
 - Extent to which the 2030 Agenda has been adapted in the national context;
 - o Identification and mobilisation of resources and capacities,
 - Creation of mechanism for monitoring and reporting progress.
- To assess preparedness at the State level, seven states were selected- Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Uttar Pradesh and West Bengal. In addition, 'Goal 3- Good Health and Well-Being' was selected for detailed examination of preparedness.

Key Observations of the Audit

- Both at the Central and State levels, the exercise of formulating policy documents in the context of SDGs was still ongoing.
- A roadmap with defined milestones aligned with UN SDG Targets for 2020, 2025, 2030 was yet to be prepared. Greater efforts also appeared necessary for localising and publicising the SDGs to ensure inclusiveness.
- With respect to resource mobilisation for achieving the SDG targets, a financial gap analysis had not yet been undertaken.
- Further, integration of SDGs into the accounting and budgeting framework was still to be done at the Centre and most of the States.
- With respect to Monitoring and Reporting, the delay in publication of the NIF had held back several key tasks such as development of indicators and monitoring frameworks in the States and identification of baseline data and milestones.

Key Learning as per the NITI Aayog Report on implementation of SDGs in India -

- On following 'whole-of-government' approach- Preparation of vision document aligned to the SDGs enabled subnational governments to embed the 'whole-of-government' approach in planning.
 - Extending this approach beyond planning to budgeting, implementation, and monitoring can result in substantial benefits in progress on the SDGs.
- On monitoring- Preparation of the National Indicator Framework is an important exercise to arrive at a system, which not only tracks progress but also helps to identify data gaps.
 - Efforts are also required to harness and unify development data to ensure that decisions made are based on comprehensive data and are thereby effective.
- On budgeting- Mapping budgetary priorities in relation to the SDGs does not automatically lead to more coherent management or reorientation of resources as accounting and budgeting frameworks need to be aligned to integrate SDGs.
 - An assessment of requirement and availability of financial resources as for implementing SDGs is required both at Central and State levels.
- On communication, awareness generation and advocacy- It is critical to engage in continuous advocacy to sustain momentum of localising the SDGs.
 - It is important that initiatives for enhancing public awareness and sensitisation about SDGs are stepped up. Also, behaviour change communication should be promoted so that society adopts practices that promote sustainable development.
- On aligning Local Plans with SDGs- Empowering local self-governance institutions is the single most effective strategy
 for ensuring community ownership and integration of SDGs at grassroots level, as its members are directly elected by
 the people, and are mandated to undertake planning exercises in consultation with the community
- On capacity development- The training on SDGs should go beyond the 17 goals and targets and should be viewed from the perspective of fundamental skills and competencies that are required to deliver the goals by 2030.
- On reaching the Furthest Behind First- The agenda of Leave No One Behind requires a robust system for identifying the marginalised and ensuring that they are able to exercise their rights and benefit from their entitlements.
- On partnerships- Here the focus should be to create an environment where public and private partners pool in their resources and competencies to achieve common objectives.

Some success stories from the states

- Assam- The Government has launched 'District Multi-sectoral Results Based Nutrition Plan' in partnership with the
 World Bank to improve child, maternal and adolescent girls' health. It is a prime example of convergence of various
 departments for a common goal.
- **Haryana-** The Government has mapped all the schemes with relevant SDGs and formulated SDG based State Budget for the financial years 2018-19 and 2019-20.

6.5. STUDY IN INDIA

Why in News?

To attract foreign students to higher education in India, the **Ministry of Human Resource Development** has launched a programme called 'Study in India'.

About Study in India

- The 'Study in India' programme's primary objective is to target foreign students by branding India as an attractive education destination.
- The programme focuses on attracting international students from select 30 plus countries across South-East Asia, Middle East and Africa.

Objectives

- To improve the soft power of India with focus on the neighbouring countries and use it as a tool in diplomacy.
- o To boost the number of inbound International students in India.
- o To double India's market share of global education exports from less than 1 percent to 2 percent.
- Increase in contribution of international student in the form of direct spends, indirect spends, spillover effects.
- o Improvement in overall quality of higher education.
- Increase in global ranking of India as educational destination.
- o To reduce the export Import imbalance in the number of International students.
- The programme envisages participation of select reputed Indian institutes and universities by way of offering seats for international students at affordable rates.
- The **proposed fee waivers** to meritorious foreign students in this policy will be decided by the Institute.
 - The expenditure on the fee waiver will have to be borne by the Institute concerned. No additional cash flow from Government is proposed for the same.
- It is a joint initiative of Ministry of HRD, Ministry of External Affairs, Ministry of Home Affairs and Ministry of Commerce and Industry.
- EdCIL (India) Limited, a Mini Ratna Category I CPSE is the implementing agency of the Ministry of HRD for the Study in India education campaign.
- A **centralised admission web portal** has also been launched to work as a single window for admission of foreign students.



7. SCIENCE AND TECHNOLOGY

7.1. GAGANYAAN

Why in News?

Recently, Gaganyaan National Advisory Council has been created with members from different institutions and industries.

Background

- An Indian manned mission to space was first mooted in 2004.
- The Gaganyaan programme, an indigenous mission that would take Indian astronauts to space, was announced in 2018.

About Gaganyaan Advisory Council

- It comprises of multiple senior officials like Secretaries of Department of Space & Department of Science and Technology, Principal Scientific Advisor to PM, Former Chairman of ISRO, Directors of Premier Academic and Research Institutions, Heads of various Indian Industries etc.
- It discusses overall project status of Gaganyaan, covering technical details as well as collaboration with various national stake holders.
- It stresses the need for setting priorities at various National Institutions including Industries to accomplish Gaganyaan.
- Over the years, the Indian Space Research Organisation has developed and tested a number of technologies
 that are critical to a human space flight. These include a Space Capsule Recovery Experiment (SRE-2007),
 Crew module Atmospheric Reentry Experiment (CARE-2014), GSLV Mk-III (2014), Reusable Launch VehicleTechnology Demonstrator (RLV-TD), Crew Escape System and Pad Abort Test. ISRO also recently unveiled a
 space capsule (crew module) and Space suit prototype.
- ISRO has signed a pact with the **Russian firm Glavkosmos** to select and train astronauts for the country's Gaganyaan project.
 - o ISRO will receive assistance from the **French space agency CNES**, in terms of expertise various fields including space medicine, astronaut health monitoring, radiation protection and life support.

About Gaganyaan Mission

- It is a **crewed orbital spacecraft** which is expected to carry three people into the space for seven days.
- With this, India could potentially **become the fourth country to send a man to space**, after the erstwhile USSR, the US and China.
- The total programme is **expected to be complete before 2022**.
- ISRO also plans **two unmanned Gaganyaan flights** by December 2020 and in July 2021 before undertaking the manned mission by December 2021.
- **GSLV Mk III**, the three-stage heavy lift launch vehicle, will be **used to launch Gaganyaan** as it has the necessary payload capability.
- The spacecraft is expected to be placed in a **low earth orbit of 300-400 km**. Within 16 minutes of taking off, the crew will be in space, where they will **remain for five-seven days**. The return journey is expected to take 36 minutes.
- Gaganyaan would be **smaller in size** than the current Russian Soyuz, Chinese Shenzhou, NASA's planned Orion spacecraft
- While formal agreements are not yet in place, **ISRO will collaborate with the Indian Air Force** and its Institute of Aerospace Medicine, Bengaluru, to train astronauts.
 - The astronauts on the human space mission 'Gaganyaan' will mostly be pilots.

How Gaganyaan can prove to be beneficial for India?

- Enhancement of science and technology levels in the country: Gaganyaan will source nearly 60 per cent of its equipment from the Indian private sector hence these are investments will spur technological innovation.
 - o **For example:** The programme will provide a unique micro-gravity platform in space for conducting experiments and test bed for future technologies.
- **Involvement of multiple agencies**: Gaganyaan Programme will establish a broader framework for collaboration between ISRO, academia, industry, national agencies and other scientific organizations.
- Contribution to economy: The programme is expected to give impetus to economic activities within the
 country in terms of employment generation, human resource development and enhanced industrial
 capabilities.

- **Inspiring youth:** It will inspire large number of young students to take up science and technology careers for national development.
- **Development of technology for social benefits:** Huge potential for technology spinoffs in areas such as medicine, agriculture, industrial safety, pollution, waste management, water and food resource management etc.
- **Space diplomacy:** It re-establish India's role as a key player in the new space industry hence improving international collaboration and giving space to Space diplomacy.
- **Improvement of industrial growth:** This will allow pooling in of diverse technological and industrial capabilities and enable broader participation in research opportunities and technology development benefiting large number of students and researchers.

Challenges to programme

- **Training of astronauts**: India lacks training facilities for astronauts, though ISRO has demanded for indigenous training centers for its astronauts since early 2000s, no action have been taken yet.
- Large investments needed: The cost estimated at Rs 10,000 crore will demand huge investment.
- **Biosciences**: While ISRO has perfected the engineering aspects of the mission, bioscience is a new field for ISRO that requires greater technological knowhow and collaboration and support from other organizations.
 - Creating habitable space ecospheres also requires a host of technologies, including the development of exotic materials and first class recycling systems.
- **Radiation:** In space stations, astronauts receive over ten times the radiation than what people are subjected to on Earth. Radiation exposure may increase the risk of cancer. It can damage the central nervous system.
- Technological challenges
 - Gravity field: Transitioning from one gravity field to another is tricky. India does not have facilities for such rigorous and focused training, such as centrifuges to experience g-forces and aircraft to simulate zero gravity conditions.
 - **Hostile environment:** Space is hostile. In addition to lack of gravity and danger of radiation, there is no atmosphere. Human blood starts boiling if there is no pressure.
 - ✓ The 'Gaganyaan' has to create an atmosphere like Earth inside a small volume and ensure that adequate supply of oxygen, removal of carbon-dioxide and comfortable temperature and humidity levels are maintained throughout the mission.
- **Upgrading GSLV Mk III:** Gaganyaan needs a large rocket that can lift a heavy capsule. Geo-synchronous Satellite Launch Vehicle (GSLV) Mark III has been designed to inject large satellites into orbit, the launcher will now have to be human rated.
- **Precision in technology:** The reliability of a system has to be as high as to allow a failure rate of only one in 500 launches. For e.g. the spacecraft needs to reenter the atmosphere at a very precise speed and angle, and even the slightest deviation could end in disaster.

Conclusion

The project would bump up the entire space industry, forcing it to meet challenges beyond the low-cost launch of payloads, a sector in which it has already excelled. Besides, certain missions are better performed by humans than by robots. These remain far in the future, but the development of human capabilities in space would prime the industry well in advance. The technical knowledge generated in the process would be of use much later, in ways that may not be obvious today.

7.2. CHANDRAYAAN 2

Why in news?

ISRO recently launched Chandrayaan-2 mission.

Background

- Chandrayaan-2, a completely indigenous mission, is India's **second lunar exploration mission** which the following basic components-
 - Orbiter- will observe the lunar surface and relay communication between Earth and Chandrayaan 2's Lander.

- o Lander (called Vikram)- designed to execute India's first soft landing on the lunar surface.
- o **Rover (called Pragyan)-** a 6-wheeled, Al-powered vehicle, which will move on the lunar surface and perform on-site chemical analysis.
- Launcher- It was launched by Geosynchronous Satellite Launch Vehicle GSLV MkIII-M1. It is India's most powerful launcher to date, and has been completely designed and fabricated from within the country.

Some notable features of Chandrayaan 2 Mission-

- 1st space mission to conduct a soft landing on the Moon's south polar region.
- 1st Indian expedition to attempt a soft landing on the lunar surface with homegrown technology.
- 1st Indian mission to explore the lunar terrain with home-grown technology.
- 4th country ever to soft land on the lunar surface after the United States, the U.S.S.R. and China.
- Primary Objective: To demonstrate the ability to soft-land on the lunar surface and operate a robotic rover on the surface. It seeks to
 - o foster a new age of discovery,
 - o increase our understanding of space,
 - o stimulate the advancement of technology,
 - o promote global alliances,
 - o inspire a future generation of explorers and scientists.

Scientific Objectives of Chandrayaan 2

- Moon provides the best linkage to Earth's early history.
 - It offers an undisturbed historical record of the inner Solar system environment.
 - Though there are a few mature models, the origin of Moon still needs further explanations.
 - It will conduct detailed topographical studies, comprehensive mineralogical analyses, and a host of other experiments on the lunar surface.
- Evidence for water molecules discovered by Chandrayaan-1, requires further studies on the extent of water molecule distribution on the Moon.
- It will also study new rock types with unique chemical composition.

Why explore the Lunar South Pole?

Related News About Chandrayan-1

- Chandrayan-1 was launched by India in October, 2009 using PSLV-C11.
- Primary Objective: To prepare a three-dimensional atlas of both near and far side of the moon and chemical, mineralogical and photo-geological mapping of moon.

• Findings of Chandrayan-1

- Detection of Water Major finding was the detection of Water (H2O) and Hydroxyl (OH) on the surface of the moon. The data revealed its presence in abundance around the polar region.
- Magma Ocean Hypothesis It confirmed the Ocean Magma Hypothesis i.e. the moon was once completely in molten state.
- New Spinel-rich Rock Data from Chandrayaan-1 have led to detection of new spinel-rich rock type on lunar far-side.
- X-Ray signals detected— It detected x-ray signals during weak solar flares thus indicating presence of magnesium, aluminium, silicon and calcium on lunar surface.

Mission Payloads

Orbiter payloads-

- Terrain Mapping Camera-2 (TMC-2),
- Chandrayaan-2 Large Area Soft X-ray Spectrometer (CLASS),
- Solar X-ray monitor (XSM),
- Orbiter High Resolution camera (OHRC)
- Dual Frequency L and S band Synthetic Aperture Radar (DFSAR),
- Imaging IR Spectrometer (IIRS),
- Chandrayaan-2 Atmospheric Compositional Explorer 2 (ChACE-2),
- Dual Frequency Radio Science (DFRS) experiment.

Vikram payloads

- Radio Anatomy of Moon Bound Hypersensitive Ionosphere and Atmosphere (RAMBHA),
- Chandra's Surface Thermo-physical Experiment (ChaSTE),
- Instrument for Lunar Seismic Activity (ILSA)

Pragyan payloads

- Alpha Particle Induced X-ray Spectroscope (APXS),
- Laser induced Breakdown Spectroscope (LIBS)

Passive Experiment- Laser Retroreflector array (LRA)

- The lunar surface area remains in shadow, which is much larger than that at the North Pole. There is a possibility of the presence of water in permanently shadowed areas around it.
- In addition, South Pole region has craters that are cold traps and contain a fossil record of the early Solar System.

- Its regolith has traces of hydrogen, ammonia, methane, sodium, mercury and silver- making it an uptapped source of essential resources.
- Its elemental and positional advantages make it a suitable pit stop for future space exploration.

7.3. DNA TECHNOLOGY (USE & APPLICATION) REGULATION BILL

Why in news?

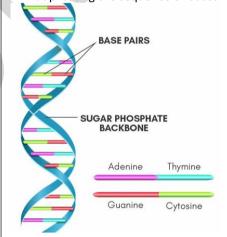
Recently, the **DNA Technology (Use and Application) Regulation Bill, 2019** was introduced in the Lok Sabha, which provides for the regulation of use of DNA technology for establishing the identity of certain persons.

Key Provisions of the Bill-

- Use of DNA Data: DNA testing is allowed only in respect of matters listed in the Schedule to the Bill, such as
 - o Offences under the Indian Penal Code, 1860.
 - o for civil matters such as paternity suits.
 - for matters related to establishment of individual identity.
- Collection of DNA: the investigating authorities may collect bodily substances of persons.
 - Requirement of consent for collection in certain situations-
 - For arrested persons- Requirement of written consent if the offence carries a punishment of up to seven years. If the offence carries more than seven years of imprisonment or death, consent is not required.
 - ✓ If the person is a victim, or relative of a missing person, or a minor or disabled person, the authorities are **required to obtain the written consent** of such victim, or relative, or parent or guardian of the minor or disabled person. If consent is not given in these cases, the authorities can approach a Magistrate who may order the taking of bodily substances of such persons.
- **DNA Data Bank** A **National DNA Databank** and regional **DNA Databanks** will store DNA Profiles from **DNA labs** in a specified format. It will have various categories of indices such as crime scene index, suspect index etc.
- Removal of DNA profiles:
 - o The criteria for entry, retention, or removal of the DNA profile will be specified by regulations.
 - However, the Bill provides for removal of the DNA profiles of the following persons:
 - ✓ of a suspect if a police report is filed or court order given,
 - ✓ of an undertrial if a court order is given, and
 - ✓ on written request, for persons who are not a suspect, offender or undertrial, from the crime scene or missing persons' index.
- Establishment of DNA Regulatory Board: which will supervise the DNA Data Banks and DNA laboratories.
 - The Secretary, Department of Biotechnology, will be the **ex officio Chairperson** of the Board. The Board will comprise **additional members including**: (i) experts in the field of biological sciences, and (ii)

What is DNA?

- DNA stands for Deoxyribonucleic Acid, a hereditary material in human and almost all the other organisms.
- Most DNA is located in the cell nucleus (called nuclear DNA) but some small amount of DNA can be found in Mitochondria (called mitochondrion DNA).
- It is composed of two chains, which coil around each other to form a double helix carrying the genetic instructions used in the growth.
- It is made up of 23 pairs of chromosomes and provides instructions for building an entire organism and the proteins.
- The information in DNA is stored as a code made up of four chemical bases: adenine (A), guanine (G), cytosine (C), and thymine (T). Human DNA consists of about 3 billion bases, and more than 99 percent of those bases are the same in all people.
- An important property of DNA is that it can replicate, or make copies of itself. Each strand of DNA in the double helix can serve as a pattern for duplicating the sequence of bases.



- Director General of the National Investigation Agency and the Director of the Central Bureau of Investigation.
- It will advise governments on all issues related to establishing DNA laboratories or Data Banks and grant accreditation to DNA laboratories. Further, the Board is required to ensure that all information relating to DNA profiles with the Data Banks, laboratories, and other persons are kept confidential.
- Penalties for various offences, including disclosure of DNA information or using DNA sample without authorization.

Concerns

- **Limited Scope** of the DNA Profile as it shall only be used for the purpose of identification of the person in criminal cases in accordance with the rules of admissibility of evidence for the purpose of prosecution or defence and **no other purpose such as medical research.**
 - o **Does not clearly spell out the consent provisions in sensitive civil matters** such as paternity/maternity, assisted reproduction, organ transplants, and cases related to immigration.
- **Not fool proof** Although DNA technology is the best method available to carry out identification, it is still probabilistic in nature. There are chances, however remote, that a wrong match is generated, causing unnecessary harassment to an individual.
- **Does not cover procedures involved in the commercial use of DNA** such as genealogical tests, or medical tests to discover predisposition to disease, or DNA editing.
- Does not state that DNA information related to civil matters will be stored or not in the Data Bank- if DNA information related to civil matters is stored in the data bank, it may violate the fundamental right to privacy as laid down by the Supreme Court.
- Not all DNAs can be matched- the identity of the person as stated above will be stored under various indices. If the person is not an offender, suspect or under-trail, his/her DNA cannot be matched.
- No improvement in conviction rates Over the last 25 years; most countries have adopted a DNA fingerprinting law and have developed databases for use primarily in criminal investigation, disaster identification and forensic science. However, DNA tests have not led to an improvement in conviction rates in countries where it is already being followed.

Significance

- It creates a framework for the oversight of law enforcement authorities and the regulation of a rapidly expanding industry that is using and misusing DNA technologies.
- It can almost accurately ascertain the identity of a person, establish biological relationships between individuals etc. Thus, useful in investigations of crime, identification of unidentified bodies, or in determining parentage.
- It will provide accreditation for private laboratories and medical facilities, which have been operating in a legal vacuum.

Way Forward

- Extensive reskilling of police forces, fire departments etc, will be required to ensure the sanctity of samples to prevent contamination, forgery, mislabelling, and other errors.
- The banks will also need the highest possible levels of cyber security to prevent breaches.
- The legislation or the rules will need regular reviews simply to stay in tune with fast-paced technological changes.
- There are also grave privacy concerns. Given that DNA is the most intrinsic property of any living entity, the need for privacy safeguards and for carefully defined, purpose-based sample collection is necessary.

7.4. BIOLOGICAL RESEARCH DATA

Why in news?

The Department of Biotechnology has brought a draft document, called the **Biological Data Storage**, **Access and Sharing Policy of India** on use and sharing of biological data.

Background

• The draft document is primarily meant to address a long-standing concern among many scientists, that several scientists use government funds to **conduct research and collect biological specimens and data** such as DNA samples, cell and tissue samples, store these details in databases and **often lock them up**.

- It blocks access to other researchers and scientists who may be interested in them.
- This leads to **duplication of data collection exercises**, lost opportunities to access data collected over the years and a wastage of public money.
- Sharing of data maximizes the **collective utility of data**.
- However, there are many issues that must be taken into account in the context of data sharing, the most importantly it must be done in a responsible manner.
 - Data may induce vulnerability to individuals and to populations. The rights to privacy and confidentiality
 of individuals and populations must be protected as emphasized in the U.N. Declaration of Human
 Rights, and no harm must be done to them as a result of data sharing.
- The document provides a **framework and principles for sharing of data** while protecting the rights of individuals and populations and without causing any harm to them.

Broad Guidelines for Biological Data

Framework for Data Sharing and Access-

- Access to Data- Data generated from publicly-funded projects should be shared openly for public good, with few restrictions and in a timely manner, safeguarding the ethical issues that may arise out of shared data.
 - ✓ Only under **specific circumstances**, data generated using public funds may not be provided open access, and may be provided under a **managed/controlled** access protocol.
 - ✓ Access to data that are of "sensitive" nature may be barred, even if generated using public funds.
- o High standards and best practices should be used in generation, management and access to data.
- Data that are valuable in the long-term should be stored in a manner that these remain accessible for a long time.
- o **Conduct of research-** must not be jeopardized by release of data.
- **Privileges of Data Generator-** there may be a period of moratorium before the data generator releases the data in the public domain.
 - ✓ However, the shared data will always be de-identified.

Data Release and Timing

- Raw Data- It is produced by the various equipment that are used, e.g. DNA sequencer, Flow cytometer, etc.
 - ✓ It must be shared within one year of its generation, by placement in a suitable database identified by the funding agency of the Government of India.
- Processed Data- It is the data processed from the raw data. It may be shared with others within two years of data-generation
- **Meta Data-** It is the supplementary data as to complement the understanding of other data. It may include the gender, background etc. It should be released concurrently with other types of data.
- Deposition of Data- in an appropriate database in a National Biological Data Centre, as identified by the Department of Biotechnology. It shall be the responsibility of the data generator
- Withdrawal of Data- requests may be considered and granted provided that the data are identifiable in the database.

Data User Agreement

- Open Access Data- Most data stripped of all personal identifiers and data that are not subjected to any
 intellectual property or patent restrictions should be made accessible openly, especially if the data are
 generated using public funds.
 - ✓ Here the agreement must contain the information regarding the data provider, intellectual property, sharing of data, re-identification of individuals and other legal issues.
- o **Managed Data-** Sometimes, data generated in even in publicly funded projects may not be allowed open access for a variety of reasons. Such data should still be made available to others under **managed access.**
 - ✓ Here the agreement must contain the purpose of access, competence of researchers requesting data access, users authorized to access the data, duration of data etc.

Audit-

o **For open-access data,** there may be a national committee established by a consortium of national funding agencies to monitor access and use.

- o For managed-access data, the institution that manages data shall be responsible for data-audit.
- The data-management group shall regularly seek reports from users who have been provided data-access.

7.5. ARTIFICIAL INTELLIGENCE IN AGRICULTURE

Why in news?

Government inked pact with IBM India for undertaking a pilot study to utilise **Artificial Intelligence (AI)** and weather technology solutions in agriculture.

More about News

- The pilot study will be conducted for the Kharif crop season 2019 in three districts -Bhopal, Rajkot and Nanded in Madhya Pradesh, Gujarat and Maharashtra, respectively.
- IBM will give solution in the field of agriculture through AI and weather technology at village level/ farm level to provide weather forecast and soil moisture information on pro bono basis to help farmers for taking decisions regarding water and crop management for better production and productivity.

Artificial intelligence in Agriculture

- It is estimated that AI and connected farm services can impact 70 million Indian farmers by 2020, thereby adding US\$ 9 billion to farmer incomes.
- In 2017, the global Al in agriculture market size was US\$ 240 million, and is expected to reach US\$ 1.1 billion by 2025.

About Artificial Intelligence

- It refers to the **ability of machines to perform cognitive tasks** like thinking, perceiving, learning, problem solving and decision making and **execute tasks in real time situations** without constant supervision.
- It can be deployed to take over a variety of tasks, enable connectivity and enhance productivity.
- The field of artificial intelligence is essentially when machines can do tasks that typically require human intelligence.
- It encompasses **machine learning**, where machines can learn by experience and acquire skills without human involvement.

Application of AI

- Healthcare: increased access and affordability of quality healthcare,
- Agriculture: enhanced farmers' income, increased farm productivity and reduction of wastage,
- Education: improved access and quality of education,
- **Smart Cities and Infrastructure:** efficient and connectivity for the burgeoning urban population,
- **Smart Mobility and Transportation:** smarter and safer modes of transportation and better traffic and congestion problems.

Importance of AI

- All has the potential to overcome the physical limitations of capital and labour and open up new sources of value and growth.
- All has the potential to drive growth by enabling
 - Intelligent automation i.e. ability to automate complex physical world tasks.
 - o **Innovation diffusion** i.e. propelling innovations through the economy.
- Role in social development and inclusive growth: access to quality health facilities, addressing location barriers, providing real-time advisory to farmers and help in increasing productivity, building smart and efficient cities etc.

Challenges with AI

- Lack of enabling data ecosystems such as access to intelligent data
- Lack of broad based expertise in research and application of AI
- Inadequate availability of AI expertise, manpower and skilling opportunities
- High resource cost and low awareness for adopting AI in business processes
- Large gaps in data collection, preparation, and benchmarking capabilities.
- Unclear privacy, security and ethical regulations
- Unattractive Intellectual Property regime to incentivise research and adoption of AI
- Absence of collaborative effort between various stakeholders.
- Major factors driving the growth of the AI in agriculture market include:
 - o the growing demand for agricultural production owing to the increasing population
 - o rising adoption of information management systems and new advanced technologies for improving crop productivity
 - o increasing crop productivity by implementing deep learning techniques
 - o growing initiatives by worldwide governments supporting the adoption of modern agricultural techniques.

Challenges in AI Adoption in Agriculture

- Lack of Trained professionals in agriculture: Only around 4% of Indian AI professionals are trained in emerging technologies such as deep learning.
- **Costly for Small farmers**: All in agriculture can prove to be extremely expensive and smaller-scale farmers might not have access to that kind of funding.
- Lack of infrastructure in agriculture: Farms have historically lacked the information technology infrastructure and data warehousing systems to develop and implement AI applications.
- Lack of awareness: There still exists a lack of familiarity with high tech machine learning solutions in farms across most parts of the world.
- **Decrease in employment**: A deficiency in farming jobs and farm workers has already started and will worsen with the increasing advancement and availability of these technologies.
- **Issues in getting temporal data**: In case of vast agricultural land, though spatial data can be gathered easily, temporal data (data that represents a state in time, such as the land-use patterns) is hard to get.
 - For example, most of the cropspecific data can be obtained only once in a year when the crops are growing. Since the data infrastructure takes time to mature, it requires a significant amount of time to build a robust machine learning model.
- Data related issues: Lack of standards, perceived poor transparency around data use and ownership, and the difficulty of gathering and sharing data has lead to a situation where AI algorithm developers in Agriculture are still starved for data.

Way forward

 Strong data infrastructure: The data infrastructure on the farm will need to become more robust before large scale agricultural AI deployment can be successful.



SMART DRONES

Survey fields, map weeds, yield and soil variations; enable application of inputs and map productivity.

Drones are also used for applying pesticide and herbicide.



AUTONOMOUS TRACTOR

GPS-controlled autonomous tractor charts its route automatically, ploughs the land saving fuel, and reduces soil erosion and maintains soil quality.



Provides information for groundtruthing irrigation decisions and finetuning irrigation practices; avoids under and over-irrigation saving crops from yields loss, water-related diseases, nutrient losses and leach-outs.



WEATHER FORECAST

Enables decisions about when to plant, what area and crop variety to plant, when to apply fertilizers and when to harvest.

- Increase digital literacy: Initiatives to increase digital literacy in rural landscape can help farmers understand and adopt these technologies.
- **Open source platform:** An open source platform would make the solutions more affordable, resulting in rapid adoption and higher penetration among the farmers.
- Incentives to farmers:
 Government needs to step in by giving incentives to farm to adopt AI and making it more affordable and attractive for farmers.
- Increase in R&D: Initiatives
 CoE in Al should be increased to improve more research in the field of Al.
- Collaboration between stakeholders: Industry,

Steps taken for AI

- Center of Excellence in Artificial Intelligence (CoE in AI) by National Informatics Centre (NIC) which is a platform for innovative new solutions in AI space, a gateway to test and develop solutions for projects undertaken by NIC at central and state level.
- A Statement of Intent has been signed between NITI Ayog and IBM to develop Precision Agriculture using Artificial Intelligence (AI) in Aspirational Districts.
- Government has begun the use of Artificial Intelligence on pilot basis for crop cutting and yield estimation under scheme Pradhan Mantri Fasal Bima Yoajana.
- Microsoft India is using AI sensors to make farming and healthcare smart.

Government and all other stakeholders need to come together for viable solutions to agriculture.

7.6. INNOVATION ECOSYSTEM

Why in news?

Recently, India has improved its ranking in the global innovation index by five places to 52nd in 2019 from 57th position last year.

Background

- Innovation has been defined commercially successful exploitation of new technologies, ideas or methods introduction of new products or processes or by improvement of the existing ones.
- The Global Innovation Index (GII) has been developed by the World Intellectual Property Organization (WIPO) together with top business universities like Cornell University, INSEAD etc.
 - o It measures the innovative capacity and outputs of 129 economies, using 80 indicators ranging from standard measurements such as research and development investments and

India's Performance in Innovation Rankings

- According to the GII, India is the most innovative country in Central and Southern Asia since 2011 and has consistently outperformed on innovation relative to its GDP per capita for nine years in a row.
- India is consistently among the top in the world in innovation drivers such ICT services exports, graduates in science and engineering, the quality of universities and scientific publications, economy-wide investments and also creative goods exports.
- On the quality of its innovation namely, the quality of scientific publications, of universities and of patent families India ranks as the 2nd middle-income economy worldwide.
- India also features in the GII ranking on the world's top science and technology clusters, with Bengaluru, Mumbai and New Delhi included among the global top 100 clusters.
- Overall, India's rank has improved from 81st in 2015 to 57th in 2018.
- This year, India is hosting the launch of the 2019 edition of the GII.
- This year's GII theme "Creating Healthy Lives: The Future of Medical Innovation" is important and relevant for India because we would need a strong focus on medical innovation towards the goal of bringing healthcare and its delivery to all Indians.
- India has consistently worked on developing its intellectual property system to provide an enabling environment for innovation to flourish at all levels, including grassroots and frugal innovation.

patent and trademark filings, to mobile-phone app creation and high-tech net exports.

Some of the indicators of India's Position with regards to Innovation

Strengths		Weaknesses
•	Large graduates in science and	• India's R&D expenditures have remained stagnant at 0.6-0.7% of
	engineering	GDP over the past two decades.
•	High Gross capital formation	Slowdown in business sentiment
•	Ease of protecting minority	Inadequate regulatory environment
	investors	 Issues with education in terms of assessment in reading,
•	India is the seventh largest	mathematics, and science
	patent filing office in the world	There is a disconnect between the teaching and research enterprise
•	High ICT services exports	with research being concentrated in specialized research institutes
•	Large creative goods exports	Lack of Firms offering formal training
		Difficulty in getting credit for research and innovation.

Steps taken towards Innovation ecosystem

- Various schemes- such as Ramanujan Fellowship Scheme, the Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty scheme and the Ramalingaswami Re-entry Fellowship, Visiting Advanced Joint Research Faculty Scheme (VAJRA), Knowledge Involvement in Research Advancement through Nurturing (KIRAN) etc.
- ATAL Innovation Mission (AIM)- to act as a platform to promote a network of world-class Innovation hubs and Grand Challenges for India.
 - Self-Employment and Talent Utilisation (SETU)- will be a Techno-Financial, Incubation and Facilitation Programme to support all aspects of start-up businesses, and other self-employment activities, particularly in technology-driven areas.

- o **Various Innovation Challenges-** such as for Indian Railways, for Digital India Challenge 2.0, Grand Innovation Challenge by NITI Aayog, Smart India Hackathon etc.
- The India Innovation Growth Programme (IIGP) 2.0 is a unique tripartite initiative of the Department of Science and Technology (DST), Government of India, Lockheed Martin and Tata Trusts which enables innovators and entrepreneurs through the stages of ideation, innovation and acceleration, to develop technology-based solutions for tomorrow.
- Innovate India is a unique platform to display, promote and recognize innovations happening across the nation. It has been launched in collaboration with AIM-NITI Aayog and MyGov. Citizens from all parts of the country are eligible to share the innovation on the platform.
- The **Confederation of Indian Industry (CII)** has been orchestrating initiatives towards creating and fostering innovation among the Indian industry and encouraging entrepreneurial ventures.
- India is also currently engaged in opening WIPO-supported **Technology and Innovation Support Centers** (**TISCs**) in the country, which will help local innovators and creators research and market their products.
- In collaboration with WIPO, the **first India Innovation Index**, focusing on ranking Indian States was released in 2018.

Challenges faced by Innovation ecosystem

- Indian innovations are **invariably incremental and not disruptive** They are often 'first to India' and not 'first to the world'. They copy the 'current best practice' but don't create the 'next' practice.
- Lack of Scalability- to create competitive marketable products with speed, scale and sustainability.
- Quality of the STEM talent pool- the gross enrollment ratio at the tertiary education level in India is a low 26% meaning, a vast reserve of potential research talent is lost.
- Comparison with other countries- Even though India is within touching distance of breaking into the top-50 innovator countries in the world, it is still quite far from a China, which filed, for instance, 53,345 patent applications with the WIPO in 2018 versus India's 2,013.
- **Skewed results** India is an odd juxtaposition of stellar successes like the Chandrayaan and digital payments and a large number of unemployable engineering graduates and institutes that have virtually no autonomy. Moreover, while our top-rung universities and institutes (IITs Delhi & Mumbai, IISc) do well regionally, they have consistently remained out of the global top-100.

Way Forward

- Innovation is a key driver for sustenance and prosperity of start-ups, conglomerates, governments by helping
 them improve their service delivery and performance. It also contributes to the long-term development of
 an economy.
- India needs to boost its innovation ecosystem by intertwining among various stakeholders like the government, industry, academia and society to transform India as an attractive innovation destination.
- There is a need to link National Labs to Universities to improve the synergy between universities and research institutes. It would fill the gaps of faculty support and young talents and ensure deep commitment to excellence.
- Government can also partner with private sector to create new R&D funding opportunities such as 50:50 partnerships with Science and Engineering Research Board (SERB) for industry relevant research under Ucchtar Avishkar Yojana (UAY).
- Furthermore, academics who believe in not just 'publish or perish', but 'patent, publish and prosper' should form a crucial cog in the machine of this ecosystem. Scientists, who have the passion to become 'technopreneurs' and passionate innovation leaders need to come up for the scalability of these innovations.

7.7. USE OF ANTIBIOTICS IN ANIMAL FOOD

Why in News?

The health ministry has banned the manufacture, sale and distribution of the antibiotic colistin and its formulations for food producing animals and animal feed supplements.

More in news

- It is found that the misuse of colistin in the poultry industry is said to be a major reason for the increase in antibiotic resistance in India.
- The ban has been imposed under provisions of the Drugs and Cosmetics Act, 1940.
- The ban follows recommendations by the Drugs Technical Advisory Board, and the National Antimicrobial Resistance Action Plan committee.
- The government also makes it mandatory for the manufacturers of antibiotic colistin to write clearly on the label that the drug is not to be used in food-producing animals, poultry, aqua farming and animal-feed supplement.

About Colistin

- Colistin or polymyxin E is an old antibiotic first introduced in 1952.
- The drug has been used for treating infections caused by Gram-negative bacilli, which are responsible for various diseases such as plague, cholera and typhoid.
- However, it was revealed that colistin has side effects
 of nephrotoxicity and neurotoxicity, prompting to
 restrict the use of the drug and replace it with other
 antibiotics which were considered safer at that time
- According to the World Health Organisation (WHO), Colistin is a "reserve" antibiotic, which means it is supposed to be considered a "last-resort" option in treatment and used only in the most severe circumstances, when all other alternatives have failed.

Background

- India is one of the top consumers of agricultural antibiotics worldwide, accounting for 3 percent of global consumption. By 2030, this use is estimated to double.
- Its use has been prohibited in Europe, the United States and China.

Reasons for use of Antibiotics in Animal food

- For the treatment of animals that show clinical signs of an infectious disease.
- As growth promoter to boost the weight of the animals.
- Easy availability of antibiotics.
- Currently, few laws in India govern antibiotic use in food animals, and most pertain only to animal products for export.

Steps to be taken to prevent its misuse

- **Track use of antibiotic:** Track rates of veterinary antibiotic use, resistance, and residues through a nationwide surveillance and monitoring system
- **Alternatives to antibiotics:** Subsidies and alternatives to antibiotics are necessary to offer incentives for farmers to decrease antibiotic use without causing economic harm.
- **Promote antibiotic-free meat:** Veterinarians, farmers, and consumers should be educated on appropriate use of antibiotics and the benefits of antibiotic-free meat.
- Laws to reduce antibiotic use: Appropriate laws and regulation should be framed, along with the enforcement of current laws, to reduce antibiotic use in India.

8. CULTURE

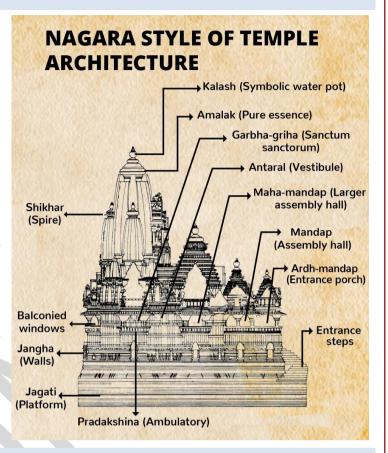
8.1. MINI KHAJURAHO

Why in news?

The Archaeological Survey of India is restoring the Markandeshwar group of temples in the Gadchiroli district of Maharashtra.

Details

- This group of temples were built between the 9th and 12th centuries and may have had up to 24 different temples.
- It gets its name from the main temple dedicated to Lord Shiva called Markandeshwar or Markandadeo temple, which lies in Markanda village on the banks of the Wainganga river.
- They are famously known as the 'mini Khajuraho' or 'Khajuraho of Vidarbha'. They belong to saiva, vaishnava and sakti faith.
- The temples belong to the Nagara group of temples of North India.
- It is believed that a lightning strike about 200 years ago led to the partial collapse of the shikhara. Then a Gond ruler about 120 years ago tried to restore the temple.



8.2. AWARDS BY SANGEET NATAK AKADEMI

Why in news?

Recently, the Sangeet Natak Akademi has announced multiple awards.

About Sangeet Natak Akademi

- It was the first national academy of arts setup by the Government of India in 1952. It is registered as a society under the Societies Registration Act, 1986.
- It functions as the apex body of the performing arts in the country, preserving and promoting the vast intangible heritage of India's diverse culture expressed in the forms of music, dance and drama.
- The academy also collaborates with international organisation like the UNESCO to save the cultural heritage of the country.

Awards by Sangeet Natak Akademi

- The Fellowship of the Akademi is the most prestigious and rare honor, which is restricted to 40 numbers at any given time. This year it has been awarded to: Zakir Hussain (Tabla), Sonal Mansingh (Bharatnatyam and odissi), Jatin Goswami (Sattriya) and K.Kalyanasundaram Pillai (Bharatnatyam).
- Sangeet Natak Akademi Awards: forty-four artists from the field of Music, Dance, Theatre, Traditional/ arts forms etc. have been awarded this year.
- The Ustad Bismillah Khan Yuva Puraskar is conferred upon artists with the objective of identifying and
 encouraging outstanding young talents in diverse fields of performing arts and giving them national
 recognition early in their life. It is open to all Indian nationals upto 40 years of age. It would not be given
 posthumously.

8.3. INDIGENOUS LANGUAGES

Why in news?

2019 is the United Nations' International Year of Indigenous Languages.

More on news

- Papua New Guinea has the highest number of 'living' indigenous languages in the world (840), while India stands fourth with 453.
- Among regions, Asia and Africa account for the highest number of indigenous languages (over 70% of the total).
- According to UNESCO's 'Atlas of the World's Languages in Danger', 228 languages have become extinct since 1950.
- About 10% of the languages are classified 'vulnerable', while another 10% are 'critically endangered'.
- In India, five languages have become extinct since 1950, while 42 are critically endangered.
- The Central Government is implementing 'Protection and Preservation of Endangered Languages of India' (SPEEL)' for protection, preservation and documentation of all mother tongues and languages of India, which are spoken by less than 10,000 people.
 - o Dialects are also covered under this programme.
 - It is being implemented by Mysore-based Central Institute of Indian Languages (CIIL).

8.4. JAIPUR GETS WORLD HERITAGE STATUS

Why in news?

Recently, the Pink City, Jaipur got the UNESCO World Heritage status.

Background

- In 2017, **old Ahmedabad** was **India's first city** to win the 'heritage city' tag.
- With Jaipur's inclusion, the number of heritage sites across India that are on the UNESCO World Heritage list, has grown to 38, including 30 cultural properties, 7 natural properties and 1 mixed site.
- India had proposed the nomination of Jaipur as an "exceptional urban example in indigenous city planning and construction in South Asia".

About Jaipur- City Planning

- The fortified city of Jaipur, in India's north western state of Rajasthan was founded in 1727 by Sawai Jai Singh II.
 - O Jaipur is distinguished for its **exemplary**
 - development in town planning and architecture of the late medieval period.
 - o Unlike other cities in the region located in hilly terrain, Jaipur was established on the plain and built according to a grid plan interpreted in the light of Vedic architecture.
 - The city's urban planning shows an exchange of ideas from **ancient Hindu and modern Mughal** as well as **Western cultures**.
- Designed to be a **commercial capital**, the city has maintained its local **commercial**, **artisanal and cooperative traditions** to this day.
- Jaipur boasts of vibrant intangible culture and heritage reflected in it being preferred tourism destination owing to its iconic monuments such as the Govind Dev temple, Amer Fort, City Palace, Jantar Mantar and Hawa Mahal among many.

Related Information

- The University Grants Commission (UGC) has a scheme for 'Establishment of Centres for Endangered Languages' under which centres were approved in respect of nine Central universities.
- UGC has also invited proposals from universities for establishment of Department of Devanagari Lipi (script) in universities with a view to preserve dialects, which do not have a written script in Devanagari.

Benefits of UNESCO Heritage tag to the Pink city:

For a city to be designated as world heritage under UNESCO, it has to

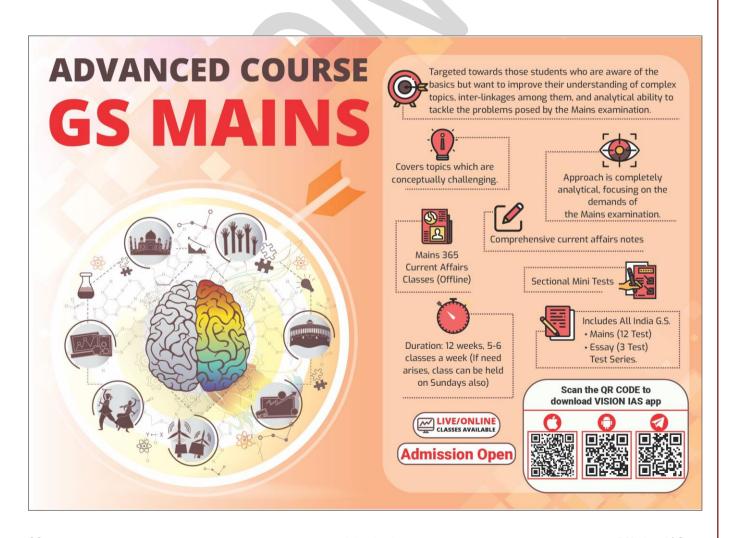
- Be of 'outstanding universal value',
- Needs to commit to protect and conserve its heritage.

In case of Jaipur, the challenge has been **balancing heritage conservation with a growing city** and the phenomena of Urbanisation.

- The Heritage tag has led to several initiatives for protection and conservation of Jaipur, as committed to UNESCO.
- Since progress on Jaipur conservation works now requires periodic reporting to the UNESCO World Heritage Committee, it places the ongoing planning, projects and commitments on a mission mode to be completed by December 2021.
- The new recognition would boost tourism and benefit the local economy.

8.5. CULTURAL FESTIVAL IN NEWS

Festival	State	Details
Kharchi festival	Tripura	 It is week-long festival celebrated at Chaturdash Devata Mandir (14 Gods temple), Old Agartala, Tripura to worship fourteen gods and mother earth. The Puja is performed to wash out the sins and to clean the post menstrual phase of mother earth's menstruation. It is performed 15 days after Ambubachi (annual festival held at Kamakhya temple, Assam). On the day of the Puja, the fourteen gods are carried to river Saidra. Earlier, the kings of Tripura offered pujas to the 14 Gods and Goddesses, but later it became the festival of common people. Animal sacrifice is also an important part of this festival and includes sacrificing of goats and pigeons.
Ashadhi Bij	Gujarat	 Ashadh Bij or Kutchi New Year is a distinguished culture where arrival of rain is celebrated. Kutchi community in Kutch region (desert area) of Gujarat observes Kutchi New Year as per an indigenous calendar. Ganesha, Lakshmi and other regional deities are worshipped on this occasion. During Ashadhi-beej, they check the moisture in the atmosphere to help predict which crop would do best in coming monsoon.



9. ETHICS

9.1. SURVEILLANCE SOCIETY

Why in news?

The recent decision of the Government of Delhi to install CCTV cameras in different parts of the capital has generated a debate on sanctity and normalisation of a surveillance society.

About Surveillance

- Surveillance involves paying close and sustained attention to another person. The term encompasses not
 only visual observation but also the scrutiny of all behaviour, speech, and actions. Prominent examples of
 surveillance include surveillance cameras, wiretaps, GPS tracking, and Internet surveillance.
- When this activity includes an entire or a substantial fraction of a population, it is said that there is a normalisation of a surveillance society.
- Some of the mechanisms of surveillance used by the Governments in India-
 - Central Monitoring System, DRDO NETRA, Lawful Intercept and Monitoring Project, National Cyber Coordination Centre, Telecom Enforcement Resource and Monitoring Project.
 - Several states within India have already installed CCTV surveillance systems with face matching capabilities using biometrics in Aadhaar.
 - Andhra Pradesh and Telangana are using information linked with Aadhaar across different agencies to create a 360-degree profile of a person, calling it the Integration Information Hub.
- In this background, it is crucial to study the ethical aspects of surveillance.

Rationale behind Surveillance

- **Defence of the nation-** such as stopping cross border infiltration, organisation crime on drugs and arms and other intelligence activities for the integrity and sovereignty of the nation.
- **Safety and security-** such as to screen the miscreants, anti-social elements that can be harmful to the safety and security of the citizens.
- Transparency- such in conduct of examination to curb cheating, impersonation.
- Aid Decision Making- such in judicial pronouncements on the basis of credible evidence.
- Monitoring important parameters- such as efficient working of the officials in their service delivery.
- **Effective Response** to events such as fire outbreaks and other disasters, which may go, out of control if not stopped at the right time.

Ethical Issues in Surveillance

- What are the areas and events when people do not mind being surveyed?
 - We do not have issues with the security checks at airports and railway stations. In fact, we demand more and more surveillance.
 - Whereas on the other hand, even a small intrusion in our phone is resisted forcefully.
- What powers of surveillance states should have over their citizens?
 - o Can the state have a universal access and unlimited powers to survey a particular person, if it is convinced of its efficacy? Or there has be a set of limitations on its use.
- What powers of surveillance private companies should have over clients?
 - The companies in the guise of service delivery and research may be use misusing the data of citizens. E.g. as revealed in the recent case of Facebook where the users personal data and activity was leaked to other agencies.
- Which technologies should and shouldn't be used?
 - Today there are number of advanced technologies available which can intrude into the private space of citizens, such as phone tapping, spyglasses etc. There needs to be a rationing of the technologies available to the government agencies, which should be mandated by law.

Implications arising out of Surveillance

• **Intrusion into privacy-** Such as demanded by the draft encryption policy of the government, which seek to scan through all the personal messages of the citizens in a usual manner.

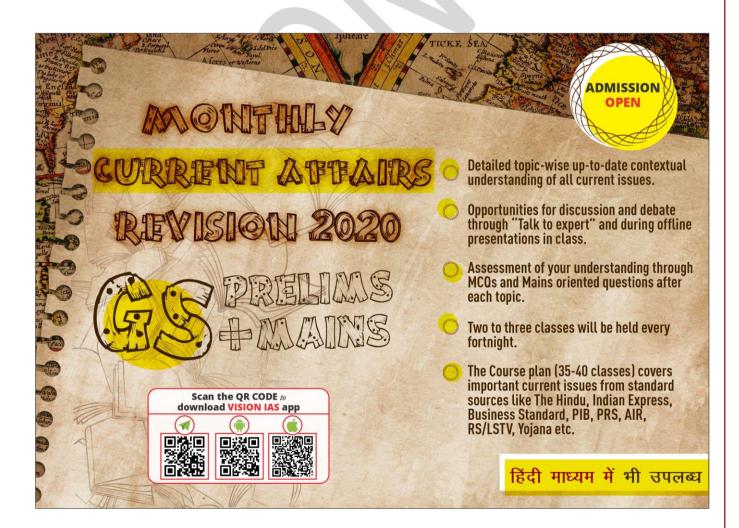
- **Error and discrimination-** When people are singled out for scrutiny on the basis of factors other than what makes them suspect.
- Can be counter-productive- Such as, if the surveillance mechanisms are hacked or fall in the hands of antisocial elements then it can be misused against the citizens itself.

Erosion to trust

- Of the Authorities- in the minds of citizens which make them go against even the just orders of the government in the times of emergency.
- o **Of other stakeholders** such as the private companies, NGOs and other groups, which seek data from, people for improvement in services.
- o **Among citizens** people must have a spirit of trust and care that reconciles their freedom along with the needs of social discipline.

Way Forward

- The state should have powers of surveillance, but its use and application should be entrusted to non-partisan and independent bodies so that it is not done for any vested interest.
- Sufficient safeguards and grievance redressal mechanism should be in place.
- In a general space, universal surveillance should be in place so that the cost of privacy is borne by everyone.
- Further, the state should make the threshold of evidence needed for surveillance very high (e.g. targeting very few individuals), so that the cost of privacy of that individual is placed very high.



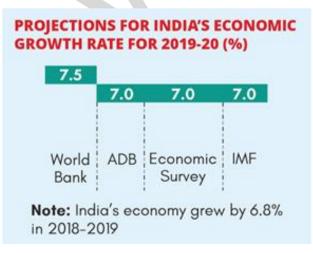
10. NEWS IN SHORT

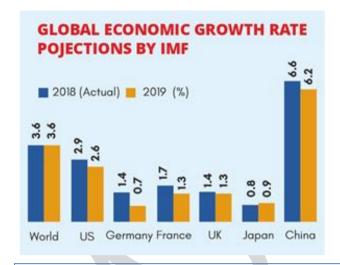
10.1. SECOND INDIA-RUSSIA STRATEGIC ECONOMIC DIALOGUE

- Recently, the second India-Russia Strategic
 Economic Dialogue (IRSED) was held in New Delhi.
- The India-Russia Strategic Economic Dialogue (IRSED) was established following a bilateral Memorandum of Understanding signed between NITI Aayog and the Ministry of Economic Development of the Russian Federation during the 19th edition of the Annual India-Russia Bilateral Summit in New Delhi.
- The First India-Russia Strategic Economic Dialogue was held in St. Petersburg between November 25-26, 2018
- The Second meeting of the IRSED focussed on six core areas of cooperation:
 - Development of Transport Infrastructure and Technologies
 - Development of Agriculture and Agro-Processing sector
 - o Small and Medium Business support
 - Digital Transformation and Frontier Technologies
 - Cooperation in Trade, Banking, Finance, and Industry
 - Tourism & Connectivity.

10.2. WORLD ECONOMIC OUTLOOK

- International Monetary Fund (IMF) in its update to the World Economic Outlook (WEO) has cut annual growth forecast for India, as it expects weaker domestic demand to limit an economic recovery.
- The economy is now expected to expand 7% in the year ending 31 March 2020, 0.3 percentage point slower than IMF's April projection.
- However, India will still be the fastest growing major economy of the world and much ahead of China.
- Also, Reserve Bank of India (RBI), the Economic Survey and the Asian Development Bank have cut their growth outlook for India to 7%.





10.3. UTKARSH 2022

- RBI launched 'Utkarsh 2022', the Reserve Bank of India's Medium-term Strategy Framework to achieve excellence in the performance of RBI's mandates and strengthening the trust of citizens and other institutions.
- It is a three-year road map for medium term objective which is in line with the global central banks' plan to strengthen the regulatory and supervisory mechanism.

10.4. RBI ALLOWS DOMESTIC BANKS TO SELL NPAS ABROAD AS ONE-TIME SETTLEMENT

 The Reserve Bank of India (RBI) allowed domestic banks to directly sell their bad loans in manufacturing and infrastructure sectors to investors abroad as part of one-time settlement (OTS) exercises.

Details

- Corporates can raise long-term ECB loans for working capital, general purpose, and to repay domestic loans.
- Banks or corporates can sell bad loans directly to ECB lenders abroad.
- Loans raised will be part of one-time settlement with companies.
- Loans with minimum average maturity of 7-10 years can be raised to repay domestic loans.
- RBI was earlier opposed to raising ECBs to repay domestic loans.
- The move can raise India's external liability significantly and build up risks.
- o It will allow overseas investors to take direct loan exposure to Indian corporates.
- It would shift credit outside of the Indian banking sector, but it would also increase our forex exposure.

External Commercial Borrowings

It is the financial instrument used to borrow money from the foreign sources of financing to invest in the commercial activities of the domestic country.

10.5. MOTIHARI-AMLEKHGUNJ OIL PIPELINE

- India and Nepal have successfully concluded the 'testing transfer' of the Motihari-Amlekhgunj oil pipeline
- The 69-km long petroleum pipeline from Motihari in Bihar to Amelkhgunj in Nepal has been constructed by India.
- This is the first transnational petroleum pipeline from India, first South Asian oil pipeline corridor and first oil pipeline in Nepal.
- It will ensure smooth, cost-effective and environment-friendly supply of petroleum products to Nepal.
- The Motihari-Amlekhgunj oil pipeline project was first proposed in 1996. The two governments had inked an agreement to execute the project in August 2015.

10.6. SARGASSO SEA

- Recently it was found that Sargasso seaweed algae belt is increasingly growing in Sargosso Sea.
- It is named for a genus of free-floating seaweed called Sargassum.
 - Seaweed can be a boon for marine wildlife, providing habitat for creatures including fish and birds.
 - At the same time, thick mats can block sunlight, while if large mats die and sink it can prove deadly for marine life, including coral.
- While there are many different types of algae found floating in the ocean all around world, the Sargasso Sea is unique in that it harbors species of sargassum that are 'holopelagi' - this means that the algae not only freely floats around the ocean, but it reproduces vegetatively on the high seas.
- The Sargasso Sea lies within the Northern Atlantic Subtropical Gyre. While all other seas in the world are defined at least in part by land boundaries, the Sargasso Sea is defined only by ocean currents.
 - The Gulf Stream establishes the Sargasso Sea's western boundary, while the Sea is further defined to the north by the North Atlantic Current, to the east by the Canary Current, and to the south by the North Atlantic Equatorial Current.
 - Since this area is defined by boundary currents, its borders are dynamic, correlating roughly with the Azores High Pressure Center for any particular season.
- The Sargasso Sea is a spawning site for threatened and endangered eels, as well as white marlin,

porbeagle shark, and dolphinfish. Humpback whales annually migrate through the Sargasso Sea.

10.7. AMRABAD TIGER RESERVE, TELANGANA

- Recently, Centre granted "in-principle" clearance for uranium exploration in Amrabad Tiger Reserve in Telangana.
- The area proposed for mining falls under the Amrabad and Nudigal Reserved Forests of the 'core area' of the tiger reserve.
- Location: This tiger reserve lies in Nallamala hill that stretch in Mahbubnagar and Nalgonda districts of Telangana.
 - The area lies along a patch where the Nallavagu and Dindi rivers merge, forming a major tributary and catchment of the Krishna river.
 - It is India's second-largest tiger reserve, next only to the Nagarjunasagar Srisailam Tiger Reserve, Andhra Pradesh.
- Wildlife: It has wildlife like leopards, sloth bears, wild dogs, spotted deer, sambar and wild boars. In 2017, the endangered species of mouse deer was reintroduced here.
- **Tribes:** Amrabad is dominated by the **Chenchus**, a Schedule Tribe, who are less affluent and are the most under-privileged group in Telangana.
 - Tribe has been coexisting with tigers and wild animals for long without disturbing the ecological balance, which ensures enough water and fodder for the herbivores
- Archaeological aspect: It contains ruins of the ancient Nagarjuna Viswa Vidyalayam run by the great Buddhist scholar Nagarjunacharya (150 AD).

10.8. GLOBAL COALITION TO PROTECT POLLINATORS

- Recently, Nigeria became the fourth African country to join the Global Coalition of the Willing on Pollinators.
- The initiative to form a coalition was taken by the Netherlands in 2016 at the Conference of the Parties—Convention of Biological Diversity held in Mexico.
- It was formed to follow up on the findings of Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Assessment on Pollinators, Pollination and Food Production, which found that many of the world's pollinator species are on the decline.
 - IPBES is the intergovernmental body established to improve the interface between science and policy on issues of biodiversity and ecosystem services.
- Joining the coalition means adopting the following measures:

- Taking action to protect pollinators and their habitats by developing and implementing national pollinator strategies
- Sharing experience and lessons learnt in developing and implementing national pollinator strategies, especially knowledge on new approaches, innovations and best practices
- Reaching out to seek collaboration with a broad spectrum of stakeholders—countries as well as businesses, NGOs, farmers and local communities
- Developing research on pollinator conservation
- Supporting and collaborating with each other and those parties that are willing to join the coalition

10.9. STATE BUTTERFLY OF TAMIL NADU

- Tamil Yeoman (Cirrochroa thais), a butterfly species endemic to western ghats has been declared as the state butterfly of Tamil Nadu. It is also known as Tamil Maravan, which means warrior.
- Maharashtra was the first state to declare Blue Mormon as its state butterfly; followed by Uttarakhand (Common peacock), Karnataka (Southern bird wings) and Kerala (Malabar banded peacock) and now Tamil Nadu.

10.10. PLASTICRUST: NEW KIND OF POLLUTION

- Researchers have noticed a new type of rock formation: a thin coating of plastic that's growing on the rocks at the shore. It is being called 'Plasticrust'.
- Analysis of the crust indicated that it's composed of polyethylene, which is the most commonly used plastic, often found in food and product packaging.
- When molluscs and similar creatures stick to rocks in order to feed from the algae coating them, they end up feeding on this plastic coating, further polluting the food chain.

10.11. PARAMARSH SCHEME

- Ministry for Human Resource Development recently launched 'Paramarsh' а University Grants Commission (UGC) scheme for Mentoring Institutions aspiring to achieve National Accreditation and Assessment Council (NAAC) Accreditation.
- Focus areas will include curricular aspects, teachinglearning & evaluation, research, innovation, institutional values & practices, etc.
- The scheme will target 1000 Higher Education Institutions for mentoring with a specific focus on quality as enumerated in the UGC "Quality Mandate".

10.12. INDSPACEEX

- The Indian armed forces are all set to conduct the country's first-ever simulated space warfare exercise "IndSpaceEx".
- The tri-Service integrated defence staff (IDS) under the defence ministry is conducting the two-day "IndSpaceEx", with all military and scientific stakeholders in the backdrop of China's rapidly expanding space and counter-space capabilities.
- This was first such exercise that is being planned after India successfully tested an anti-satellite (A-Sat) interceptor missile to destroy the 740-kg Microsat-R satellite, at an altitude of 283-km in the low earth orbit (LEO), in a "hit-to-kill mode" under "Mission Shakti" on March 27 this year.

10.13. ROLE OF COSMIC RAYS IN GLOBAL WARMING

- Recently, the scientists have found evidence on the role of cosmic rays in influencing climate change.
- As per recent findings, the galactic cosmic rays (high-energy radiation from space) can enhance the formation of low-lying clouds.
 - This leads to increase in the global cloud cover ultimately leading to the cooling of Earth's atmosphere, due to "umbrella effect".
 - This is particular during Earth's geomagnetic reversal, a phenomenon where the planet's overall magnetic field flips.
 - One of the instances is in Siberia. There the combined effect of rays and cloud cover, led to a high atmospheric pressure. It has caused the East Asian winter monsoon to become stronger.

10.14. PLOONETS

- Recently a team of astronomers from Royal Astronomical Society have defined a new class of celestial objects called 'Ploonets'.
- Ploonets are the orphaned moons that have escaped the bonds of their parent planet and start orbiting their stars instead.
- Ploonets could help explain some bizarre exoplanetary features and can also provide details on planet formation processes.
- Astronomers concede, however, that ploonets still remain hypothetical.

10.15. SPEKTR-RG

- Recently, Russia launched an all-sky-survey satellite,
 Spektr-RG to space from the Baikonur Cosmodrome in Kazakhstan.
- It is a joint project between the Russian space agency, Roscosmos, and the German space agency, DLR.
- **Objective-** to conduct the **first all-sky survey** with an imaging telescope to discover the hidden

population of several hundred thousand obscured supermassive black holes and the first all-sky imaging X-ray time variability survey.

10.16. DOLUTEGRAVIR

- World Health Organisation (WHO) has recommended the use of the HIV drug dolutegravir (DTG) as the preferred first-line and second-line treatment for all populations, including pregnant women.
- Recent studies comparing DTG to another drug Efavirenz (EFV) found it to be more effective, easier to take and having fewer side effects.
- In the present scenario of rising drug resistance, it is important that DTG has a high genetic barrier to developing drug resistance.

10.17. MERGER OF NIMH AND NIOH

- The National Institute of Miners' Health (NIMH) has been dissolved and merged with the ICMR-National Institute of Occupational Health (NIOH), Ahmedabad.
- National Institute of Miners' Health (NIMH) was setup in 1990 as an autonomous Institute under Ministry of Mines (MoM).
- ICMR-National Institute of Occupational Health (NIOH) comes under Ministry of Health & Family Welfare (MoH&FW). The focus area of NIOH is

- occupational health including occupational medicine and occupational hygiene.
- It will lead to enhanced expertise in the field of occupational health coming from both the institutes, besides the efficient management of public money.

10.18. NATIONAL ACTION PLAN FOR CONTROL AND ERADICATION OF GLANDERS

- Ministry of Fisheries, Animal Husbandry and Dairying has released the National Action Plan for Control and Eradication of Glanders.
- Glanders is a contagious and fatal disease of equines, including horses, donkeys and mules. Humans can also get the disease.
- It is caused by the **bacterium** Burkholderia mallei. **No vaccine** is available for the disease.

10.19. E-2020 INITIATIVE

- WHO is working with different countries and other partners on the E-2020 initiative to eliminate Malaria in these countries by 2020.
- It is part of the Global Technical Strategy for Malaria 2016-2030 endorsed by WHO which aimed to dramatically lower the global malaria burden over this 15-year period.

CAPSULE MODULE on ETHICS GS PAPER IV

For scoring high in Ethics paper, one needs to have conceptual clarity, ability to interlink theoretical concepts with daily life and proper approach to tackle case studies in a short span of time.

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KEY HIGHLIGHTS/ FEATURES:-

Module is meticulously designed based on last few years UPSC papers.

Integrated approach, interlinking different topics of ethics as well as relevant themes of other GS papers

Batch duration: 12 classes.

Previous years' questions discussion

Daily assignment and discussion.

Printed Study material on whole syllabus in additional to special value addition booklet.



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11. GOVERNMENT SCHEMES IN NEWS

11.1. PRADHAN MANTRI ROJGAR PROTSAHAN YOJANA (PMRPY)

Out of over one crore new employees who joined the workforce as part of the Pradhan Mantri Rojgar Protsahan Yojana (PMRPY) between August 2016 and March 2019, about 57 per cent came from five States — Maharashtra, Tamil Nadu, Karnataka, Gujarat and Haryana.

Objective	Beneficiaries	Key features
To incentivize employers promoting employment generation and providing social security benefits to the workers	 All establishments registered with Employees' Provident Fund Organisation (EPFO) can apply for availing benefits. The establishments must have a valid LIN (Labour Identification Number). 	Employees' Provident Fund Organization (EPFO). • It encourages employers of Small and Medium Enterprises and Micro Businesses to avail the benefits of this project.

11.2. STAND UP INDIA SCHEME

Recently, Stand Up India Scheme has been extended upto the year 2025.

Objective	Beneficiaries	Key Features
To promote entrepreneurship among Scheduled Caste/Schedule Tribe and Women	sc/st and/or woman entrepreneurs, above 18 years of age.	 It aims to facilitate bank loans between Rs 10 lakh and Rs 1 Crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and at least one-woman borrower per bank branch for setting up a greenfield enterprise. Loans under the scheme is available for only green field project. In case of non-individual enterprises, 51% of the shareholding and controlling stake should be held by either SC/ST and/or Women Entrepreneur. Borrower should not be in default to any bank/financial institution. The rate of interest would be lowest applicable rate of the bank for that category (rating category) not to exceed (base rate (MCLR) + 3%+ tenor premium). Besides primary security, the loan may be secured by collateral security or guarantee of Credit Guarantee Fund Scheme for StandUp India Loans (CGFSIL) as decided by the banks. The loan is repayable in 7 years with a maximum moratorium period of 18 months. Rupay debit card to be issued for convenience of the borrower. It also provides for Creation of a credit guarantee mechanism through the National Credit Guarantee Trustee Company (NCGTC).

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