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1. POLITY AND CONSTITUTION

1.1. RIGHT TO PRIVACY

Why in news?

 Recently, in Justice K. S. Puttaswamy (retd.) vs Union of India, a nine-judge Constitution Bench of the Supreme Court ruled that right to privacy is an intrinsic part of life and liberty under Article 21.

Background

- Constituent Assembly after discussing this issue decided not to put right to privacy in constitution
- Earlier M.P. Sharma (8-judge Bench) and Kharak Singh (6-judge Bench) cases delivered in 1954 and 1961, respectively, held that privacy is not protected under the Constitution.
- In Maneka Gandhi vs Union of India (1978), it was held that any law interfering with personal liberty and right of privacy must be just & not arbitrary
- However, the IT (information technology) Act of 2003 was silent on privacy laws.
- Various bills have been tabled in the past including The Prevention of Unsolicited Telephonic Calls and Protection of Privacy Bill, draft Bill on privacy 2011 etc. However, still privacy is not provided in law.
- A Committee of Experts was constituted under Justice A P Shah to study the privacy laws & make suggestions on proposed draft Bill on Privacy 2011
- Recently, the Data (Privacy and Protection) Bill, 2017 was tabled in the Lok Sabha.

Why right to privacy is needed?

- Rapid digitization in India may result into problems of ID theft, fraud, misrepresentation
- Welfare benefits through IT platforms using computerised data collected from citizens.
- Huge personal data collection Huge MNCs are taking data of millions of Indians abroad without including protection procedures
- Increasing internet users India has around 400 million Internet users engaged in generation, transmission, consumption and storage of data.

Recommendation of AP Shah Panel

- Enacting **new and comprehensive law** to protect privacy in the private & public spheres.
- Appointment of privacy commissioners at the Centre and in states
- Setting up of Self-Regulating Organisations by the industry which would develop a baseline legal framework enforcing right to privacy.
- Listed nine principles of privacy to be followed by data controllers Notice, Choice & consent, Collection limitation, Purpose limitation, Access & correction, Disclosure of information, Security, Openness, Accountability
- Listed exceptions to the right to privacy national security, public order & public interest, tackling criminal offences, protection of the rights of freedom of others.

Key features of judgement

- Expands the individual's fundamental rights by guaranteeing it in Article 21 and including freedom from intrusion into one's home, the right to choice of food, freedom of association etc.
- **Ensures dignity** as it is not possible for citizens to exercise liberty and dignity without privacy
- Etches firmer boundaries for the state Now right to privacy cannot be curtailed or abrogated only by enacting a statute but can be done only by a constitutional amendment
- Increase responsibility of state to protect data –
 as any data breach in national programmes
 involving collection of personal data would have to
 be compensated unlike in a police state.
- Shows an admirable capacity of judiciary to selfcorrect - This judgement overrules its previous stand in 6 and 8-judge benches.
- Independent external monitoring Now citizen can directly approach Supreme Court or High

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Heart of the matter

Salient points:

 Privacy is a constitutionally protected right emerging primarily from the guarantee of life and liberty in Article 21 of the Constitution

- It includes the preservation of personal intimacies, sanctity of family life, marriage, procreation, the home and sexual orientation
- Privacy connotes a right to be left alone. It safeguards individual autonomy and recognises one's ability to control vital aspects of his/
- Privacy is not an absolute right, but any invasion

must be based on legality, need and proportionality

- Informational privacy is a facet of this right.
 Dangers to this can originate from both state and non-state actors
- Government must put in place a robust regime for data protection.
 It must bring about a balance between Individual interests and legitimate state concerns

Courts for violation of his fundamental right under Articles 32 and 226. Thus ensuring that the right is subject to reasonable restrictions of public health, morality and order only.

- International significance as privacy enjoys a robust legal framework internationally and India has also signed and ratified the ICCPR in 1979.
- Preventing digital colonisation by digital & ecommerce businesses - such as ensuring checks on accessibility of data harvested and taken to servers outside the country by Facebook and Google.

Concerns arising from judgement

- Bearing on government's welfare schemes & other cases – such as Adhaar, Section 377, WhatsApp privacy policy, restriction on eating practices etc.
- Bearing on RTI A fine balance is difficult to be maintained between right to privacy & right to information such that disclosure of information does not encroach upon someone's personal privacy
- Possible misuse by accused in investigations by accused – on using personal information by law enforcement agencies
- Contours of privacy cannot be defined as it pervades all other fundamental rights. It is a cluster of rights including surveillance, search and seizure, telephone tapping, abortion, transgender rights etc.
- Undermines Separation of Power as it is not the job of court to amend fundamental rights. Inclusion or exclusion of fundamental rights is only the proviso of Parliament.

Way forward

Since the global surveillance disclosures of 2013, the right to privacy has been a subject of international debate. Indian laws also talked about one component of privacy, i.e. data protection. The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules of 2011

Data (Privacy and Protection) Bill, 2017

- Rights-based approach where consent of individual is mandatory for collection, processing, storing and deletion of personal data with very limited exceptions on case-by-case basis.
- Differentiate data collectors and data processors and mandates that they shall collect, store or access personal data in a lawful and transparent manner and implement necessary security measures for data collected
- Data intermediaries must inform individuals of data breach within a time frame
- Creation of position of data protection officer for grievance redressal of end-users with a provision for appeal to Data Privacy & Protection Authority

However, bill skips the issue of data sovereignty- the practice of subjecting information to the jurisdiction of data privacy laws on the basis of geographical boundaries. Unless explicitly specified, Indian IT laws are not applicable to data stored outside India and data intermediaries can claim immunity by exploiting this loophole.

Related International laws

- Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108), signed by European Council in 1981, is the first legally binding international treaty dealing with privacy
- Article 12 of the Universal Declaration of Human Rights, 1948 and Article 17 of the International Covenant on Civil and Political Rights (ICCPR), 1966, legally protect persons against "arbitrary interference" with one's privacy, family, home, correspondence, honour and reputation.
- European Union is planning to enforce its General Data Protection Regulation (GDPR) by May 2018.

provides for the secure storage of personal data and Aadhaar Act 2016 also has full chapter on privacy and security of personal data. However India is still lagging behind over 100 countries that already have some form of data protection law. India should resolve the following concerns:

- Increasing privacy consciousness in India which is low compared to western countries. Indian institutions like joint family, marriage celebrations etc. do not encourage privacy. However, rapid changes in technology warrant people awareness about what to put in public realm.
- **Developing a national data protection framework** which will hopefully also define the contours of personal privacy in a broader context beyond just data.
- **Horizontal application of privacy** where this right is available against private players also. If state is excluded from its role in society's data resources without constraining private corporations, it may lead to threatening of interests of weaker sections that depend on the state for justice and redistribution.
- Encouraging use of privacy enhancing technologies (PET) These are essentially processes and tools that
 allow end users to safeguard the privacy of their personally identifiable information It puts the end user in
 control over what information to share, with whom to share and a clear knowledge of the recipients of this
 information.
- Balance individual's privacy right with benefits of data mining and big data by clearly laying down a legal framework

1.2. MARITAL RAPE

Why in News?

The government has expressed its unwillingness to criminalize marital rape.

Background

- Section 375 of the IPC dealing with rape makes an exception for instances of forced intercourse within marriages and holds that "sexual intercourse by a man with his own wife, the wife not being under 15 years of age, is not rape".
- Various PILs were filed by NGOs (RIT Foundation, All India Democratic Women's Association) and a man and a woman, who have sought striking down of this exception in the Indian penal law (Sect 375 of IPC).
- The exception in section 375 of the IPC dealing with the offence of rape, was brought by way of the **Criminal Law Amendment Act of 2013**, which was enacted after the gangrape case of December 16, 2012.
- No other statute or law recognises marital rape, and victims only have recourse to civil remedies provided under the Protection of Women from Domestic Violence Act, 2005.
- The **Justice Verma committee**, formed in the wake of the 2012 Delhi gangrape, had recommended removing the exception made for marital rape in the law.

According to **the Justice Verma Committee**, "Rape or sexual assault is not a crime of passion but an expression of power and subordination. No relation, including marriage, supplements an irrevocable consent of sexual activity."

- Similarly, the **report 'Status of Women in India'**, by the high-level **Pam Rajput committee** of the Ministry of Woman and Child Development, criticised the legislature for its failure to criminalise or even recognise marital rape in the Criminal Laws (Amendment) Act 2013 enacted following the Justice Verma committee report.
- A recent judgement on the Right to Privacy, by the Supreme Court, has focused widely on the importance of dignity of an individual.

Argument against criminalisation

- The government argues that doing so "may destabilise the institution of marriage" and render a large number of men "vulnerable" to getting victimised at the hands of women who file "false" rape and domestic violence cases. It goes on to cite "rising misuse of Section 498A of IPC", commonly known as the dowry law.
- Before taking any step towards criminalising marital rape there needs to be proper well-defined lines and definitions for what is marital rape and what is 'non-rape'.
- If there is physical harm to either of the parties, then it may be called sexual assault for which there are laws already in place and in case of divorce or separation, the woman effectively withdraws her consent for having sexual relations with her estranged husband.
- In Indian society, marriage is considered to be a sacred relationship. Accordingly, the concept of "marital rape" does not apply to Indian context.

Arguments in Favour

- According to many civil society activists the government's argument takes away from the wife, merely by dint of her being married, her agency, her right over her own body and most importantly, her dignity.
- The 'exception in the rape law for marital rape' has its origin in the historical patriarchal society where a woman was considered as her husband's property.
- Various countries around the world have criminalised marital rape including our neighbours like Nepal, Bhutan, Sri Lanka, etc.
- It is important to note that sexual violence within or outside marriage is a gross violation of one's dignity and it should not ordinarily need a judicial stamp.

Important Data

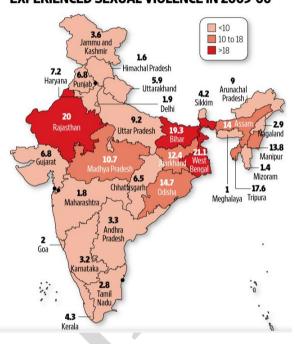
- While a lot of data for National Family Health Survey (NFHS) 4, which was carried out in 2015-16, has been released, information on sexual violence has been withheld.
- However, the previous NFHS (2005-06) data shows that among married women aged 15-49 years, 8.2% have faced sexual violence at least once. An overwhelming majority of such acts are committed by husbands.

- A 2014 paper by Aashish Gupta of the Research Institute for Compassionate Economics (Rice) has used NFHS 3 data to show that husbands were responsible for 6,590 incidents of sexual violence per 100,000 women.
- Only 0.6% of sexual violence committed by husbands was reported to the police.
- Both men and women who witness such violence in their family are more likely to inflict/experience sexual and other forms of spousal violence. The consequences are more severe for women.
- Entrenched patriarchal notions have legitimized such violence even among women. More than 4 in 10 women who had experienced physical or sexual violence felt that wife-beating was justified under various excuses.

Way Forward

 The high-level committee report on the status of women in India rightly points out that violence against women has been acknowledged as one of the crucial social mechanisms by which women are forced into a subordinate position compared to men and therefore a violation of women's equality rights.

PERCENTAGE OF CURRENTLY MARRIED WOMEN AGED 15-49 YEARS WHO HAVE EXPERIENCED SEXUAL VIOLENCE IN 2005-06



- The issue is a sensitive one and would need a detailed scrutiny and analysis. The very first step would be to define what constitutes as 'marital rape', and then further steps may be taken.
- Due to a grossly high number of assaults on women of sexual nature, as the data depicts, it becomes crucial for the country to take the matter for consideration on an urgent basis.

1.3. ARTICLE 35A OF THE INDIAN CONSTITUTION

Why in news?

• In response to a petition filed in supreme court, the bench has indicated that the question of constitutionality of Article 35A is likely to be handled by a 5-judge constitution bench.

What is Article 35A?

- Article 35A was incorporated into the Constitution in 1954 by a Presidential order issued under Article 370 (1) (d) of the Constitution
- Article 35A of the constitution empowers J&K legislature to define state's "permanent residents" and their special rights and privileges without attracting a challenge on grounds of violating the Right to Equality of people from other States or any other right under the Constitution.
- Article 35A protects certain provisions of the J&K Constitution which denies property rights to native women who marry from outside the State. The denial of these rights extend to her children also
- The Article bars non-J&K state subjects to settle and buy property in J&K.

Why is Article 35A debated?

- It was not added to the Constitution through amendment under Article 368 thus bypassing the parliamentary route of lawmaking.
- It is contended that it is discriminatory against non-residents as far as government jobs and real estate purchases are concerned. Thus, violating fundamental rights under Articles 14, 19 and 21.
- Some refugees from West Pakistan, who had migrated to India during Partition, have moved the Supreme Court challenging Article 35A of the Constitution relating to special rights and privileges of permanent residents of Jammu and Kashmir.

Arguments against

• It is feared that it would lead to further erosion of J&K's autonomy and trigger demographic change in valley.

• It increases the possibility of flooding the valley by people from outside the valley which may increase trust deficit.

1.4. DNA BASED TECHNOLOGY (USE AND REGULATION) BILL, 2017

Why in news?

- Law Commission of India has released The DNA Based Technology (Use and Regulation) Bill, 2017.
- It aims to prevent misuse of DNA technology by regulating and standardizing DNA testing as well as supervising the activities of all authorized laboratories

What the Bill proposes?

- Establishing new institutions a DNA profiling Board, a
 National DNA Data Bank and regional DNA databanks in
 every state or one or more states.
- Only for identification: It restricts DNA profiling to the purpose of identification only and not for extracting any other information
- Mandatory consent: No bodily substances will be taken from a person unless consent is given by him except if the individual is arrested for certain specific offences or if magistrate is satisfied of the need for DNA test
- Option for deletion of data There is also provision for defined instances for deletion of profiles and destruction of biological samples.
- Rights to an undertrial He can request for another DNA test in case of doubts that his earlier samples may have been contaminated.
- **Penalties**: Any violation would attract imprisonment up to three years and a fine up to 2 lakhs.
- Only accredited labs by DNA profiling Board would be authorised to carry out DNA testing and analysis.
- The new Bill has also removed a provision that allowed DNA profiles in the databank to be used for "creation and maintenance of population statistics databank".

Advantages of DNA technology

- 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 can also reveal person looks, eye colour, skin colour as well as more intrusive information like their allergies or susceptibility to diseases.

DNA Profiling board

- It is an 11 members regulatory authority with following functions
 - o grant accreditation to DNA laboratories
 - lay down guidelines, standards and procedures for labs
 - advise central and state governments on "all issues relating to DNA laboratories"
 - make recommendations on ethical and human rights, including privacy, issues related to DNA testing

DNA data bank

- Data from the analysis will need to be shared with the nearest regional data bank which will store it.
- All regional DNA databanks will be mandated to share their information with the national databank.
- They will also be responsible for maintaining certain indices, like crime scene index, suspects' index, missing persons' index etc. DNA experts would be notified as government scientific experts.
- Samples picked up from a crime scene, belonging to those who are not offenders or suspects, would not be
 matched with the databases. They would have to be expunged from the records on a written request from
 the individual concerned.

Criticism

- Not foolproof 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.
- **Issue of privacy** such as whose DNA can be collected and under what circumstance, who can access the database, the circumstances under which a record can be deleted etc.
- **Issue of security** Though the Law Commission cites the use of the 13 CODIS (Combined DNA Index System) profiling standard as a means to protecting privacy in its report this standard has yet to find its way in the text of the Bill. It has been pointed out that information like ancestry or susceptibility to a disease, or other genetic traits, is liable to be misused.
- **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.

1.5. JHARKHAND'S ANTI-CONVERSION BILL

Why in news?

Jharkhand cabinet has approved the Jharkhand Religious Independence Bill, 2017 that forbids religious conversion through allurement or coercion.

What are the provisions of the bill?

- It carries jail term of three years and/or fine of Rs 50,000 for anyone found guilty of converting people by alluring or forcing them. The punishment goes up if the person being converted is a minor, women or member belonging to the Scheduled Caste or Scheduled Tribe community.
- Those converting willingly will have to inform the district administration or they are liable to face action.

Criticisms surrounding the bill

- Penal provisions already exist under Section 295(A) of IPC for those indulging in coercive conversion or using allurement.
- It can infringe the fundamental rights provided by constitution under Article 25, i.e., freedom to practice and profess one's religion.
- It may lead to communal disharmony as it involves wide and vague terminologies such as the term "force" includes "threat of divine pleasure" or "fraud" includes "misrepresentation".

States with similar laws

- In 1967, Odisha's Swatantra Party government enacted India's first anticonversion law calling it "Freedom of Religion" Law.
- Today five states Odisha, Madhya Pradesh, Chhattisgarh, Gujarat and Himachal Pradesh – have active anticonversion laws.
- Arunachal Pradesh has an anticonversion law but it is in limbo since the rules <u>have not</u> been framed. Rajasthan passed a similar law a decade ago but the bill is <u>yet</u> to get the assent of the President of India.

1.6. NABARD (AMENDMENT) BILL, 2017

Why in news

 Recently, Lok Sabha has passed the National Bank for Agriculture and Rural Development (Amendment) Bill, 2017. The Bill seeks to amend the NABARD Act, 1981.

Highlight of the Bill

- Increase in capital of NABARD: Bill allows the central government to increase its capital from Rs 5000 crore to Rs 30,000 crore. The capital may be increased to more than Rs 30,000 crore by the central government in consultation with the RBI, if necessary
- Transfer of the RBI's share to the central government: The Bill transfers the share capital held by the RBI and valued at Rs 20 crore to the central government.
- Micro, small and medium enterprises (MSME): The
 Bill includes terms 'micro enterprise', 'small enterprise' and 'medium enterprise' as defined in the MSME
 Development Act, 2006.
- Consistency with the Companies Act, 2013: The Bill substitutes references to provisions of the Companies Act, 1956 under the NABARD Act, 1981, with references to the Companies Act, 2013.

Significance

• Integrated Rural Development: By including MSME Act, NABARD will be able to finance non-farm activity as well, which will facilitate promotion of integrated rural development and securing prosperity of rural areas including generation of more employment.

National Bank for Agriculture and Rural Development (NABARD)

- It was established on the recommendations of **Shivaraman Committee.**
- It is an apex institution which has power to deal with all matters concerning policy, planning as well as operations in giving credit for agriculture and other economic activities in the rural areas.
- It promotes rural industries, small scale and cottage industries including tiny sectors by providing loans to commercial and co-operative banks.
- The bank provides funds to State governments for undertaking developmental and promotional activities in rural areas.
- It also supports the Self-help Group (SHG) and works for the restructuring of credit institutions, and training and development of staff.

- Improving Infrastructure in Rural Areas: Proposed increase in authorised capital would enable NABARD to respond to commitments it has undertaken, particularly in respect of the Long Term Irrigation Fund and the recent Cabinet decision regarding on-lending to cooperative banks.
- **RBI share transfer**: It will **remove the conflict in RBI's role** as banking regulator and shareholder in NABARD. But some have raised issues with this move like:
 - ✓ RBI would lose an important supervisory and development institution in rural credit activity.
 - ✓ Nabard also stands to forfeit the wisdom and guidance that it sourced from the RBI.

1.7. AMENDMENTS TO WHISTLE BLOWER PROTECTION ACT

Why in News?

Recently the government suggested amendments to the Whistle Blower Protection Act, 2014 to address the concerns of national security, which has seen opposition from the civil society.

Background

- There have been multiple instances of threatening, harassment and even murder of numerous whistle blowers in the country. For example, the murder of Satyendra Dubey in 2003.
- After a long struggle demanding protection for the people to unveil any corrupt or wrong doing in a public organization, in 2014, the Whistle Blower Protection Act finally received President's assent.
- The importance of such progressive expansion is underlined by the fact that in the last few years, more than 65 people have been killed for exposing corruption in the government on the basis of information they obtained under the Right to Information (RTI) Act.
- However, instead of operationalising the Whistle Blower Protection law, an amendment Bill, which fundamentally dilutes the law, was introduced in Parliament in 2015 by the government without public consultation.

Provisions under Whistle Blower Protection Act (WBPA), 2014

- It provides a broad definition of a whistle blower which goes beyond government officials and includes any other person or non-governmental organisation.
- The person may make a public interest disclosure to a competent authority (CA), notwithstanding anything contained in the provisions of Official Secrets Act, 1923.
- The CA may seek assistance of the CBI or police authorities or any other authority to carry out inquiries under the Act. For the purpose of inquiries, CA shall have all the powers of a civil court.
- Directions of this authority are binding. The organization in question is to act on recommendations within 3 months (max 6 months) or record reasons in writing for disagreement, else pay penalty for non-compliance.
- It ensures confidentiality and penalizes any public official that reveals a complainant's identity, without proper approval, with up to three years imprisonment and a fine of up to 50,000 rupees.

Recommended Amendments to the Act

- The amendment Bill seeks to remove immunity provided to whistle-blowers from prosecution under the draconian Official Secrets Act (OSA) for disclosures made under the WBP law. Offences under the OSA are punishable by imprisonment of up to 14 years.
- To bring the WBP Act in line with the RTI Act, complaints by whistle-blowers containing information which would prejudicially affect the sovereignty, integrity, security or economic interests of the state shall not be inquired into.
- In addition, certain categories of information cannot form part of the disclosure made by a whistle-blower, unless the information has been obtained under the RTI Act. This includes what relates to commercial confidence, trade secrets which would harm the competitive position of a third party,

These categories include information related to: (i) economic, scientific interests and the security of India; (ii) Cabinet proceedings, (iii) intellectual property; (iv) that received in a fiduciary capacity, etc.

etc. These exemptions have been modelled on Section 8(1) of the RTI law which lists information which cannot be disclosed to citizens.

Issues

- The amendment restricts complaints to a certain domain. This would exclude crucial areas from being scrutinised. For example, exposing corruption in nuclear facilities or sensitive army posts not be inquired may not be enquired. Surely the country would benefit if such wrongdoing is exposed so that appropriate action can be taken.
- The RTI Act already makes a lot of information inaccessible to the public on various grounds. By making it imperative for whistle blowers to prove they have obtained information through RTI, the amendment bill leaves very little room for actually calling out corruption in the system.
- The amendment talks about conflating the two acts. However, the two acts have different intent and purpose all together. The purpose of the RTI Act is to make information with public authorities accessible to all citizens in order to promote transparency and accountability while the purpose of WBPA is to reveal corruption related information to the public authority.
- Also, the information under RTI is what people have the right to know. While the information divulged under WBPA might or might not be meant for the public knowledge.
- RTI Act permits the relevant public authority to disclose information, if the public interest in revealing information outweighs the harm done to protected interests. The Whistle blower (Amendment) Bill 2015 does not have such provisions.

Way Forward

- Concerns related to national security can at no level be misjudged. However, such concerns can be well
 integrated with protection and encouragement for genuine whistle blowers without compromising the real
 intent behind WBPA, 2014.
- If the intention was to ensure that sensitive information pertaining to national security and integrity is not compromised, instead of carving out blanket exemptions the government could have proposed additional safeguards such as requiring complaints to be filed using sealed envelopes to the competent authorities.
- Government must take steps to make people aware of the existing provisions to file such complaints such as Public Interest Disclosure and Protection of Informer.
- Whistle Blowers take severest of risks for the integrity of the nation. The WBPA was well intended to protect
 this stratum of citizenry. And no such step should be taken that renders them vulnerable in the hands of
 corrupt people of the society.

1.8. PUSH FOR LAW TO ENSURE TRANSPARENCY RULES

Why in News?

• The government could consider introducing a new law to ensure transparency of rules after the Economic Survey (II) has suggested the introduction of Transparency of Rules Act (TORA).

Need for TORA

- Rule of Law is the fundamental need for Good Governance which in turn depends on aware and vigilant citizens.
- The problem is that it is not easy for ordinary citizens in India to navigate the multitude of rules, regulations, forms, taxes and procedures which are further updated and changed as per the requirement.
- This is the cause of a lot of inefficiency, and delay. Arguably it is also an important source of corruption and endless litigation.
- Apart from Economic Survey, the 'Three Year Agenda' by NITI Aayog also talked about the need for Creation of a repository of all existing Centre and State laws, rules and regulations for the establishment of Rule of Law in the country.

Features of TORA

The proposed legislation would have the following three elements.

• It would make it mandatory for all departments to place every citizen-facing rule, regulation, form and other requirement on its website (preferably in English, Hindi and regional language). Once a department is declared "TORA-complaint", any rule that is not explicitly on the website would be deemed not to apply.

- It will further specify that all laws, rules and regulations need to be presented as an updated, unified whole at all times.
- The websites should clearly state the date and time when each change is made. Laws would normally be applicable after a specified time after the rule has been posted to give citizens a reasonable time to comply. The officials cannot retrospectively change the rules.

Significance

- All three of the above features are crucial for addressing the issues like lack of awareness, delay and ultimately corruption.
- The proposed law is solely concerned about the ease of finding out these varied rules and regulations that the citizens are expected to know about. It will also support the Digital India initiative.
- Once a department has shifted to the platform, it can be deemed "TORA-compliant" and citizens can be sure that the information is authentic and updated.

1.9. THE DILEMMA OF DELIMITATION

Why in News?

An increase in number of seats in both Houses of the Indian Parliament is expected after the lifting of the freeze imposed by the Constitution (42nd Amendment) Act, 1976, which is due in 2026.

Background

• The power to determine the aspects and manner of delimitation lies with the Parliament. This power has been exercised 4 times through enactment of the Delimitation Commission Acts 1952, 1962, 1972 and 2002.

 The 42nd Amendment Act 1976, froze the allocation of the seats in the Lok Sabha to the states and the division of each state into territorial constituencies till year 2000 at the 1971 (census) level.

 This amendment took care of the concerns of the states which took a lead in population control faced the prospect of their number of seats getting reduced.

 The prohibition on readjustment was extended for another 25 years, i.e. upto 2026, by the 84th Amendment Act of 2001. The main objective behind extending this was to encourage population limiting measures.

 The 87th Amendment Act 2003 provided for delimitation of constituencies on the basis of 2001 census, which was done without altering the number of seats or constituencies.

Constitutional Provisions for Delimitation

• Clause (2) of Article 81 provided that, there shall be allotted to each State a number of seats in the House of the People in such a manner that the ratio between that number and the population of the State is, so far as practicable, the same for all States.

Delimitation means the act or process of fixing limits of boundaries of territorial constituencies in a country or a province having a legislative body.

Delimitation in the J&K is done under the state constitution.

Under 31st Amendment Act, delimitation exercise doesn't apply to states and Union Territories having population less than 6 million.

Other Important Provisions

Article 82 provides for the readjustment of seats in the House of the people to the States and the division of each State into territorial constituencies after every census.

Article 170 provides for the composition of Legislative Assemblies.

Delimitation Commission

The Delimitation Commission in India is a highpower body whose orders have the force of law and cannot be called in question before any court.

The Commission consists of the Chief Election Commissioner of India and two judges of Supreme Court or any of the High Courts in India.

These orders come into force on a date to be specified by the President of India in this behalf.

The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.

- Clause (3) defined the expression "population" for the purposes of Article 81 to mean the population as ascertained at the last preceding Census of which the relevant figures have been published.
- Each state is divided into territorial constituencies in such a manner that the ratio between population of each constituency and the number of seats allotted to it is the same throughout the state.
- Through these provisions the constitution ensures that there is uniformity of representation in two respects Between different states

- Between different constituencies of the same state
- After every census, a readjustment is to be made in the-
 - Allocation of seats in the Lok Sabha to the states
 - Division of each state into territorial constituencies

Problem

- The problem is that the current population of our country stands at 121 Crore, which is way more than what
 was there in 1976, when the figures were frozen. Basing the 1971 Census figure of 54.81 crore to represent
 today's population presents a distorted version of our democratic polity and is contrary to what is mandated
 under Article 81 of the Constitution.
- Concerns expressed by the States in 1976 which necessitated the freezing of seat allocation on the basis of 1971 population figures would appear to hold good even today and have to be addressed to the satisfaction of all stakeholders. Now the first census figures after 2026 will be available for 2031, which will already be too late to envelope the reality of Indian electorates.
- More number of members jostling with each other to capture attention to raise their respective issues would make it a difficult task for the presiding officer to ensure smooth functioning of House.

Way Forward

• There is a need for a debate now on how to deal with the problems that are likely to arise else we will be forced to postpone the lifting of the freeze to a future date as was done in 2001.

1.10. MAKING INDIA HUB OF ARBITRATION

Why in News?

The High-Level Committee, under the **Chairmanship of Justice B. N. Srikrishna**, to review the institutionalization of arbitration mechanism and suggest reforms thereto has submitted its report recently.

Background

- The Government of India has laid emphasis on making Arbitration a preferred mode for settlement of commercial disputes by taking legislative and administrative initiatives on arbitration.
- The initiatives aim at minimizing court intervention, bring down costs, fix timelines for expeditious disposal, and ensure neutrality of arbitrator and enforcement of awards.
- Arbitration is often the first alternative amongst various ways to manage contract related disputes and it holds the promise of flexibility, speed and cost-effectiveness.
- The Arbitration and Conciliation (Amendment) Act, 2015 envisages various ways to encourage foreign
 investment by projecting India as an investor friendly country having a sound legal framework and ease of
 doing business in India.

Problem

- The World Bank's Ease of Doing Business ranking for 2017 reveals that India continues to fare badly on enforcement of contracts, with an average of 1,420 days taken for enforcement. The absence of effective means for enforcement of contracts is a serious fetter on the legal system and impedes economic growth and development.
- Also, it was found that judicial intervention and failure of the government and its agencies to use institutional arbitration has, among others, led to India's reputation as an "arbitration-unfriendly" jurisdiction.
- In India, both ad hoc arbitration mechanism and institutionalised mechanism are riddled with various problems. Besides this a lack of awareness about the advantages of institutional arbitration and the existence of certain institutions leads to parties avoiding institutional arbitration or preferring foreign arbitral institutions over Indian ones.

Report Recommendations

• The committee in its report has recommended strengthening of institutional arbitration in India. The Committee has divided its Report in three parts.

- The **part I** is devoted to suggest measures to improve the overall quality and performance of arbitral institutions in India and to promote the standing of the country as preferred seat of arbitration. Important points in this part are-
 - Setting up of an autonomous body called Arbitration Promotion Council of India (APCI), having representatives from all the stakeholders for grading arbitral institutions in India.
 - o APCI may recognize professional institutes providing for acceleration of arbitration.
 - Creation of a specialist arbitration bench to deal with commercial disputes in the domain of the courts.
 - The committee also opined that the National Litigation
 Policy must promote arbitration in government contracts.
- The Committee in Part II of the Report reviewed the working of International Centre for Alternate Dispute Redressal(ICADR). It called for declaring the ICADR as an Institution of national importance.
- In the III part, the committee has recommended for the creation of post of 'International Law Advisor' (ILA) to advise the Government and coordinate dispute resolution strategy for the Government in disputes arising out of its international law obligations, particularly disputes arising out of BITs.

The **ICADR** is an autonomous organization with its headquarters at New Delhi. The Regional Centres of ICADR are fully funded and supported by the respective State Governments.

It was set up by the Department of Legal Affairs as an autonomous body registered under the Societies Registration Act, 1860.

The Minister for Law & Justice is the Chairman of ICADR. Its main object is to promote popularise and propagate Alternative Dispute Resolution to facilitate early resolution of disputes to reduce the burden of arrears in the Courts.

Significance

- With India's focus gradually shifting towards greater growth and development through increased Foreign Investment, it is essential for the government to make India safer for the foreign investments.
- To achieve this goal institutionalization of the arbitration mechanism can help to make dispute settlement easier and guicker.
- As also the mechanism, has become crucial for commercial dispute resolution, particularly for high-value disputes involving international parties, in most advanced jurisdictions.
- The recommended steps might not necessarily lessen the burden of judiciary but will push the developmental agendas of the government further.

1.11. NRIS PERMITTED TO VOTE THROUGH PROXY

Why in news?

The Union cabinet has recently approved proposal to change the electoral laws to allow NRIs to vote in the Lok Sabha and assembly elections through a proxy. Earlier, this was permitted only to service personnel.

Details

 Overseas electors will have to appoint a nominee afresh for each election — one person can act as proxy for only one overseas voter. This is unlike the armed forced who can nominate their relatives as permanent proxy to vote on their behalf.

Current Status

- In 2010, Representation of the People (Amendment) Act was amended to introduce Section 20A to make NRI eligible to be registered as a voter in the constituency mentioned in her Indian passport.
- Before this amendment, only "ordinary residents" could cast their vote.
- However, Section 20A required NRIs to be physically present in their respective constituencies at the time of elections.
- Service voters can cast their vote through post as well but this is not permitted for NRIs as the government felt that it could become an administrative and logistic nightmare.

Challenges with proxy voting

- **Violates right to equality** It gives special privilege to person who have migrated abroad but not to people who have domestically migrated.
- **Difficulty in checking illegal practices** such as buying of votes from the NRIs' nominees, bribery and inducements of voters abroad, checking concurrence in proxy vote with the main voter etc.
- Violates the principle of secrecy of voting
- It would be difficult to ascertain the genuineness of proxy selected by an NRI

Arguments in favor of bill

- Citizens have a democratic right to choose their legislators irrespective of their place of residency.
- With the rapid increase in cross-border migrations, the concept of nationhood and political membership is increasingly being decoupled from territorial locations.

Way forward

- The government can make Aadhaar mandatory for all, including the NRIs, for voting.
- NRIs may be allowed to do e-voting from their workplaces overseas for e.g. Mahe residents have for long been voting online in the French elections.

1.12. NEW RATING SYSTEM FOR BUREAUCRATS

Why in news?

The parliamentary standing committee has criticized the new 360-degree rating system for the bureaucrats proposed as one of the major administrative reform by the government.

What is the 360-degree rating system?

- The 360-degree approach is a new multi-source feedback system for performance appraisal of bureaucrats started by the current government for future postings.
- The system seeks to look beyond the ratings received in appraisal reports written by their bosses. It relies on feedback of juniors and other colleagues for an all-round view.

Criticism of the rating system

- According to the Second Administrative Reforms Commission, in the context of India, where strong
 hierarchical structures exist and for historical and social reasons it may not be possible to introduce this
 system unless concerns of integrity and transparency are addressed.
- The report notes that the 360-degree approach does not have any statutory backing, or supported by any Act.

Advantages

- It Improves credibility of performance appraisal as it reduces bureaucrat's zone of maneuverability such as lobbying the minister concerned for a job in his department, or even other senior bureaucrats in key positions.
- It provides feedback from all angles and bring to table differing opinions and perspectives.
- It positively impacts the work culture of an organization.



2. INTERNATIONAL/INDIA AND WORLD

2.1. US NEW AFGHAN POLICY

Why in news?

Recently the U.S. President laid out strategy for "Afghanistan and South Asia".

New strategy

The new strategy can be summed up as **Obama-plus:** it builds on the premises of the Obama plan of additional troops and regional diplomacy. But unlike earlier strategy, which set a timetable for the withdrawal of troops, the new strategy calls for an open-ended engagement.

Important points of new strategy

• From Rapid Withdrawal to Uncertain Time Frame

- ✓ In outlining his new strategy, the President recommitted the United States to an open-ended conflict in Afghanistan, saying U.S. forces must "fight to win" the war.
- ✓ The US currently has about 8,400 troops in Afghanistan, and US military generals have said that a few thousand more troops would help the US break the current stalemate against the Taliban.
- ✓ The additional troops would serve in two roles: counterterrorism missions and training the Afghan forces.
- ✓ The President added that he would give military commanders the authority to act in real time and expand the authorities for US armed forces to target terrorists and criminal networks in Afghanistan.

Winning but not nation-building

✓ President said the focus of the American mission should narrow down to fighting terrorists, not rebuilding Afghanistan "in our own image".

• Tougher Stance On Islamabad

- ✓ Trump directly called Pakistan a country that shelters terrorists. He demanded that Pakistan's support to cross-border terror "will have to change" and "change immediately".
- ✓ America would no longer tolerate Pakistan's policy of harbouring terrorists.

• Larger role for India

- ✓ Describing India as "a key security and economic partner of the United States," the President said America would further "develop its strategic partnership with India the world's largest democracy."
- ✓ He also urged India to play a larger role in providing economic and development assistance to the wartorn Afghanistan.

Implications of new strategy for India

India has welcomed Mr. Trump's strategy, as the U.S.'s objectives in building a stable Afghanistan and ending Pakistan's sponsorship of terrorism are exactly in line with India's own goals for the region.

- The elevation of India to a key partner to bring about peace and stability for this region represented the biggest departure from previous administration's approaches.
- This gives India an opportunity to work with the US to determine what kind of Afghanistan it wants to see, and ensure greater Indian economic involvement.
- It was also a negation of Pakistan's argument that greater Indian involvement in Afghanistan would be a source of instability in the region and a hurdle in bringing the long Afghan conflict to an end.

Way forward for India

A positive Indian approach would involve three elements — economic, security and diplomatic.

- India must ramp up its **economic diplomacy in Afghanistan** to bring immediate benefits to Kabul amidst the deteriorating conditions in the country.
- Delhi must step up **security cooperation with Afghanistan**, especially in the training of its police and armed forces and intelligence sharing.
- On the diplomatic front, India must counter the emerging argument that Trump's new approach will
 intensify the "Indo-Pak rivalry" in Afghanistan and the old one that Kashmir holds the key to peace in
 Afghanistan.
- Delhi must remind the world of India's commitment to regional cooperation with Afghanistan and Pakistan, in an atmosphere free of terrorism.

Implications of new strategy for Pakistan

- Pakistani officials have cited Indian influence as a primary cause of instability and insecurity in Afghanistan.
- Pakistan's Afghanistan policy is all about India not gaining sufficient influence over the country. New strategy
 might force Pakistan to rethink its strategy of harboring terrorist groups. However, it will not be easy, for
 Pakistan to abandon its investments in cross-border terror.
- Many experts believe that Pakistan may play China card to reduce the USA pressure. Any increase in conflict
 in Afghan-Pak region would further enhance China's overall position as a stakeholder in South Asian geopolitics.

Analysis

Though the strategy seems to be very comprehensive in terms of dealing with the overall situation in Afghanistan and the region, it is important to answer the question of how it can be operationalized. Dealing with Pakistan appears to be a hard question to answer as the U.S. is logistically dependent on Pakistan to carry out its operations in Afghanistan. However, this requires a multi-pronged approach and should be tailored to coerce Pakistan to give up its support for insurgents and to stop using terror as an instrument of foreign policy.

2.2. INDIA-NEPAL

Why in news?

Nepal PM Sher Bahadur Deuba paid official visit to India. This was his first foreign visit as Prime Minister, and it confirmed Kathmandu's abiding interest in strong ties with India.

Significance of visit

Nepal PM visit provided an opportunity for both counties to repair the India-Nepal relationship.

 The joint statement refers to the "deep, comprehensive and multi-faceted" ties between the neighbours as it listed projects being developed in Nepal under lines of credit provided by India.

List of MoUs/Agreements

- MoU on Modalities for Utilization of India's Housing Grant Component to support Reconstruction of 50,000 Houses.
- MoU on Implementation of the Grant Component of India's Post-Earthquake Reconstruction Package in the Education, Health and Cultural Heritage Sector in Nepal.
- MoU on Drug Demand Reduction and Prevention of Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursor Chemical and Related Matters.
- Agreement on Cooperation in the Field of Standardization and Conformity Assessment
- MoU between the Institute of Chartered Accountants of India and the Institute of Chartered Accountants of Nepal.
- India made the obligatory appeal to Kathmandu "to take all sections of society on board" while implementing its Constitution, but the tenor was notably softer this time. No mention was made of a key amendment to the Constitution to accommodate Madhesi demands.

2.3. INDIA-CHINA

Why in news?

Recently, India announced both countries had agreed to mutually disengage their troops from the plateau along the Sino-Bhutan border.

• Troops of the two countries had been locked in a standoff in Dokalam since June 16 after Indian troops stopped the Chinese Army from building a road in the disputed area.

Diplomatic victory for India

The end of Dokalam standoff is a huge **political, diplomatic and moral victory for India**. It will contribute to raising the stature of the country.

- The fact that the Indian government stayed steadfast and resolute in the face of extreme provocation, speaks volumes of the determined and decisive approach of the present government.
- The episode has significantly **established the image of India as a responsible**, decisive and reliable actor on the global scene.
- The episode has contributed to further **strengthen relations between India and Bhutan**. It is to Bhutan's credit that it stood steadfast through the long, tense standoff. China has been trying for long to create fissures between India and Bhutan.

• The message to **India's neighborhood is also positive and reassuring**. It will further enhance India's stature and image of a reliable partner. It will enhance the resolve and resilience of some of China's neighbours to stand up to China on issues of vital and critical importance for them.

Way forward to prevent such standoffs

The Doklam imbroglio may have been resolved peacefully after 73 days, but sources in the military warn that India and China will witness such standoffs more frequently now, unless a **more robust border management mechanism** is put in place.

- India and China should not see Doklam in terms of point-scoring but rather as a warning of the need for extending their border management framework across other borders as well.
- India and China must revert to the spirit of the Border Defence Cooperation Agreement of 2013, which laid down specific guidelines on tackling future developments along the 3,488-km boundary the two countries share.
- Both countries need to have the **Director General of Military Operations (DGMO) level hotline** in place along with more visits and tactical level exchanges.
- Stronger economic and commercial partnership between the two countries can be a win-win scenario for both the countries if China removes or significantly reduces its non-tariff barriers against Indian products and services.
- India must necessarily "hope for the best, and prepare for the worst", when it comes to tensions with its northern neighbour.

2.4. INDIA AND PHILIPPINES COUNTERTERRORISM COOPERATION

Why in news?

India has decided to provide a financial assistance of Rs. 3.2 crore to the Philippines to aid its fight against the Islamic State (IS)-affiliated terror groups in the city of Marawi in Mindanao province.

More on news

- The Philippines has been engaged with Islamic State (ISIS)-affiliated militants who launched an offensive to control city of Marawi in Mindanao province on May 23, 2017.
- This is the first time India is sending financial aid to another country for relief and rehabilitation from deadly terror groups.
- India has emerged as the highest donor for anti-terrorism efforts in Philippines.
- India is also conducting cybersecurity training for the Philippine security forces, focusing on deradicalisation.

Significance

- India's participation in countering the Marawi crisis marks yet another milestone in India's Act East policy.
- Sending aid to another nation will help India's attempts to burnish its credentials as an emerging security provider to the wider Asian region.
- This will augment India's counterterrorism cooperation with other nations fighting terrorism, such as Indonesia and Malaysia and will help to counter balance China's influence in the region.

Conclusion

- India has managed to ward off the threats from globalized Islamist terrorist groups by enhancing capabilities of security agencies and conducting community based de-radicalisation programmes.
- These experiences and capabilities should be transferred to Philippines whose response to IS threat has mostly been military in nature.

2.5. INDIA AND SWEDEN

Why in news?

The Union Cabinet cleared MoU signing between India and Sweden on intellectual property right (IPR) cooperation, aimed at benefiting entrepreneurs, investors and businesses.

• The MoU establishes a wide ranging and flexible mechanism through which both countries can exchange best practices and work together on training programs and technical exchanges to raise awareness on IPRs and better protect intellectual property rights.

- It will be a landmark step forward in India's journey towards becoming a major player in global Innovation and will further the objectives of National IPR Policy, 2016.
- A Joint Coordination Committee (JCC) with members from both sides will be formed to decide cooperation activities to be taken under the MoU.

2.6. INDIA-ISRAEL

Why in news?

The Union Cabinet approved a Memorandum of Understanding (MoU) between India and Israel on "India-Israel Industrial R&D and Technological Innovation Fund (I4F)".

- It envisages promotion of bilateral Industrial R&D and Innovation cooperation in the fields of science and technology by extending support to joint projects for innovative or technology-driven new or improved products, services or processes.
- India and Israel will make a contribution of **four million US Dollars** each for the Fund, both equivalent amounts, annually for five years.
- The Innovation Fund will be governed by a joint board which will consist of four members from each country.
- It would leverage the **complementary strengths of Israel and India** to encourage Israel-Indian joint projects that capitalize on both the national and global marketplace.
- It is expected that this will foster and strengthen the **eco-system of innovation** and technoentrepreneurship in India and will contribute directly to **the Start-up India programme.**

2.7. TAPI GAS PIPELINE

Why in news?

India will host the next steering committee meeting of the proposed 1,814 kilometre-long Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline.

- The decision came during the sixth joint Inter-Governmental Committee (IGC) meeting on trade, economic, scientific and technological cooperation.
- The move is also an effort by the government to stave off any Chinese interest in the project.

About TAPI

The pipeline that is set to cross over 1,700 km, through Herat and Balochistan before reaching the Indian Punjab border will draw from the world's second largest natural gas field of Galkynysh.

- The TAPI pipeline will have a capacity to carry 90 million standard cubic metres a day (mscmd) gas for a 30-year period. It will come into operation in 2018.
- India and Pakistan would get 38 mmscmd each, while the remaining 14 mscmd will be supplied to Afghanistan.
- The US is backing the TAPI pipeline as an alternative to the Iran-Pakistan-India line in its efforts to restrict Tehran financially over its suspected nuclear weapon programme.

Importance of TAPI

- It will reopen a historic route that **reconnects South Asia to Central Asia**.
- It will also bring India and its neighbours much needed energy at competitive pricing.
- TAPI will provide an alternative supply source of gas with **dependable reserves leading to enhanced energy security**. It will further diversify the fuel basket to the benefit of Indian economy.



- The TAPI project is crucial to India, as its success would spur other connectivity such as road and rail between Central Asia and India, and potentially change economic relations. Diplomatic relations too could undergo a sea change, bringing Central Asia out of the Russian-Chinese orbit.
- The TAPI pipeline gives this **fractured region a reason to work on a project together** as well, and it is hoped the shared stakes in TAPI's success will ensure that India, Pakistan and Afghanistan find ways of cooperating on other issues as well.

Challenges before the project

- The project faces the challenge of terrorism. Unless the pipeline is secured from the **Taliban that operates on both sides of the Durand Line**, and from militant groups operating in Pakistan, it is hard to see how the TAPI dream can go beyond the groundbreaking ceremony.
- The success of TAPI project is also dependent on the overall relation not only between India and Pakistan but also between Pakistan and Afghanistan.

Way forward

The project will be actualised if the leadership of all four member-countries don't just dwell on the world that exists today, but the region as it can be: **connected**, **cooperative**, **peaceful and prosperous**.

2.8. REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP (RCEP)

Why in news?

19th Round of the RCEP Trade Negotiating Committee meeting at the technical level was held at Hyderabad.

 The member countries agreed to achieve a set of key elements for significant outcomes by the end of this year.

India and RCEP

- India is primarily interested in securing greater market access for services and is pushing for easing restrictions in the sector.
- It is especially looking at opening up issues under Mode 4, which deals with cross-border migration of services
 professionals. However, the slow progress of the services negotiations has been worrying India.

About RCEP

- The RCEP is billed as an FTA between the 10-member ASEAN bloc and its six FTA partners — India, China, Japan, South Korea, Australia and New Zealand.
- When inked, it would become the world's biggest free trade pact. This is because the 16 nations account for a total GDP (Purchasing Power Parity, or PPP basis) of about \$50 trillion (or about 40% of the global GDP) and house close to 3.5 billion people (about half the world's population).
- The RCEP 'guiding principles and objectives' state that the "negotiations on trade in goods, trade in services, investment and other areas will be conducted in parallel to ensure a comprehensive and balanced outcome."
- The proposed FTA, aims to boost goods trade by eliminating most tariff and non-tariff barriers — a move that is expected to provide the region's consumers greater choice of quality products at affordable rates. It also seeks to liberalise investment norms and do away with services trade restrictions.
- India has reservations regarding the potential adverse impact of eliminating duties on its local manufacturing and job creation
- Several of the members want India to eliminate duties on about 90 per cent of traded goods as part of the ambitious RCEP pact.
- China is keen on an agreement on a 'high level' of tariff liberalisation eliminating duties on as much as 92% of traded products. However, India's offer is to do away with duties on only 80% of the lines and that too, with a longer phase-out period for Chinese imports (ie, about 20 years, as against 15 for other RCEP nations).
- There are demands from some RCEP countries to open up the **public procurement segment**, India is not willing to undertake any binding commitment on that.
- A highly ambitious level of tariff elimination without enough flexibility would affect India the most on the goods side. This is because in the RCEP group (except Myanmar, Cambodia and Lao PDR), India has the highest average 'Most Favoured Nation (MFN) tariff' level at 13.5%.
- Eliminating duties under the RCEP will impact many sectors including steel, aluminium, auto-components, many engineering items and readymade garments."
- The proposed FTA, owing to the possibility of elimination of duties across most sectors, could lead to a surge in inflow of low-priced goods, mainly from China.

- Since India already has separate FTAs with the 10-member ASEAN bloc, Japan and Korea, India Inc. feels that on account of the RCEP, India may not gain much on the goods side with existing FTA partners.
- China is the only RCEP country with which India neither has an FTA, nor is in talks for one. Therefore, Indian industry sees RCEP as an indirect FTA with China.
- India has a goods trade deficit with China that has ballooned from \$1.1 billion in 2003-04 to \$52.7 billion in 2015-16. The domestic steel and heavy industries sectors have been apprehensive that China might use the RCEP to try and gain more market access in India even as it remains unwilling to import more.
- Indian companies and industry bodies, including CII, flagged their concerns that the centre's 'Make In India' initiative to boost manufacturing and job creation could be hit by a hurried pact.
- In the area of intellectual property rights, several members have been pushing provisions that **go beyond TRIPS**, with serious adverse consequences for **access to generic medicines** manufactured in India.
- Agreeing to data exclusivity, extending patent terms and unduly strong enforcement measures will weaken
 the entire generic medicine sector and take away several health safeguards in India's Patent Act, notably
 section 3(d).

2.9. URANIUM BANK IN KAZAKHSTAN

Why in news?

International Atomic Energy Agency (IAEA) has opened a uranium bank for Low Enriched Uranium (LEU) in Oskemen city of Kazakhstan to discourage new nations from enriching the nuclear fuel.

Details

- The project was funded by donors, including the United States, the European Union, Kuwait, the United Arab Emirates, Norway and the Nuclear Threat Initiative.
- It will store up to 90 tonnes of the fuel and will act as a supplier of last resort for Member States in case the supply of LEU to a nuclear power plant is disrupted due to exceptional circumstances and the Member State is unable to secure LEU from the commercial market or by any other means.

International Atomic Energy Agency

- It is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field.
- It is an autonomous international organization within the United Nations system.
- It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.
- It is headquartered in Vienna, Austria.
 - India is a member of IAEA.
- IAEA will run the bank independently of any country, will purchase and store low-enriched uranium fuel for civilian reactors but not an ingredient for nuclear weapons.
- A Member State which needs to purchase LEU from the IAEA LEU Bank must have a comprehensive safeguards agreement with the IAEA in force and no issues relating to safeguards implementation.
- Russia has operated a similar bank since 2010 and the United States of America also operates its own LEU reserve.

Significance

- It will strengthen the **global non-proliferation** regime as the technology to enrich uranium is also the technology to make nuclear bomb.
- According to the <u>World Nuclear Association</u> around 40 countries around the world are actively consider nuclear energy to address the **growing energy needs.**
- While the commercial uranium market is more than adequate to meet the growing demand, some countries
 could be tempted to manufacture their own enriched uranium as a hedge against future disruptions to the
 global supply caused by war or political crises. For e.g. Iran cited concerns over market disruptions as the
 primary reason for constructing its massive Natanz uranium enrichment plant.
- It will help countries allay the fears of such countries to obtain fuel without domestic enrichment facilities.

2.10. GLOBAL ENTREPRENEURSHIP SUMMIT (GES)

Why in news?

India and USA will be co-hosting the Global Entrepreneurship Summit (GES) at Hyderabad in November, 2017.

- Organized annually since 2010, GES is the preeminent annual entrepreneurship gathering that convenes over one thousand emerging entrepreneurs, investors, and supporters from around the world.
- This year marks the first GES held in South Asia, and the event underscores US broad and enduring partnership with India.
- This year, the theme is "Women first, prosperity for all" and the focus will be on four key areas: energy and infrastructure; health care and life sciences; financial technology and digital economy; and media and entertainment.
- GES 2017 will create an environment that empowers innovators, particularly women, to take their ideas to the next level. Their voices are critical to global security, prosperity, and peace.
- The Summit is a unique opportunity for bringing together entrepreneurs and startups with global leaders.
- Niti Aayog is the lead Indian agency in holding the event in partnership with the state government of Telangana.

2.11. 15TH MINISTERIAL MEETING OF BIMSTEC

The 15th Ministerial Meeting of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) was recently held at Kathmandu.

Highlights of the meeting

- The meeting of the foreign ministers adopted a master plan to alleviate poverty in the region.
- The meeting also agreed to set up **the BIMSTEC Energy Centre**, **BIMSTEC Environment Centre** and **BIMSTEC Cultural Centre** immediately to expedite the objectives of the regional organisation.
- The meeting agreed to constitute an **Eminent Persons' Group** to suggest a future roadmap for the regional grouping.
- The energy ministers' meeting of the member countries, proposed for early 2018, will sign the MoU on **grid interconnection**, which will pave the way for electricity trade among member states.
- Member states have agreed to expedite the negotiation process to realise the concept of free trade area in this region.
- The foreign ministers of BIMSTEC countries agreed to take "concrete measures to step up cooperation and coordination among our law enforcement, intelligence and security organisations."
- The ministerial meeting also agreed on early ratification of BIMSTEC Convention on Cooperation in Combating International Terrorism, Transnational Organised Crime and Illicit Drug Trafficking to enhance the collaboration to fight terrorism, human and drug trafficking.



3. ECONOMY

3.1. WOMEN IN AGRICULTURE

What is the Problem?

- Women constitute about 65% of all agricultural workers and about 74% of the rural workforce. Yet, despite
 their hard labour in the field, women are not officially counted as farmers because they do not have a claim
 to land under their name in official records.
- Nearly three-quarters of rural women in India depend on land for a livelihood compared to about 60 percent of rural men, as lower farm incomes push many men to the cities for jobs.
- According to NSSO report, women lead almost 18% agricultural households and there is not a single area of agriculture in which they are not involved.
- As many as 87 per cent of women do not own their land primarily because of 2 reasons-
 - Land, a state subject, is not governed by a constitutional uniform law that applies equally to all citizens, which tend to discriminate against women when it comes to land inheritance.

Feminization of Agriculture reflects the shift in the gender roles in the agriculture. Where earlier the image of agriculture or an agricultural farmer was associated deeply with men, in today's India, the image has been feminized due to increasing number of female workers in the agriculture sector.

- The cultural aspect of the deep-rooted biases that hinder women's ownership of land in patriarchal societies cannot be discounted.
- Further, Indian farmers, both men and women, face an uphill battle even in terms of leasing land. Despite restricting tenancy nearly 35 per cent of India's agricultural land is cultivated by tenant farmers, who tend to be landless, poor and marginal.

Reasons behind Feminization of Agriculture

- Male Migration- Increasingly there has been a need for men to find better avenues for income for the
 sustenance of their family. Urban centres have been seen as providing lucrative job opportunities for them.
 Men from rural areas migrate to cities seeking a means for regular income leaving behind the agricultural
 chores to women.
- Low level of Skills- The women in turn face various handicaps and problems while operating agricultural chores such as low level of agricultural skills, lack knowledge to improve productivity thereby entering into a vicious cycle of poverty.
- Lack of Property Rights- Given the social and religious set up in India, women do not generally enjoy equal property rights as their male counter parts. The property related rules and rights are governed by the religious laws which are inherently unequal.
- Lack of Bargaining power to women- Due to lack of property rights, women are generally not given the land rights in their name. Because of this, women lack bargaining power in the family as against the property holding male member. Also, due to low level of skills, they work much longer hours than men and are paid lesser than their counterpart.
- Also, their **ignorance about their rights**, opportunities and facilities make their participation in agricultural all the more tough.

Discriminating Inheritance laws

- Property rights can be a complex web of national and state laws, customs, traditions, and histories that vary from country to country, even town to town.
- Even when the laws offer equal protection, sometimes traditions and customs take over, especially in rural areas.
- For instance, under the Indian Succession Act 1925, the daughter of a person dying intestate would be
 entitled only to one-fourth of the son's share, or Rs. 5,000/-, whichever is lesser, this amount is also termed
 as Streedhan and this entitlement excludes the women from any further right in seeking a proper division of
 the properties of the deceased.

Importance of providing land ownership rights

- Female farmers should be provided with the three critical driving factors — the incentive, the security, as well as the opportunity — to invest in the land they harvest. Raising voice for female farmers, platforms like MAKAAM have already been established.
- Many studies have shown that women have a greater propensity to use their income for the needs of their households. Land-owning women's offspring thus receive better education and nourishment. Therefore, it can be a win-w

MAKAAM, or Mahila Kisan Adhikaar Manch (Forum For Women Farmers' Rights) is a nationwide informal forum of more than 120 individuals and organisations of farming women, of women farmers' collectives, civil society organisations, researchers and activists, drawn from 24 states of India, to secure due recognition and rights of women farmers in India.

better education and nourishment. Therefore, it can be a win-win situation for farmer, her family and overall society.

- The wiping away of the debilitating feelings of insecurity and vulnerability for rural women can prevent physical and emotional abuse that they face. The chance of propertied women being physically abused is reduced from 49 per cent to 7 per cent due to an increase in the women's bargaining power. This suits the society's overall goal for women empowerment.
- Such a framework is in sync with the goals 2 and 5 of SDGs. The SDGs recognize the importance of property rights for women, especially in rural areas. It has set goals so that
 - o All men and women have equal rights to ownership and control over land by 2030; and
 - The agricultural productivity and incomes of small-scale food producers, especially women can be doubled.

Steps Taken

- Earmarking at least 30% of the budget allocation for women beneficiaries in all ongoing schemes/ programmes and development activities.
- Focusing on women self-help group (SHG) to connect them to micro-credit through capacity building activities and to provide information and ensuring their representation in different decision-making bodies.
- The Ministry of Agriculture and Farmers Welfare decided to celebrate 15th October of every year as Women Farmer's Day.

Way Forward

- Given the increasing feminization in agriculture, it becomes imperative to give women their due property rights which will have a widespread impact on improving various social factors.
- Giving agency to women farmers is critical in realising these outcomes as it would provide them security and would further incentivize the whole process of agriculture. It all may begin with creating a new image for the "Indian farmer".

3.2. NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT

Why in news?

 The National Agricultural Higher Education Project has been formulated by the ICAR in partnership with the World Bank with a focus to improve and sustain quality of higher education.

Need

- The present infrastructure of agricultural education in the country is not competent enough to be at par with global standards.
- Lack of convergence between ICAR and SAUs (State Agricultural Universities)
- Non-committal faculty and ill-equipped institutions.
- Paucity of funds
- Agriculture being a state subject tends to be neglected by most states.

ICAR

- The Indian Council of Agricultural Research (ICAR) is an autonomous organisation under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare, Government of India.
- It was established on 16 July 1929 as a registered society under the Societies Registration Act, 1860.
- The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country.

Negative attitude towards agricultural education due to low returns and limited career opportunities.

About The Project

- The project has been launched for a period of four years with 50:50 cost sharing basis with the World Bank.
- All statutory agricultural universities, deemed to be Universities and Agricultural faculty of Central Universities are eligible to participate in this project.
- It will focus on raising the standards of teaching and learning through faculty and student development programmes, infrastructure, state of the art laboratories, industry linkage, alumni network, career development etc.
- It project has three major components:
 - ✓ Support to Agricultural Universities
 - ✓ Investments in ICAR for Leadership in Agricultural Higher Education
 - ✓ Project Management and Learning

Other Government Initiatives

- ARYA: The GOI launched ARYA "Attaining and Retaining Youth in Agriculture" in 2015 with the objective for entrepreneurial development of Youth in Rural Areas to take up various Agriculture, allied and service sector enterprises for sustainable income and gainful employment.
- Pandit Deendayal Upadhyay Unnat Krishi Shiksha Scheme: It was launched in 2016 under which 100 new centres were opened up for agricultural education.
- The GOI has also opened up various research institutions, colleges in order to boost agricultural education such as Indian Agricultural Institute (IARI) in Assam.

3.3. LONG TERM IRRIGATION FUND

Why in news?

 The Union Cabinet recently approved raising Extra Budgetary Resources (EBR) of upto Rs 9,020 crore for Long Term Irrigation Fund (LTIF) for year 2017-18 through issuance of bonds by National Bank for Agriculture and Rural Development (NABARD).

What is LTIF?

- LTIF was created in 2016 with an initial corpus of Rs. 20,000 crore for funding and fast tracking the implementation of incomplete major and medium irrigation projects.
- It aims to bridge the resource gap and facilitate completion of these projects during 2016-2020. 23 projects (priority-I) have been identified to be completed by 2016-17, 31 projects (priority –II) have been identified to be completed by 2017-18 and balance 45 projects (priority – III) have been identified to be completed by 2019-20.

Pradhan Mantri Krishi Sinchayee Yojana

- Launched in 2015, it was formulated with the vision of extending the coverage of irrigation and improving water use efficiency in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities.
- It has been has been formulated by amalgamating viz. Accelerated Irrigation
 Benefit Programme (AIBP) of the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and the On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).
- LTIF has been instituted in NABARD under PMKSY (Pradhan Mantri Krishi Sinchayee Yojana).
- To make loans from NABARD attractive for the states it was decided that the rate of interest may be kept six per cent by providing the requisite funds to NABARD every year from 2016-17 to 2019-20, on which the interest cost would be borne by the government of India

Funds Raised Under LTIF would be used for

- Implementation of **AIBP** works of 99 ongoing prioritised irrigation projects along with their command area development (CAD) works.
- Lending resources to National Water Development Agency (NWDA), registered under Societies Registration Act 1860 and functioning under Ministry of Water Resources (MoWR), Government of India.
- Lending to State Governments to meet the state share in the projects or to deploy their own resources.

3.4. ESSENTIAL COMMODITIES ACT

Why in news?

NITI Aayog has recommended for completely removing agriculture commodities from the Essential Commodities Act.

The **Essential Commodities Act, 1955** was enacted to ensure the easy availability of essential commodities to consumers and to protect them from exploitation by unscrupulous traders.

- The Act provides for the regulation and control of production, distribution and pricing of commodities which are declared as essential. The Act aims at maintaining/increasing supplies/securing equitable distribution and availability of these commodities at fair prices.
- The State Governments are fully empowered under the Act to regulate production, distribution, supply and prices of the food items which are declared as essential commodities in the respective States. Thus the States are the implementing agencies to implement the EC Act, 1955 to ensure adequate availability of essential commodities at reasonable prices, by exercising powers delegated to them. This is reviewed periodically at the National level.
- The list of essential commodities is reviewed from time to time with reference to their production and supply and in the light of economic liberalization in consultation with the concerned Ministries/Departments administering these commodities. Currently, the restrictions like licensing requirement, stock limits and movement restrictions have been removed from almost all agricultural commodities. Wheat, pulses and edible oils, edible oilseeds and rice are the exceptions, where States have been permitted to impose some temporary restrictions in order to contain price increase of these commodities.

Problems in the act

- Stockholding limits do not distinguish between food processing industries and food retail chains, which need to hold large stocks for their operations. But under the Essential Commodities Act, these can become liable at least for harassment.
- Identifying the actual hoarders is not at all easy. The conviction rate under the Act is also abysmally low. So the hoarders go scot free and genuine players in the food economy are harassed.
- The Act is not in tune with present times. Due to robust transport infrastructure shortages in one part of the country can be countered if there is ample supply somewhere else.

Potential Impact after removal

- Removing stock restrictions from agriculture commodities will lead to organised trading, improve scale and logistics benefit and bring about more capital into trade with handful of big traders competing with each other. This will reduce handling costs, bring economies of scale, reduce prices and increase returns for farmers.
- Increased investment in infrastructure: Frequent changes in rules and stock limits under the act demotivate traders from investing in better storage infrastructure. Also, stock limits curtail the functioning of food processing industries which need to maintain large stocks of underlying commodity to run their operations smoothly. Removal of these restrictions will attract more investment.

Way forward

- The centre and states can invoke the Prevention of Black-marketing and Maintenance of Supplies of Essential Commodities (PBMSEC) Act, 1980 to check hoarders. However, the list of items that the PBMSEC can be invoked for comes from the Essential Commodities Act. Thus there is need to address this anomally.
- The Essential Commodities Act is out of tune with current realities and needs to be either scrapped or
 drastically overhauled to deal with crisis situations like supplies getting disrupted due to war, natural
 calamities and breakdown of law and order.

3.5. E-RAKAM PORTAL FOR SELLING AGRI-PRODUCE

- The government recently launched an e-auction portal e-RaKam for selling agricultural produce.
- This portal is joint initiative of state-run-auctioneer MSTC and CRWC (Central Railside Warehousing Company).
- This portal has been launched in order to help farmers get reasonable price for the produce and not fall prey to middlemen as well as save them the effort to carting the produce to the mandi.

MSTC Limited is a Mini Ratna Category-I PSU under the administrative control of the Ministry of Steel, Government of India.

Central Warehousing Corporation

It is public sector warehousing company established in 1957 to provide logistics support to the agricultural sector.

• The farmers will be paid directly into their bank accounts.

3.6. AGRI UDAAN

Recently, ICAR-NAARM and IIM-A's incubator centres announced "AGRI UDAAN"- Food and Agribusiness Accelerator 2.0.

- It is a food and Agriculture Accelerator which focuses on catalyzing scale-up Food & Agribusiness start-ups through rigorous mentoring, industry networking and Investor pitching.
- The main idea is to attract rural youth and train them to add value to agriculture and farmer's produce.
- The aim of AGRI-UDAAN is to bring start-up revolution in agriculture which has been mostly concentrated in Services sector.

3.7. DISINVESTMENT

Why in News?

- Recently, a high-powered Committee has been set up to expedite strategic disinvestment of state-owned companies.
- Earlier government had approved disinvestment in NHPC, Coal India, and ONGC.

More on News

- Cabinet Committee on Economic Affairs proposed an Alternative Mechanism (AM) consisting of the Finance Minister, Minister for Road Transport & Highways and Minister of Administrative Department to decide on the sale from the stage of inviting of Express of Interests (EoIs) till inviting of financial bid.
- The new mechanism will empower the core group of secretaries on disinvestment (CGD) to take policy decisions on procedural issues.

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.
- CPSE Exchange Traded Fund (ETF)
 Disinvestment through ETF route 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

What is Disinvestment?

- Disinvestment or divestiture 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
- It is done when a PSU start incurring the loss of exchequer.
- Disinvestment proceeds can help the government fund its fiscal deficit.
- The budget 2017-18 has set a goal of ₹ 72,500 crore from disinvestment in various PSUs.

Disinvestment in India

The new economic policy 1991 indicated that PSUs had shown a very 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;

- To reduce the financial burden on the Government by improve public finances
- To introduce, competition and market discipline by encourage wider share of ownership

Rangrajan Committee 1993, recommended the reduced in government equity up to 49 per cent in case of six the industries i.e. coal and lignite, mineral oils, arms ammunitions and defense equipment, atomic energy, radioactive minerals and railway transport.

Disinvestment Commission (1996) under **GV Ramakrishna** identified 58 CPSUs for purpose of disinvestment and suggested that the long term disinvest policy should stress that on minimizing budgetary support to unprofitable PSUs.

National Investment Fund (NIF)

- It was created in 2005. All the proceeds from the disinvestment of Centre Public Sector Enterprises were to be channelized in this fund.
- 75% of the fund will be used in social sector schemes while 25% is to be utilized in the revival of PSUs.
- This rule was relaxed during global economic slowdown and the govt. approved 100% NIF income utilization for social sector from 2009 to 2013.

CPSEs which form part of the ETF basket.

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.
- o 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.

Disinvestment: Arguments in Favour and Against

Against

- 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.

Favour

- 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 prayers works out-of Red Tapism bureaucratic mentality and focus on performance-driven culture and effectiveness (Disinvestment Commission 1996).
- 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.

3.8. FINANCIAL DATA MANAGEMENT CENTRE

Why in news?

 The Law Ministry has approved a revised Cabinet proposal on the creation of the Financial Data Management Centre (FDMC) that would subsequently collect raw data directly from various financial regulators.

Need

 Such a data repository would serve to assist the Financial Stability and Development Council (FSDC) in conducting research on systemic risk and system-wide trends, and facilitate a discussion about policy alternatives between the members of the FSDC

What is it?

- Creation of FDMC under the aegis of FSDC was first mooted by a committee headed by Ajay Tyagi. The same was echoed by the Finance Minister in Budget 2017-18.
- FDMC and the regulators are to "enter into agreement" for flow of data, "stringent confidentiality norms" to ensure the same level of protection as provided by various acts applicable to the regulators and guarantees that the "data centre is at all times kept secure and effectively protected".

Financial Stability and Development Council

- FSDC was constituted in December 2010.
- The Council is chaired by the Union Finance Minister and its members are Governor, RBI; Finance Secretary and/or Secretary, Department of Economic Affairs; Secretary, Department of Financial Services; Chief Economic Adviser, Ministry of Finance; Chairman, SEBI; Chairman, IRDA and Chairman, PFRDA.
- FSDC deals with issues relating to financial stability, financial sector development, inter-regulatory coordination, financial literacy, financial inclusion and macro prudential supervision of the economy including the functioning of large financial conglomerates.

• Establishment of FDMC would require amendments in the RBI Act, Banking Regulation Act and the Payment and Settlement Systems Act as their confidentiality clauses do not allow access to raw data.

Why Statutory Body?

- Initially FDMC was to be a non-statutory body. However, the department of Legal Affairs turned down the proposal citing that it would be difficult for FDMC to collect data from other statutory bodies.
- Also, RBI had objected to sharing information with a non-statutory body as it would mean breach of confidentiality.

3.9. PUBLIC CREDIT REGISTRY

Why in news?

RBI has said that it will form a task force to provide a roadmap for development of a Public Credit Registry.

Background

- Indian economy at present is grappling with a banking sector crisis situation known as the Twin Balance Sheet Syndrome in which
 - o Corporate sectors have a **high debt burden** which they are unable to pay
 - o Banks have mounting Non Performing Assets.
- The Banking sector NPAs have surged which is slowing the Bank's credit decision and impacting the economy as a whole.
- At present there are four private credit databases which are regulated by RBI under Credit Information Companies (Regulation) Act, 2005 (CICRA 2005) namely
 - o Credit Information Bureau (India) Limited (CIBIL),
 - Equifax
 - o Experian
 - o CRIF Highmark
- According to World Bank survey as of 2012 87 out of 195 countries had Public Credit Registry.
- However, RBI has proposed the creation of an integrated facility as PCR which will help to remove inconsistencies such as information asymmetry and data fragmentation.
- Therefore, RBI has created a taskforce which will provide a roadmap to set up Public Credit Registry.

Public Credit Registry

- Public Credit Registry is a **database of credit information** which is accessible by all the stakeholders. It generally captures all the relevant information in one large database on the borrower.
- It will be managed by a public authority as RBI and the lenders will have to mandatorily report the loan details.
- PCR will assist RBI in
 - Credit assessment and pricing by the bank
 - o Risk-based, countercyclical and dynamic provisioning of bank
 - Supervision and early intervention by regulator
 - Understanding the transmission of monetary policy working and its bottlenecks.
 - Restructuring the stressed bank credit
- It will improve the credit culture in the country by making it more transparent, improve the ease of doing business, increase financial inclusion and reduce delinquencies.

3.10. MEDIUM-TERM EXPENDITURE FRAMEWORK STATEMENT (MTEF)

Why in news?

Recently the MTEF statement was laid in the Parliament which sets forth three year targets for expenditure with underlying assumptions and risk involved.

Background

- According to the FRBM Act, 2013 Section 3 following documents are presented in the Parliament:
 - o the Medium-term Fiscal Policy Statement
 - o the Fiscal Policy Strategy Statement
 - o the Macroeconomic Framework Statement
- These documents are presented along with the **Annual Budget**. However, later Section 3 was amended to present a MTEF statement in the Parliament immediately following the Budget session.
- The objective of MTEF is to
 - Provide closer integration between Annual Budget and FRBM statements.

- Provide medium term perspective to fiscal management and enhance Government's **commitment to fiscal consolidation.**
- To give focus to the expenditure pattern of Government on various schemes, a scheme wise projection has also been attached to the MTEF statement.

3.11. BHARAT-22

Why in news?

Government of India is set to launch its second ETF (Exchange Traded Fund) Bharat 22 which will comprise
 22 stocks including those of central public sector enterprises (CPSEs), public sector banks and GOI's holdings under the Specified Undertaking of Unit Trust of India (SUUTI).

About Bharat 22

- The ETF will have a diversified portfolio of companies from six sectors with a 20% cap on each sector and a 15% cap on each stock.
- The new ETF will help government sell equity stakes in state-run firms and also help in achieving its objective to raise Rs. 72,500 crore through disinvestment in the current financial year.

What is an ETF?

- Exchange Traded Funds are index funds that offer the security of a fund and liquidity of stock.
- Much like index funds they mirror the index, commodity, bonds or basket of assets.
- Their price changes daily as they are traded throughout the day.

3.12. PANEL SETUP TO REVIEW NORMS ON UNFAIR TRADE PRACTICES

Securities and Exchange Board of India has formed a committee to review norms on Prevention of Insider Trading (PIT) 2015, and Prevention of Fraud and Unfair Trade Practices (PFUTP) 2003.

- The PIT and PFUTP regulations have also been criticised in past for being poorly drafted and lack integration with price-sensitive information. PIT code were reviewed in 2015, however PRUTP have not been reviewed since 12 years now.
- The recent amendments to Companies Act, Insolvency and Bankruptcy Code and Benami Transactions (Prohibition) Amendment Act, 2016 need to be aligned with the provisions of Financial Market.
- Therefore, SEBI has constituted a Committee on 'fair market conduct' under chairmanship of former law secretary T K Viswanathan.

3.13. NEW METRO RAIL POLICY 2016

Why in News?

• Recently, the Union Cabinet approved the New Metro Rail Policy which focuses on compact urban development, cost reduction and multi-modal integration.

Highlights of New Metro Rail Policy

- The policy make PPP (Public Private Partnership) component mandatory for availing central assistance for new metro projects.
- The three broad PPP models detailed in the policy include;
 - 1. Constructing new Metro Rail systems through the Design-Build-Finance-Operate-Transfer mode,
 - **2.** Allowing private players to operate the service as well as supply rolling stock.
 - 3. Involving them in the maintenance and upgrade of infrastructure.
- The new policy mandate **Transit Oriented Development (TOD)** to promote compact and dense urban development along metro corridors.
- New metro projects will be approved in line with global best practices, on the basis of 'Economic Internal Rate of Return of 14%', a change from the existing 'Financial Internal Rate of Return of 8%.

- Under the policy, states will get powers to make rules and regulations and set up permanent fare fixation authorities.
- States would also be required to enable low-cost debt capital through issuance of corporate bonds.
- It provides for rigorous assessment of new metro proposals by an independent third party.
- It requires the authority to take measures for commercial property development generate maximum non-fare revenue through advertisements, lease of space.
- The policy also makes it mandatory for state governments to set up a statutory body called as Unified Metropolitan Transport Authority.
- The new policy entails the States to charge a "betterment levy" in areas that will benefit from the metro rail projects.
- The policy envisages private sector participation in operations and managements (O&M) of metro services in different ways. These include;
 - Cost plus fee contract: Private operator is paid a monthly/annual payment for O&M of system. This can have a fixed and variable component depending on the quality of service. Operational and revenue risk is borne by the owner.
 - Gross Cost Contract: Private operator is paid a fixed sum for the duration of the contract. Operator to bear the O&M risk while the owner bears the revenue risk.
 - o **Net Cost Contract**: Operator collects the complete revenue generated for the services provided. If revenue generation is below the O&M cost, the owner may agree to compensate.

National Urban Transportation Policy 2006

Policy envisages safe, affordable, quick, comfortable, reliable and sustainable urban transport systems, establishment of quality focused multi-modal public transport systems.

It recognizes that people occupy centre-stage in our cities and all plans would be for their common benefit and well-being.

Poor mobility can become a major dampener to economic growth and cause the quality of life to deteriorate.

Policy is at the core of Jawaharlal National Urban Renewable mission.

Objectives of the Policy

Urban transportation as an important parameter at the urban planning stage rather than being a consequential requirement.

Enabling the establishment of quality focused multi-modal public transport systems that are well integrated, providing seamless travel across modes.

Transit Oriented Development is the creation of compact, walkable, pedestrian-oriented, mixed-use communities cantered around high quality train systems. This makes it possible to live a lower-stress life without complete dependence on a car for mobility and survival.

Economic Internal Rate of Return (EIRR)

IRR is defined as the rate at which net present value of an investment project is equal to zero.

If IRR > required rate of return the project should be accepted.

EIRR differs from the financial rate of return in that it takes into account the effects of factors such as price controls, subsidies, and tax breaks to compute the actual cost the project to the economy.

Benefits of Policy

- It will help in meeting the metro rail aspirations of various cities and help in realising the objective of National Urban Transportation Policy 2006.
- The policy will boost the Make in India Initiative and infrastructure led growth paradigm for India.
- It envisions **Transit Oriented Development** to promote compact and dense urban development along metro corridors infrastructure, which would ease the mobility related problems of urban cities.
- The policy will help in expansion of Public-Private Partnership led growth which would boost the investor confidence in transport infrastructure.

Limitations of the Policy

- Various transport economists are on the opinion that construction of Metro rail would not be a profitable investment because private players will look at least 12-15% return while no Metro project has ever yielded an investment return of over 2-3%.
- Earlier, PPP model for metro rail had not yield the intended returns, for instance, Mumbai, Hyderabad and airport line of Delhi metro had faced the disputes in operations.

- The policy is intended to reduce the role of Centre in financing the state for the projects however, states are already having limited source of revenue generations. The provision of betterment levy will not yield the intended returns.
- In absence of central government guarantee, securing the bilateral loans would be difficult for the private players.
- Moreover, proposal of floating the government bonds would not attract substantial buyer for such huge investment.

3.14. AAJEEVIKA GRAMEEN EXPRESS YOJANA (AGEY)

Why in News?

The Government of India has decided to launch a new sub-scheme named "Aajeevika Grameen Express Yojana (AGEY)" as part of the Deendayal Antyodaya Yojana –

Deen Dayal Antyodaya Yojana (DAY) with an aim to uplift the urban poor folks by enhancing sustainable livelihood opportunities through skill development.

It was launched under the Ministry of Housing and Urban Poverty Alleviation (HUPA).

The scheme is integration of the National Urban Livelihoods Mission (NULM) and National Rural Livelihoods Mission (NRLM).

The financial support under the programme is mainly in the form of Revolving Fund and Community Investment Funds, given as grants to the Self Help Groups (SHGs) and their federations.

National Rural Livelihoods Mission (DAY-NRLM).

Important Provisions

- The SHGs under DAY-NRLM will operate road transport service in backward areas which will help to provide safe, affordable and community monitored rural transport services to connect remote villages with key services and amenities (such as access to markets, education and health) for the overall economic development of backward rural areas.
- This will provide an additional avenue of livelihood for SHGs.
- The **Community Investment Fund (CIF)** provided to Community Based Organization (CBOs) under DAY-NRLM will be utilized to support the SHG members in this new livelihoods initiative.
- The beneficiary SHG member will be provided an interest free loan by the CBO from its Community Investment Fund upto Rs.6.50 lakh for purchase of the vehicle.
- Or the CBO can own the vehicle and lease it to an SHG member to operate the vehicle and pay lease rental to the CBO.
- AGEY will be initially implemented in 250 Blocks in the country on pilot basis with each Block provided upto 6 vehicles to operate the transport services.
- Backwardness, lack of transportation links and sustainability of service would be the guiding factors in the selection of Blocks and routes. Besides this the Blocks will be selected by States where NRLM is being implemented intensively and where mature CBOs are already functioning.
- The feasibility survey for the identification of routes and number of services required will be done by the State Rural Livelihood Missions (SRLMs).
- The SHG member shall run the vehicle on approved routes at pre-determined frequency as agreed by the CBO and the SHG operator based on financial viability and the need for transport link.
- The vehicles under this scheme will have a certain colour coding and will carry AGEY branding to ensure their identity and avoid diversion to other routes.

Way Forward

It is expected to provide safe, affordable and community monitored rural transport services like e-rickshaws, 3 and 4 wheeler motorised transport vehicles to connect remote villages with key services and amenities including access to markets, education and health for the overall economic development of the area, through this scheme.

3.15. E-SHAKTI INITIATIVE OF NABARD

Why in news?

Recently NABARD has launched e-Shakti initiative for digitisation of Self Help Groups (SHGs).

Background

- Self Help Groups are small voluntary association of people preferably from same background for women upliftment and welfare through providing micro-finance.
- However, due to high level of illiteracy among members of SHGs the maintenance of accounts and book keeping becomes difficult. Therefore, the need for digitisation of records of SHGs was felt.

Advantages of e-Shakti Initiative

- Helps the SHG members to access credit based on their real time performance
- Reduces saving-credit linkage gap
- Promotes transparency through real time SMS alerts
- Aided convergence with government schemes.

e-Shakti Initiative

- It is an initiative launched by the Micro Credit and Innovation Department of NABARD in line with the Digital India drive.
- Project aims to
 - o Integrate SHG members with national financial inclusion agenda
 - o Improve quality of interface between SHGs and Banks
 - Facilitate delivery service convergence through Aadhaar linked identity
- The project involves
 - o E-book keeping and regular updates of transactional data
 - Auto generation of loan application for bankers on input by SHGs.

Way Ahead

- SHG members should be provided training so that the transition to e-Shakti initiative is seamless.
- The internet connectivity in the rural areas may pose a challenge to effective implementation of the initiative. Therefore, Digital India mission should be implemented at a faster pace.

3.16. INDIA MARITIME TRADE

Why in News?

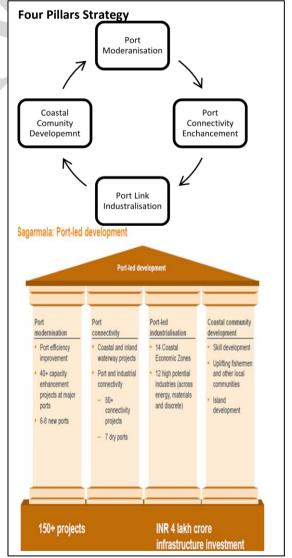
Chamber of Commerce and Industry stated that Imports from Africa are likely to increase to \$47 billion by 2021-22 from \$27 billion in 2015-16.

Background

- Economic Survey 2016-17 stated that, nearly 95% of trade by volume and 68% by Value of the country's international trade is carried on through maritime transport.
- However, global maritime freight rate shows downward trend which is further pushing the fleet utilisation toward deflationary pressure.

Marine Trade and Port Infrastructure

- Public Private Partnership Policy 2011, established 10 PPP engagement model in State of Gujrat, Maharashtra, Andhra Pradesh, and Tamilnadu.
- Maritime Agenda 2010-20 highlighted the importance of cruise Shipping is another major initiative being mooted with Indian Shipping sector to earn valuable foreign exchange for luxury tourism which is still in infancy with a start having been made at Kochi port.
- Certain limitations such as first mile to last mile connectivity, huge duty on bunker fuel and absence of assures return cargo limiting the economy of marine trade industry.
- Jal Marg Vikas project is intended to connect hubs and feeder port to waterways, which would reduce the feeder



time, retaining transhipment faster and cheaper movement of marine side traffic.

Sagar Mala Project

- It is a series of projects to leverage the country's coastline and inland waterways to drive industrial development. Sagarmala, integrated with the development of inland waterways, is expected to reduce cost and time for transporting goods.
- The four pillars strategy (See Box) would focused on building 14 Coastal Economic Zone expected to increase India's merchandise exports by 110 billion by enhancing industrial competitiveness.
- State governments would set up State Sagarmala committees, headed by the chief minister or the minister in charge of ports. At the central level, a Sagarmala Development Company (SDC) will be set up to provide equity support to assist various special purpose vehicles (SPVs) set up for various projects.
- The project intended to go beyond Maritime Agenda 2020 by linking various sub-projects under Sagarmala are in sync with the Central Government's Industrial Corridors, Dedicated Freight Corridors (DFC), National Highway Development

Okha Bhaynagar
Porbandar
Veraval
Alang
Magdalla
Alang
Mormugao
Panaji
Krishnagatnam
Mangalore
Chennal Post
Beypore
Közhikode
Kochi
Tuticorin

Kochi

Ports in India

India has a long coastline of about 7,517 km along the western and eastern shelves of the mainland. With 12 major ports and 187 minor ports.

Major Ports govern under Major Port Trust Act, 1963.

The Major Ports are under the Union List (Schedule VII) while the Non-Major Ports are under the Concurrent List (Schedule VII) of the Constitution of India.

National Maritime Agenda 2010-20

A holistic action plan ranging from Port building, Ship construction and developing inland waterways.

It also invasion enactment of new port act, Shipping Trade Practices act, Admiralty Act, Amendment of Merchant Shipping Act and Control of Piracy.

National Maritime Development Programme

The scheme is aimed at construction of 276 berths, deepening of channels, rail/road connectivity projects, equipment upgradation/ schemes and other related schemes for creation of backup facilities.

Programme (NHDP) and Special Economic Zones (SEZs).

• The project is focused on 360° port led development (See Box).

Way forward

- Rakesh Mohan Committee stated that performance of Indian ports has generally deteriorated over the
 years except for a brief period from the late 1990s to the mid 2000 therefore, comprehensive reform in port
 infrastructure in needed.
- Moreover, development of coastal shipping as an end-to-end supply chain, integration of Inland Water
 Transportation, coastal route development of regional centre to generate cargo for coastal traffic,
 development of lighthouse tourism can boost the growth of marine trade economy.

3.17. DRAFT PHARMACEUTICAL POLICY 2017

Why in news?

• The draft policy has been released by the Department of Pharmaceuticals.

Key provisions

- Emphasis on domestic Active Pharmaceutical Ingredient
 (API) manufacturing: by giving incentives for sourcing of
 locally made API/ingredients such as higher tariffs on
 imported APIs especially which can be indigenously
 manufactured, exemptions from price control, preference
 in government procurement, setting up mega bulk drug
 parks, providing adequate logistics and timely clearances
 to set up plants etc.
- Quality control in manufacturing units through adoption of World Health Organisation (WHO) quality standards, annual audit by 3rd party inspectors and mandatory selfcertification for Bio-Availability and Bio Equivalence Tests (BA/BE tests) for all drug manufacturing permissions.
- **Pricing control** through rationalized trade margins, besides allowing new distribution channels like e-pharmacies which will cut channel costs etc.

Key facts related to Indian Pharma Sector

- It is the world's third-largest pharmaceutical market globally in terms of volume
- The export growth in 2016-17 witnessed a marginal fall of 0.6%
- India is the largest supplier of generic medicines to the world accounting for 20% of global exports in terms of volume
- 100% FDI is allowed under the automatic route for greenfield pharma
- 100% FDI is allowed for brownfield pharma but beyond 74% government approval is required.

Loan licensing Pharmaceutical manufacturing means manufacturing your own products at other's premises using loan license contract.

- **Encourage generic medicines** All public procurement to be done on the basis of the generic/salt name. Brand names will be allowed only in case of patented drugs & FDCs (Fixed Dosage Combinations).
- Conditions for inbound Brownfield M&A transfer of technology, expenditure on R&D, continuing of manufacturing of NLEM (National List of Essential Medicines) drug as key considerations of M&As.
- Phase out 'loan licensing' practice as it raises many quality maintenance and assurance issues. Exception is given biopharmaceuticals where India is at a relatively nascent stage. All others allowed up to only 10% of total production of the company and from a WHO-approved manufacturing unit.
- **Timely approvals** all new drug applications will be decided within 3 months, by either the State/Central regulators. For delays (extendable by 3 months) reasons must be detailed in writing to the applicant.
- Ending unethical marketing practices by making the voluntary code for marketing a mandatory requirement, prescribing rules for branding drugs, assigning agency for its implementation, penalising for violations such as ban or confiscation of all packets of the highest selling brand of drugs by that company etc.
- Amending powers of National Pharmaceutical Pricing Authority (NPPA) by following measures
 - Allowing it to regulate only Essential Medicines. Thus, It would lose the powers to fix prices of patented medicines and to invoke extraordinary circumstances to regulate other medicines and medical devices
 - It is to be strengthened by an Advisory Board, which will have experts from relevant disciplines to help NPPA to carry out its price-related functions. NPPA is required to assign reasons in writing for modifying or rejecting its recommendations.
 - Appeal against NPPA decision will lie with the government while appeal against government's decision will lie with judiciary
 - Greater oversight on NPPA by review of all its decisions. At present, orders passed under paragraph 19 gives NPPA "extraordinary powers" and these cannot be reviewed.
 - Schedule 1 of the DPCO (Drug Price Control Order) to contain only the medicine name without reference to its dosage form or strength thus brining all strengths under price cap and going towards one-drugone-brandname-one-price
- **Compulsory provision of static bar code** containing price information on drugs will be enforced to enable computerised billing.
- Proposal for e-prescriptions to enable doctors to prescribe generic names without any hassle.

Issues

- Discontinuing loan licensing or third-party manufacturing would be negative for the industry as almost 40-50% of local drugs are sourced through it. It would also create excess un-utilised capacity.
- It doesn't explicitly say that doctors will have to compulsorily prescribe medicines by their generic names. Also there are concerns over the efficacy, safety and effectiveness of some generic drugs because they do not undergo BA/BE studies.

- It may hurt patients by compromising availability of good quality medicines due to reduced competition and increased challenges in the manufacturing of such medicines at prevailing prices
- It favors large pharma companies over smaller firms due to requirement of adherence to relatively high standards of manufacturing and marketing practices
- Capping trade margins would leave same margins for all types of drugs quality. Thus favoring law quality
- It is alleged that the department of pharmaceuticals (DoP) did not follow a "transparent" procedure in drafting the policy as it had not interacted with public health groups and limited its discussions with stakeholders to the pharma industry.
- While India has about 2,500 pharmacopeial salts, it has "60,000 brand names with varying prices". Thus, rather than enforcing "one-drug-one-brandname-one-price" it would be better to ensure all medicine conform to certain standards.

Positive impact

- Patient friendly as it aims to provide quality medicines to patients at affordable prices. It will reduce out-of-pocket expenses which is 65% of medical costs .
- It would eventually reduce the footprint of the unorganized sector or the smaller companies and would lead to consolidation.
- Ending unethical marketing practices would also lead to reduction in the overhead cost of the drugs.
- Opportunities in the e-pharmacy sector hold potential for attracting Foreign Direct Investment

3.18. FOREIGN DIRECT INVESTMENT IN INDIA

Why in news?

The government has brought out the latest edition of its consolidated FDI policy document. It is an initiative aimed at ensuring greater ease of doing business in India and an investor-friendly climate to foreign investors.

What are the major highlights of the document?

Start-ups: It is for the first time there is a separate chapter for start-ups in the FDI policy.

- Start-ups can raise up to 100 per cent of funds from Foreign Venture Capital Investor (FVCI). They can issue equity or equity linked instruments or debt instruments to FVCI against receipt of foreign remittance.
- A person residing outside India (other than citizens/entities of Pakistan and Bangladesh) will be permitted to purchase convertible notes issued by an Indian start-up company for an amount of Rs 25 lakh or more in a single tranche.
- Non Resident Indians can also acquire convertible notes on non- repatriation basis (This means that NRI cannot convert invested money back to foreign currency).
- A start-up company engaged in a sector where foreign investment requires Government approval may issue convertible notes to a non-resident only with approval of the Government.

E-commerce

• The recently released document clarified that the restriction of 25 per cent on sales of one vendor through an e-commerce marketplace will be computed on a financial year basis.

The Department of Industrial Policy and Promotion (DIPP) is the nodal agency for FDI.

- It is responsible for the overall Industrial Policy.
- It monitors the industrial growth and production, in general, and selected industrial sectors.
- The Department is also responsible for facilitating and increasing the FDI inflow in the country.
- The Department is also responsible for Intellectual Property Rights relating to Patents, Designs, Trade Marks and Geographical Indication of Goods and oversees the initiative relating to their promotion and protection.

What are Convertible notes?

A convertible note is a form of short-term debt that converts into equity, typically in conjunction with a future financing round; in effect, the investor would be loaning money to a startup and instead of a return in the form of principal plus interest, the investor would receive equity in the company.

What are venture capital funds?

Venture capital funds are investment funds that manage the money of investors who seek private equity stakes in startup and small- to medium-sized enterprises with strong growth potential. These investments are generally characterized as high-risk/high-return opportunities.

 The government had earlier mandated that an e-commerce entity will not permit more than 25 per cent of the sales value on financial year basis affected through its marketplace from one vendor or their group companies

Administrative changes

- The proposals relating to banking, mining, defence, broadcasting, civil aviation, telecoms, pharmaceuticals etc. will have to be approved by administrative ministries as FIPB had been scrapped earlier.
- DIPP will be the authority to clear proposals relating to areas including retail (single and multi-brand, and food).
- For proposals relating to financial services activities that are partly regulated or not regulated by any financial sector regulator, the department of economic affairs will clear the proposals.

Definitions simplified

• The policy simplifies the definition of 'venture capital fund'. The venture capital fund is now defined as a fund registered under the SEBI (Venture Capital Funds) Regulations, 1996.

3.19. EASE OF DOING BUSINESS

Why in news?

Niti Aayog recently released Ease of doing business report after surveying 3500 manufacturing forms across India. The aim of the survey is to assess existing business regulations and the environment from the firm's perspective.

What are the major findings of the report?

Economic Performance and Reforms: Better the economic indicators of a state, lesser are the issues faced by firms such as less obstacles in land/construction related approvals, 25% less power shortage in comparison to low growth states etc.

Improvements over time: Newer and younger firms report a more favorable business environment.

Informational gaps: States need to enhance awareness of the steps being undertaken by them to the improve ease of doing business. The survey data shows that only about 20% of new start-ups report using single window clearance facilities.

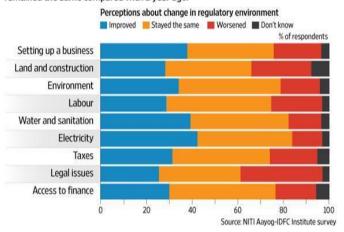
Labor regulations are a bigger constraint for labor intensive firms: Labor intensive sectors, that create proportionately more jobs per unit of capital investment, feel more constrained by labor related regulations.

- 19% more likely to report that finding skilled workers is a major or very severe obstacle.
- 33% more likely to report that hiring contract labor is a major or very severe obstacle.

Barriers to firm growth: The experience of firms with fewer employees is different from that of larger firms. In some cases, large firms face more regulatory barriers than smaller firms.

SLOW GOING

For a majority of respondents, parameters such as setting up a business, land and construction, environment, labour, water and sanitation, taxes, and access to finance remained the same compared with a year ago.



How NITI Aayog report differs from the World Bank's Doing Business Survey?

- The World Bank interviews industry leaders while this survey interviews firms along with some experts in large states.
- The World Bank Survey focuses on Delhi and Mumbai while this survey covers almost all states and Union Territories in India.
- While the World Bank survey has a standardized survey across 190 countries, this survey is a nonstandardized survey only for India.
- The present survey is meant to be qualitative. It does not rank states in the ease of doing business.
 Its objective is to provide information for states on their business environment.
- While the World Bank Survey covers 10 parameters handled by the states and the central government, this survey primarily deals with issues handled by the State Governments.

What are the solutions to the problems faced by manufacturing sector?

- Improving physical infrastructure is essential. This ranges from transport systems to the power sector.
- The report mentions the need to improve access to finance for smaller enterprises and making firm entry and exit easier.
- Enhance the flexibility of labor regulations.
- The government can bring in a law to legitimize lobbying and regulate it in a transparent fashion could reduce corruption and give smaller enterprises that band together for advocacy and lobbying a means to have policy inputs.
- The report makes a case for encouraging the entry of new entreprises and expediting the timely and least costly exit for sick entreprises.
- The report speculates that larger enterprises create an ecosystem where small firms must perforce improve productivity—whether to compete or take advantage of the downstream opportunities created by larger firms.

3.20. DIRECTORATE GENERAL OF GOODS AND SERVICE TAX INTELLIGENCE

Why in news?

 The Finance Ministry amended the Prevention of Money-Laundering (Maintenance of Records) Rules, 2005 (PMLA) to make the Directorate General of Goods and Service Tax Intelligence (DGGSTI) as the regulator with respect to money laundering cases in the gems and jewelry sector.

Background

 It seems to be fallout of income-tax raids on jewellers soon after demonetisation. It was found that they sold gold and jewellery at a huge premium and accepted old currency notes as payment.

About DGGSTI

- It is the new name given to the Directorate General of Central Excise Intelligence (DGCEI)
- It is the apex intelligence organisation functioning under CBEC, Dept of Revenue
- It mandated to check service tax and central excise duty evasion.
- It develops intelligence in new areas of tax evasion through its intelligence network across the country
- It also alerts field formations about the latest trends in the duty or tax evasion.
- Now, entity which deals in precious metals, stones, or other high-value goods and has an annual turnover of previous year is Rs.2 crore or more, will come within the ambit of PMLA

Its impact

- It will disrupt the parallel economy existing in this sector which was leading to generation of black money
- The DGGSTI would now keep a track of transactions in the gems and jewelry sector to see if they are conformity with law. It will also give DGGSTI power in the line with that of a Sales Tax officer to go to shops and check whether money laundering has happened.
- The regulator under PMLA issues guidelines and prescribes measures to establish client identity in different transactions.
- Every entity, under PMLA, is required to maintain record of all transactions of value exceeding Rs 10 lakh, all cross border wire transfers of more than Rs 5 lakh and all purchase and sale of immovable property of Rs 50 lakh or more.

PMLA

- Prevention of Money Laundering Act, 2002 is an Act of the Parliament of India enacted to prevent money-laundering and to provide for confiscation of property derived from moneylaundering
- PMLA and the Rules notified there under came into force with effect from July 1, 2005
- The Act and Rules notified there under impose obligation on banking companies, financial institutions and intermediaries to verify identity of clients, maintain records and furnish information in prescribed form to Financial Intelligence Unit – India (FIU-IND).

3.21. COMMITTEE SET UP TO FRAME A NEW NATIONAL MINERAL POLICY

Why in news?

Supreme Court on August 2, 2017 passed a judgement in light of the PIL filed by NGO Common Cause, directing the Government to revisit the National Mineral Policy (2008) and announce a new Mineral Policy.

In response to the Supreme Court Judgement, a committee to review the National Mineral Policy has been set up under Chairmanship of Dr. K. Rajeswara Rao.

Background

- The Supreme Court in the light of the PIL, noted that the existing policy is not serving the needs of the expanding Mining Industry in India.
- It has been found that certain mining projects are being carried on without proper environmental clearance or Forest Clearance; some have even expanded beyond the permitted area leading to encroachment.
- It was also found that around 131 iron ore and manganese mines were **operating without statutory approval** beyond their lease period.
- According to **Forest Survey of Indian Report**, it was found that 40% of the existing forest cover is under the threat from mining activities.

Minerals Policy 2008

- It seeks to make the **regulatory mechanisms technologically advanced** and in consonance with the investment flow making the whole process more **transparent** with respect to allocation of mineral concessions, seamlessness and security of tenure in the concession processes.
- Strengthening the role of Geological Survey of India, Indian Bureau of Mines and State Directorates of Mining and Geology.
- Developing and enforcing a **Sustainable Development Framework** so that the rights of indigenous population are not hampered and also ensuring a sustainable ecological balance.
- Discouraging unsustainable mining and promoting zero-wastage mining.
- Developing cluster based approach of mining small deposits.

3.22. PARLIAMENTARY COMMITTEE ON RERA

Why in news?

The Parliamentary Committee on Real Estate (Regulation and Development) Act, 2016 has submitted its report.

Background

- Before the enactment of RERA, the buyers of Real Estate were covered under the Consumer Protection Act 1986 or they could approach Civil Court in case of grievances.
- In this backdrop, the Real Estate (Regulation and Development) Act, 2016 was enacted which came into force from May 1, 2017 to protect home buyers from unscrupulous buyers.

Important provisions of Real Estate (Regulation and Development) Act, 2016 (RERA)

- RERA was passed to bring clarity and fair practices to protect the interest of buyers and impose penalty on errant builders.
- It regulates the transactions between buyers and real estate promoters through establishment of **Real Estate Regulatory Authorities**. The authority will also have power to impose fines.
- It mandates to establish a **Real Estate Appellate Tribunal**.
- The Real Estate Residential Projects need to be registered with RERAs before being offered for sale or booking and the further promotional advertisements need to carry the unique RERA registration number.
- The details of all the registered projects also need to be then uploaded on website for public access.
- The promoters also need to maintain a **separate escrow account** in which minimum of 70% of the money from investors and buyers will be deposited.

Observations of the Parliamentary Committee

- According to Section 84 of the Act the concerned government should make rules within 6 months of the Act
 coming into force. However, the committee noted that the so far only 12 states and UTs have notified the
 rules and other 16 have prepared the draft.
- Section 20(1) and Section 43(1) of the Act also mandated that within a period of one year from the commencement of the act Real Estate Regulatory Authority and Real Estate Appellate Tribunal respectively. The committee found that many states have not established RERA and REAT within this time.
- The Act advised to establish **Central Advisory Council** under **section 42**. However, the committee found that such an authority has not been established so far.
- **Dilution of Rules**: The Committee found that some states have deviated from the provisions of the act thus diluting the spirit of the Act and making rules in favour of the builders.
- Other problems are related to definition of ongoing projects, penalties for non-compliance with the Act and dealing with structural defects.
- Builders are obtaining **partial completion certificates** and handling over flats without fulfilling the obligatory provisions in violation to RERA.

Way Forward

- The Committee has recommended that the Ministry should make **time bound provisions** for the establishment of the RERAs and REAT.
- **Central Advisory Council** should also be established as mandated under Section 42, to advice and recommend the Central Government on all matters related to implementation of Law, consumer protection and growth and development of real estate sector.
- Clear definition of term "Ongoing Projects" should be provided to remove the impasse and confusion over it.
- The Government should strive to develop uniform law on Real Estate sector throughout the country.

3.23. REPORT ON REVIEW OF THE NATIONAL ELECTRICITY POLICY

Why in news?

The Standing Committee on Energy submitted its report on the Review of the National Electricity Policy. The central government had released the Policy in February 2005.

Details

Key observations and recommendations of the Committee include:

Objectives of National Electricity Policy:

- access to electricity for all households by 2010
- meeting the power demand of the country by 2012
- supplying reliable and quality power in an efficient manner and at reasonable rates, and
- Financial turnaround and commercial viability of the electricity sector.
- **a) Achievement of objectives:** The Committee noted that none of the Policy's objectives could be met within the stipulated timeline. It pointed out that:
 - four crore households still need to be electrified;
 - while generation capacity is adequate, the demand for power has not been fully met; and
 - financial condition of the power distribution companies has worsened.

b) Access to electricity:

- It recommended that the definition of village electrification should be changed to declare a village electrified only when all the households of the village are electrified.
- Further, no village should be declared as electrified unless at least 80% of the households have an electricity connection.
- The Committee noted that the current village electrification policy only caters to below poverty line (BPL) households. The policy be amended to include both BPL and APL households.
- Further, provisions with regard to (i) the quality of supply and (ii) reliability of supply for reasonable time should also be made.

- c) Electricity generation: The Committee observed that in the recent years, the generation capacity in the country has increased. However, the share of hydro power in the total energy mix has decreased from 25% in 2007-08 to 14% currently.
 - (i) It recommended that states with hydro potential must focus on its maximum development at the earliest. Further, since renewable energy sources are intermittent in nature, hydro power can be used as a balance to support the grid and even out the fluctuations in supply.
 - (ii) The Committee recommended declaring hydro power as a renewable source of energy. Currently, hydro power plants with a capacity of over 25 MW are classified as non-renewable sources.

d) Electricity distribution:

- (i) The Committee noted that that the economic viability of the whole electricity sector depends on the distribution sector, which is currently the most financially distressed in the country. The aggregate technical and commercial losses (AT&C) in the country are still high, and are the major reason behind the distressed condition of the distribution companies.
- (ii) It also noted that that the concept of AT&C losses is flawed as it disguises commercial losses which unlike technical losses can be eliminated completely. It recommended that these two components must be segregated.
- e) Financial health of discoms: The Committee noted that the total outstanding debt of the discoms was around Rs 4 lakh crore in 2014-15. It recommended that necessary calibrations may be made in Ujjwal Discom Assurance Yojana (UDAY), which seeks to achieve the financial turnaround of these discoms, as and when need arises to address any new issues that crop up during its implementation.
- f) New challenges in the sector: The Committee noted that the fall in solar tariff and its low gestation period is posing a threat to the economic viability of thermal power plants. It recommended that development of the power sector should be done in a balanced manner where various sources of energy complement each other.

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4. SECURITY

4.1. ARMY REFORMS

Why in News?

 Ministry of Defence in consultation with the Indian Army has decided to reform the Indian Army in a planned manner to enhance its combat capability and optimize expenditure on the lines of Lt General D B Shekatkar Panel recommendations.

Background

- Central government in 2016 formed a committee under Lt General D.B.
 Shekatkar (retd), which was tasked to recommend measures for enhancing combat capability and rebalancing defence expenditure.
- It made a total of 188 recommendations, out of which 99 were initially approved by the Defence Minister.

Accepted Recommendation and Significance

- Improve operational efficiency of the Army: Redeployment and Restructuring of approximately 57,000 posts of officers, soldiers and civilians in the Army, to Improve teeth to tail ratio i.e. increase the number of soldiers actually doing the fighting against those needed to support them to fight.
- Judicious use of resources by optimization of supply, transport and ordnance infrastructure and the closure of 39 military farms and several military postal departments in so-called peace locations.
- **Saving:** Implementation will result in significant saving of manpower, funds (Rs. 25,000 crore over the following five years) and infrastructure.
- This phase of reforms, which concerns only the army, will be completed by end-2019.
- It will free manpower to raise new combat units and increase the strength of existing units.

Concern

- There is a genuine fear in the defence services that by choosing to act on proposals internal to personnel management of the army, it has only picked the low-hanging fruit.
- The toughest recommendations of both the Arun Singh Committee, following the Kargil Review Commission, and of the Naresh Chandra Committee which required major structural changes were never implemented.

Way forward

• Implement other recommendations which deal with higher defence management, defence ministry and other organisations, such as the DRDO, ordnance factories and DGQA, far-reaching effects towards reforming and modernising the decision-making structure for national security.

KEY PROPOSALS

- The Shekatkar panel recommended raise in the retirement age of jawans by two years that will save the army significant amount on pensions and training.
- The committee also suggested optimising non-combat support arms in the army such as supply corps, ordnance and engineers.
- It also recommended abolishment of military and dairy farms.
- It called for downsizing the remount veterinary corps which looks after horses and mules.
- It suggested that only retiring personnel be sent to the NCC.

Other Major Defence reform committee

Arun Singh committee on Defence Expenditure: It recommended first genuinely integrated Long-Term 15-year Defence Plan

Kargil Review Committee (KRC) 2001: Established after Kargil war (1999), and was tasked to recommend measures which were considered necessary to safeguard national security against armed intrusions.

Naresh Chandra Committee (2011): It was appointed a decade after KRC to review its recommendations, their implementations and to suggest new steps to reform the security establishment. It's recommended-

- New post of Intelligence Advisor to assist the NSA and the National Intelligence Board on matters relating to coordination in the functioning of intelligence committee
- A permanent Chairman of the Chiefs of Staff Committee
- Amendment to Prevention of Corruption Act to reassure honest officers, who take important decisions about defence equipment acquisition, so that they are not harassed for errors of judgement or decision taken in good faith.

4.2. ACCOUNTABILITY IN DEFENCE PROCUREMENTS

Why in news?

Recently, Central Information Commission (CIC) advised the Ministry of Defence (MoD) to ensure probity and accountability in defence procurements.

Current situation in defence procurements

- Delays at every stage in procurement process from opening of the technical offer after submission of the bids, conducting field trials, to awarding the contract & releasing the payments.
- **Rejection not explained** The reasons for retraction of the Request for Proposal (RFP), especially at later stages in the process, is not given. Thus, making the future deals less attractive for the vendors for a substantial amount of time and money is involved.
- Non-disclosure of important information under Section 4 of RTI -Only routine information is available on the RTI portal of the ministry, but section 4 also requires public authorities to publish all relevant facts and provide reasons while formulating important policies or announcing the decisions which affect the public. For example - explaining introduction of the Indigenously Designed Developed and Manufactured (IDDM) category in procurement

In Section 2 (f) of the RTI Act, 'information' includes 'any material in form, including records, documents, memos, e-mails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, samples, models, papers, material held in any electronic form and information relating to any private body which can be accessed by a public authority under any other law for the time being in force'.

Section 8 (1) (a) exempts 'information, disclosure of which would prejudicially affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State, relation with foreign State or lead to incitement of an offence'.

Measures to be taken

- Proactive disclosures after identifying all areas of general interest through applications received under the RTI Act through engaging experienced consultants as Transparency Officers
- Quick response to the stake-holders' queries within maximum of 30 days for disposal of applications as specified under Section 7 of RTI
- Better management of requests under the Right to Information Act, 2005 (RTI Act) by notifying one Central Public Information Officers (CPIOs) to which the request for information should be addressed unlike existing 80 CPIOs in ministry.
- Denying information in rare cases Section 2(f) includes vast variety of information. Thus, only when information necessarily falls under Section 8(1)(a) of the RTI Act, should it be denied.

4.3. NEED TO REGULATE UAV IN INDIA

Why in news?

Recently, pilots of an aircraft landing into Delhi International Airport spotted an unidentified object flying close to the aircraft.

UAVs: It operates without a human pilot. UAVs are commonly used in both the military and police forces in situations where the risk of sending a human piloted aircraft is unacceptable, or the situation makes using a manned aircraft impractical.

Concern

- Potential threat: Its use poses a security threat, and has the potential for invading privacy.
- The airspace over Indian cities already has a high density of aircraft traffic and unregulated use of drones poses a grave threat for air collisions and accidents.
- Further, in view of technological advancements in UAV (Unmanned Aerial vehicle), it has become necessary to develop guidance material to regulate its activity.

Directorate General of Civil Aviation

DGCA is the civil aviation regulatory body responsible for regulating of air transport services to/from and within India.

Key Functions

- Registration of civil aircraft and licensing of pilots and aircraft maintenance engineers.
- Coordination with ICAO (International Civil Aviation Organization).
- Safety oversight and surveillance.
- Advising government in matters of air transport including those related to bilateral air services agreements.

Advantage of UAVs

- Damage assessment of property and life in areas affected with natural calamities, surveys, critical infrastructure monitoring.
- Security function: UAV are used by our Armed Forces for tactical purposes at border.
- Surveillance and Crowd Management: UAV are used for effective and smooth conduct of events like Kumbh Mela etc.

Draft UAV Guidelines, 2016

- Issuance of unique identification number (UIN): All unmanned aircrafts to be operated in India will require an UIN issued from the DGCA.
- Eligibility: Pilots will be required to be a minimum of 18 years old, and should have training equivalent to that undertaken by aircrew of manned aircraft or a private pilot's license holder for aeroplanes or helicopters.
- Categorisation of UAV: micro UAVs (less than 2 kg), mini (less than 20 kg), small (between 20 and 150 kg) and large (greater than 150 kg).
- **Flying Limits:** UAV operations at or above 200 feet AGL (above ground level) in uncontrolled airspace will require permit from DGCA while operations below 200 ft in uncontrolled airspace will not require permission.
- **Security and ownership condition:** The drone for which a UIN is issued **cannot be sold or disposed off** without permission from the DGCA.
- International operations of civil UAV (flying across territory) and/or over water shall be strictly prohibited.
- Monitoring of wildlife: UAV are deployed these days for better counting and guarding unreachable region.
- **SENSAGRI (SENsor based Smart AGRIculture)**: It is a drone based crop and soil health monitoring system using hyperspectral remote sensing (HRS) sensors.
- Mode of Delivery: Many e-commerce companies are using it for delivering their product like Amazon.
- Other uses: For surveys, infrastructure monitoring, commercial photography, aerial mapping etc.

Way Forward

- Finalise the draft guidelines by incorporating inputs provided by the stakeholder.
- By encouraging UAV usage, **India can become a world leader in drones industry**, given its strengths in software, telecommunications, frugal engineering and space applications.

4.4. NATIONAL CYBER COORDINATION CENTRE (NCCC)

Why in news?

The first phase of National Cyber Coordination Centre has been made operational now

Key features

 NCCC is a multi-stakeholder body and comes under Indian Computer Emergency Response Team (CERT-In) at Ministry of Electronics and Information Technology. **Section 69B of IT Act, 2000,** talks about the power to authorize to monitor and collect traffic data or information through any computer resource for Cyber Security.

- It derives its powers as per provisions of section 69B of the Information Technology Act, 2000 and the Rules notified under it.
- It will scan the country's web traffic to detect real-time cyber security threats and alert various organisations as well as internet service providers for timely action.
- It also will coordinate between intelligence agencies, specifically during network intrusions and cyberattacks.
- It will virtually be in touch with the control room of all ISPs, flowing at the point of entry and exit, including international gateways.

4.5. DELEGATION OF POWERS TO BORDER ROADS ORGANISATION

Why in news?

 The Ministry of Defence has decided to delegate administrative and financial powers to the Border Roads Organisation (BRO) right up to the level of Chief Engineer and Task Force Commander.

Border Roads Organisation

- BRO was formed in 1960 with the objective of developing means of communication to the remote areas of north and north-east
- It is entrusted with development and maintenance of roads in border areas.
- It has also helped to build roads in neighbouring countries such as Afghanistan and Tajikistan.
- It came under the Ministry of Defence in 2015.

Need

- Of the 73 strategic roads approved for the Sino-Indian border, only 27 of them have been completed.
- In a March 2017 report, **CAG (Comptroller and Auditor General)** also took strong objection to the long delays by the BRO in constructing 61 strategically important roads, with a total length of 3,409km, under the India-China Border Roads (ICBRs) project.
- In contrast to India, China has a well-constructed network of border roads which aids their troops to reach the border quickly.
- BRO has been in constant friction with the armed forces. Beefing up of administrative and financial powers can help BRO come with desired outcomes according to the requirements of the army.
- The step has been taken so as to avoid delays on account of references between the Chief Engineer and HQ DGBR and also between HQ DGBR and the Ministry.

4.6. INDIA AND CHINA TO JOINTLY HOLD NAVY EXERCISE

- The Indian Navy will join the Chinese People's Liberation Army-Navy (PLAN) for maiden International Maritime Search and Rescue Exercise (IMMSAREX) chaired by the Bangladesh Navy in the Indian Ocean.
- It is scheduled to take place in the Bay of Bengal at the Indian Ocean Naval Symposium (IONS).
- It is aimed to develop a structure to respond to any disaster and is to be attended by ships and aircrafts of the members and observers of IONS.

Indian Ocean Naval Symposium

- The 'Indian Ocean Naval Symposium' (IONS) is a voluntary initiative that seeks to increase maritime co-operation
 among navies of the littoral states of the Indian Ocean Region by providing an open and inclusive forum for discussion
 of regionally relevant maritime issues.
- Launched by India in February 2008, it is represented by the navy chiefs of various states.
- It has presently 23 members and 9 observers.

4.7. THE IMPORTANCE OF PANGONG TSO LAKE

Why in News?

• Recently, Indian and Chinese armies clashed along the Pangong lake in Ladakh

Strategic Importance

- The Line of Actual Control (LAC) between India and China passes through the lake. However, both countries have not yet agreed on the exact location of the LAC.
- At present, **India controls around 45-km long western part of the lake (1/3rd part)** and the rest is controlled by China. Most of the clashes between the two armies occur in the disputed portion of the lake.
- It lies in the path of the **Chushul Valley in Ladakh**, one of the main approaches that China can use for an offensive into Indian-held territory. During the 1962 war, China launched its main offensive here.

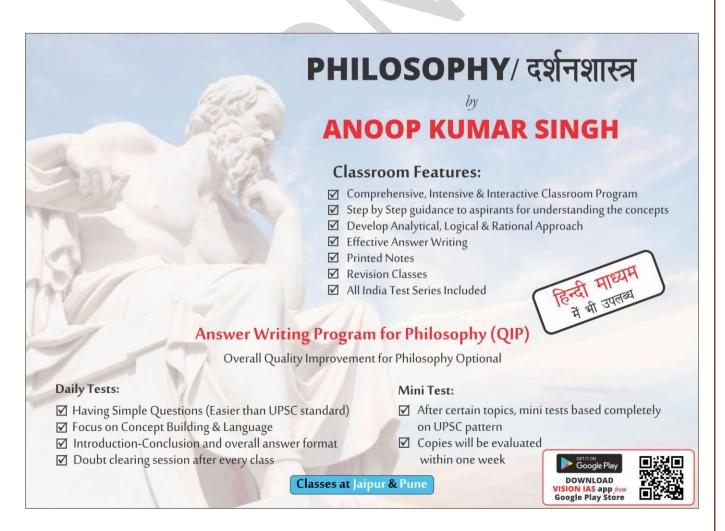


Related Information

For the first time, PLA skipped the ceremonial border meetings on Independence Day since 2005, which was decided to be held twice in a year following the signing of the Protocol on Modalities for the Implementation of Confidence Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas.

About Pangong Lake

- Pangong Tso is a long narrow, deep, landlocked lake located at a height of over 14,000-feet in the Ladakh Himalaya and around 1300-km west of Sikkim.
- It is a **brackish water lake freezes** over in winter, and becomes ideal for ice skating and polo.
- It is **not a part** of Indus river basin area.
- The lake is in the process of being identified under the Ramsar Convention as a wetland of international importance. This will be the first trans-boundary wetland in South Asia under the convention.
- Meeting provided an opportunity for a thaw between the two sides, as part of a system that had been useful in **building confidence** over the years and **reducing tensions** on the border.



5. ENVIRONMENT

5.1. FLOODS IN INDIA

Why in news?

• From Assam and Bihar in the east to Rajasthan and Gujarat in the west, floods are creating havoc with the lives of people.

Causes of Floods in India

- Natural causes includes 80% of precipitation in just 4 months, sharp fall in gradient of rivers in Eastern Himalayas, soft unconsolidated rocks causing heavy siltation, heavy landslides causing obstruction to river flow, storm surges or cyclones in coastal areas etc.
- **Anthropogenic** includes global warming; deforestation; encroachment of river basin; ill maintained embankments (80% have not been enforced in several decades); poor drainage and infrastructure;
- This year heavy rain is occurring in certain parts because of an unusual formation of the monsoon trough, with two separate depressions present at the Arabian Sea and Bay of Bengal at the same time.
 National commission on floods set up in 1976 for an

Impact of floods

- Loss of GDP Floods resulted in loss of 0.86% of India GDP in the 1970s and 1980s. In the present decade, this share has come down to 0.1% of the GDP
- Loss of human and cattle lives Official data shows that in the past four years, between 1,000 and 2,100 people have died annually. Although, these losses also have come down over the decades
- Other effects- Public health issues due to sanitation issues, post-traumatic stress disorder etc., hampering of education because of inundation of schools or using them as make-shift relief centres; environmental impacts; increase in commutation costs; damage to public utilities, crops and houses.

National commission on floods set up in 1976 for an integrated approach towards floods estimated that over 40 million hectare area is prone to floods in our country

River Flooding - Assam, West Bengal, Bihar and Eastern Uttar Pradesh

Cyclone Flooding – Coastal areas of Odisha, Andhra Pradesh, Tamil Nadu and Gujarat

Flash Floods – Haryana, Uttarakhand, J&K, Bangalore etc.

Losses due to floods post 2011 are most grim for northeastern states of Arunachal Pradesh, Sikkim, Assam and Meghalaya, and Himachal Pradesh in the north. Hilly regions suffer more due to flash floods which are difficult to predict and also cause landslides

Reason for floods in Gujarat and Rajasthan is poor drainage system while cause of Uttarakhand and Kashmir flood in 2015 & 2014 respectively was encroachment of river basin.

Possible solutions

Although there is a declining trend of flood-related loss on GDP but according to 2015 World Resources Institute study, expanding cities and worsening climate challenges can significantly increase flood-related risks in India. Thus following measures should be taken:

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

Role of floods in maintaining key ecosystem functions & biodiversity

- linking river with land surrounding it
- recharge groundwater systems
- fill wetlands
- increase the connectivity between aquatic habitats
- move both sediment and nutrients around the landscape
- For many species, floods trigger breeding events, migration, & dispersal
- Helps the economy through increased agricultural and fish production.

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.
- Efficiently utilizing disaster relief funds with states as Center asks them to set off the unutilised portion when making fresh claims during relief
- Increasing coordination and adequate training at the ground level to implement NDMP (national disaster management plan) which covers all aspects of disaster management.
- Cooperation with neighbouring countries such as Bhutan, Nepal, Bangladesh, China on Trans-Border Rivers could help the authorities to utilize the hydrological information i.e. water level, discharge and rainfall.
- Better coordination In this regard a separate ministry for disaster management could be established because currently CWC responsible for floods is under Ministry of Water Resources and Ministry of Urban Development is responsible for urban flooding while NIDM and NDMA comes under the Ministry of Home Affairs.

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.
- Speedy relief and rehabilitation Post-disaster such as
 - o alleviating financial losses
 - 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 protection for women, children and the elderly
 - Providing adequate number of boats to enhance access to developmental activities

Issues as reported by CAG on Schemes for Flood Control and Flood Forecasting:

- Huge delays in projects related to River Management Activities which is long-term solutions for the flood problems of Assam, North Bihar and Eastern Uttar Pradesh.
- Despite the increasing frequency of floods, there were inordinate delays (2-21 months) in releasing first instalment of Central assistance even after approval of Empowered Committee (EC). It is happening despite immediate release provided in Flood Management Programme guidelines
- State governments did not ensure submission of audited statements of expenditure and Utilisation Certificates within stipulated time before releasing Central assistance.
- Dam Safety Legislation initiated in 2010 is yet to be enacted. Programmes for maintenance of dams are not prepared and adequate funds are not provided to carry out repair works. Only 349 dams out of 4,862 completed dams in the country have emergency disaster management plans.
- Non-adherence to FMP guidelines when it comes to preparing Preliminary/Detailed Project Reports (PPR/ DPRs) affected the progress of these projects. Thus, data such as meteorological, soil survey, socio-economic bench mark survey, salinity, drainage and engineering surveys etc. are not available to enable planning.

5.2. COMBATING DESERTIFICATION

Context

Kubuqi Desert in Ordos, Inner Mongolia, became the first desert in the world to achieve large-scale desertification control.

Desertification Status in India:

- Desertification refers to the land degradation in arid, semi-arid and subhumid areas resulting from various factors, including climatic variations and human activities.
- According to the State of India's Environment 2017 by the Centre for Science and Environment report, nearly 30 per cent of India is degraded or facing desertification.
- In eight states—Rajasthan, Delhi, Goa, Maharashtra, Jharkhand, Nagaland, Tripura and Himachal Pradesh around 40 to 70 per cent of land has undergone desertification.

Highlight Of Kubuqi Model

- Its core pillars are government policy support, industrial investment, market-oriented participation of farmers and herdsmen and sustainable ecological improvement.
- Kubuqi model can be implemented in India to improve the land status, as an estimated 32 percent of India's total land area is affected by land degradation (of which desertification is a major component).

Major reasons for desertification in India



Water erosion

Responsible for 10.98% desertification*

Loss of soil cover mainly due to rainfall and surface runoff. Water erosion is observed in both hot and cold desert areas, across various land covers and with varying severity levels



Wind erosion

Responsible for 5.55% desertification

It denotes the spread of sand by various processes, even up to lofty altitudes of Himalayas. It removes the topsoil, which is rich in all plant nutrients and bacterial activities



Human-made/settlement

Responsible for 0.69% desertification

All land degradation processes which are induced directly or indirectly by human intervention. It includes developmental activities such as mining and urbanisation

United Nations Convention to Combat Desertification (UNCCD)

- Adopted in 1994 and entered into force in 1996, it is the only internationally legally binding framework set up to address the problem of desertification
- The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands.
- 10-Year Strategy of the UNCCD (2008-2018): It was adopted in 2007 to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability.

UNGA declared 2010 to 2020 the United Nations Decade for Deserts and the Fight Against Desertification



It includes deforestation, shifting cultivation and degradation in grazing, grassland and scrub land. Destruction of vegetation, most often by humans, accelerates desertification



Responsible for 1.12% desertification

Occurs mostly in cultivated lands, especially in the irrigated areas. Soil salinity refers to the water soluble salt present in soil. Salinity can develop naturally, or human-induced



Others

Responsible for 2.07% desertification

They include water logging, frost shattering, mass movement, barren and rocky land types

Description and Land Degradation, Atlas of India 2016 by ISRO
* percentage figures for the period of 2011-13

5.3. GUIDELINES FOR DIVERTING FOREST LAND

Why in news?

Ministry of Environment, Forests and Climate Change (MoEF&CC) has come up with new guidelines for diversion of forest land.

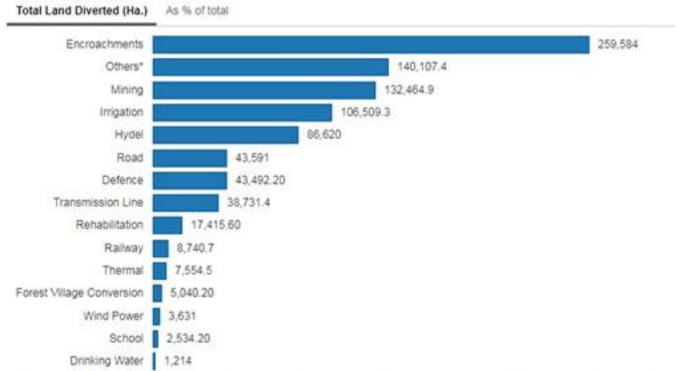
NET PRESENT VALUE [NPV] of FOREST

- It is defined under Forest (Conservation) Act of 1980.
- It is the **amount paid by the project proponent** for diverting land for non-forest use to compensate the loss in ecosystem services.
- It is calculated for a **period of 50 years**.
- For NPV estimation forests are categorised into six eco-classes, or forest types, and three canopy cover density classes—very dense forest, moderately dense forest and open forest.

Highlight

- Guideline comprise a number of new costs for diversion of forest land, including possession costs ,habitat
 fragmentation costs and various ecological services cost like water recharge, nutrients in the soil, carbon
 sequestration and others.
- NPV [NET PRESENT VALUE] formula will be used to assess the ecosystem service cost of diversion
- Guideline will come into effect once the NPV(net present value) of forests is **revise**d as prescribed by the Supreme Court in 2008
- The Indian Institute of Forest Management (IIFM) was assigned the responsibility of reassessing the value of forests.

Why forest land is diverted in India?



*Others category includes miscellaneous projects not included in the above indicated major categories such as petrol pump, relocation of villages, disputed settlement claims, stone/sand quarrying, construction of residential complex, pipe lines, borehole prospecting etc.); figures are for the period October 1980 to July 2016

Impact

- It may reduce economic viability of any development project that involves diversion of forest land.
- **Social cost of rehabilitation:** Forest dwellers will be paid 1.5 times of what they would have earned in two years.
- Conservation of forest: Between October 1980 and July 2016, India has diverted almost 900,000 hectares of forest land for non-forest purposes.

5.4. GENETICALLY MODIFIED CROPS

Background

The department-related parliamentary standing committee recently made its recommendations in its 301st report on 'GM crop and its impact on environment'.

Problems observed by committee in approval process of GM crops

GEAC established under MoEFCC is the apex body for approval of activities involving large scale use of hazardous microorganisms and recombinants in research and industrial production from the environmental angle.

The GEAC is also responsible for approval of proposals relating to release of genetically engineered organisms and products into the environment including experimental field trials.

- Possibility of data manipulation: The Genetic Engineering Appraisal Committee (GEAC) does not conduct the closed field trials on their own but are solely dependent on the data provided to them by the technology developer making it susceptible to manipulations. Thus, the Committee recommends to ensure that the whole process of field trials is done in closed environment keeping bio-safety and health safety in mind and in collaboration with the agricultural universities so as to minimise the scope of fudging the primary data.
- Concerns regarding GEAC: such as *ad hocism* in its constitution, criteria adopted for selection of its members, dominance of bureaucrats, no representation from civil society or states where Bt Cotton has been introduced, head is not from field of Biotechnology etc.
- **Functioning of DLCs:** The Committee also feels that the presence of <u>District Level Committee</u> (DLC), which is one of the most important committees to regulate GM crop at the ground level, is hardly felt in any of the States/Union Territories. The Committee is of the view that MPs should be nominated as members in the District Level Committees so that the activities of these Committees are also shared with the public.

GM Crops-Impact on Environment

- Contamination and cross pollination with non-GM and creation of super weed: as a herbicide tolerant gene
 may escape through pollen into nearby farms and fields, to another GM or non-GM cultivars or to a wild and
 weedy relative.
- **Development of insect resistance to Bt crop:** The amount of Bt toxins produced by GM Bt crops can be much greater than the reduction in chemicals sprayed. such heavy and continuous exposure induces the target pest to develop resistance far more rapidly
- Likelihood of one or a few **GM genotypes becoming the dominant cultivars** thus leading to reduction of crop diversity in farmers' fields.
- **Soil/water contamination:** Bt toxin produced in GM Bt Crops is present in every part of the plant, so when the parts that have not been harvested decompose, a considerable amount of the toxin may reach the soil.
- GM crops do **impact unintended organisms** including beneficial organisms like bees and butterflies along with predators which are also impacted.
- Studies conducted by ICAR on animals have found no deleterious effect of GM plants approved for animal feed. But these trials are of short duration. Hence, long term feeding trials in all the species of livestocks must be undertaken.

Impact of Genetically Modified Crops on Human Health

- No in house scientific study has been carried out till date to study the impact of GM crops on human health. Without having been scientifically proven that GM crops would have no adverse impact on human health and solely relying on the studies which have not been done here in India and on our own population as well as in the context of our climate and environment negating any adverse impact on human health, the Government should reconsider its decision to commercialize GM crops in the country.
- GM products being sold in the country have no labeling. The Committee strongly recommends that labeling on GM foods must be done with immediate effect.

Overall recommendations

- No genetically modified (GM) crop should be introduced in India unless the biosafety and socio-economic desirability is evaluated in a "transparent" process and an accountability regime is put in place.
- The ministry should examine the impact of GM crops on environment thoroughly, in consultation with all stakeholders so that the nation is very clear about all its probable effects before taking a call on the matter.

5.5. ECOSYSTEMS SERVICE IMPROVEMENT PROJECT

Why in news?

India signed **Global Environment Facility (GEF) Grant** agreement with the World Bank for "Ecosystems Service Improvement Project".

Global Environment Facility (GEF)

- It was established during the 1992 **Rio Earth Summit** to address the world's most challenging environmental issues.
- Its funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.
- Since 1994, **the World Bank** has served as the Trustee of the GEF Trust Fund and provided administrative services.

Ecosystem Services Improvement Project

- Aim: To protect, restore and enhance India's forest cover and help in maintaining ecological balance.
- **Objective:** Strengthening the institutional capacity the Departments of Forestry and Community Organisations, enhance forest to ecosystem services and improve the livelihoods οf forest dependent communities in Central Indian Highlands.

• The Ecosystem Services Improvement

National Mission for a Green India or the Green India Mission (GIM), is one of the eight Missions outlined under India's action plan for addressing the challenge of climate change -the National Action Plan on Climate Change (NAPCC).

It aims at protecting; restoring and enhancing India's diminishing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

The mission has the broad objective of both increasing the forest and tree cover by 5 million ha, as well as increasing the quality of the existing forest and tree cover in another 5 million ha of forest/non forest lands in 10 years.

Project will support the Government of India's Green India Mission's (GIM) goal of protecting, restoring and enhancing India's forest cover and responding to climate change.

Green India Mission

• The Project will be implemented in the states of **Chhattisgarh and Madhya Pradesh** for 5 years by **MOEFCC** through the **Indian Council of Forestry Research & Education** under the **National Mission for Green India.**

5.6. ELEPHANT CENSUS

Why in news?

Recently, environment ministry released an elephant census report, titled 'Synchronized Elephant Population Estimation India 2017'.

Highlight

 Decline in population: There has been a decline in overall elephant population from 2012 to 2017 by 3000. This might be due to faulty counting method used in 2012.

Jumbo figures	Southern region** 11,960		
Density® in Kerala reserves Anamudi 0.41	Northeast region 10,139		
Wayanad 0.25	East-central region 3,128		
Nilambur 0.25 Periyar 0.31	Northern region		
India Karnataka Assam Keral 27,312 6,049 5,719 3,09	2,085 54		

- There has been a marginal increase in elephant numbers since the 1990s.
- Increase in the geographical range: Elephants have been reported for the first time in Manipur, Mizoram, Bihar, Madhya Pradesh, Haryana, Himachal Pradesh and Andaman & Nicobar Islands.
- Man-animal conflict: There have been increasing instances of the human-elephant conflict due to loss and degradation of wildlife habitats or climate change impacts like temperature and precipitation modification, which ended up losing 1,465 humans lives in the last four years (2013-14 to 2016-17).
- out to avoid errors in estimation arising from the significant movement of elephants across

 Steps Taken

International Initiative

different states.

Monitoring Of Illegal Killing Of Elephants (MIKE) Programme

- It was established in 2003, through a Conference of the Parties (COP) resolution to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- It is an international collaboration that tracks trends in information related to the illegal killing of elephants across Africa and Asia, to monitor

Elephant corridors

- These are narrow strips of land that allow **elephants** to move from one habitat patch to another.
- There are 88 identified elephant corridors in India.

Steps Taken for Elephant conservation Wildlife (Protection) Act, 1972:

• Under it, Elephant is a **Schedule I animals**.

IUCN Status: Asian elephants are listed as "endangered" in the IUCN Red List of threatened species.

Project Elephant:

- It was launched in the year 1992 as a Centrally Sponsored Scheme
- Objectives :
 - ✓ To protect elephants, their habitat & corridors
 - ✓ To address issues of man-animal conflict
 - ✓ Welfare of captive elephants
- **Elephant reserves** are established across states to achieve above objectives.

- effectiveness of field conservation efforts.
- Purpose: To provide information needed for elephant range States to make appropriate management and enforcement decisions, and to build institutional capacity within the range States for the long-term management of their elephant populations.

5.7. ARTIFICIAL REEFS TO SAVE SINKING ISLANDS

Why in News?

Tamil Nadu govt in collaboration with IIT Madras have been restoring Vaan Island in Gulf of Mannar by deploying artificial reefs near vulnerable islands.

Background

Due to indiscriminate mining of coral, destructive fishing practices and frequent fires caused by fisherman in past decades, area of Vaan Island had been reduced from 16 hectares in 1986 to 2 hectares in 2014.

Highlights

- It is the first attempt in India to protect and restore a sinking island.
- Funding: The project has been funded by NAFCC of the Ministry of Environment, Forests and Climate Change

Importance of islands

Protecting coastline: They play a crucial role in dissipating wave energy before it reaches the coast of Tamil

- **Ensuring livelihood**: They provide a good fishing ground for local fishermen.
- Protect marine diversity: Corals provide a habitat for marine animals enhance fish diversity.

Conclusion

- To fight climate change: Artificial reef is the need of the hour as low-lying coastal areas are becoming more vulnerable to impacts of global warming as they are highly prone for inundation due to sea level rise.
- There is an immediate **need to show urgency** in

Rameswaram TAMIL NADU GULF OF MANNAR Kasuwari Island Vaan Island Tuticorin

Gulf of Mannar Biosphere Reserve

- It is the first marine biosphere reserve in Asia.
- It lies between the southeastern tip of India and the west coast of Sri Lanka, in the Coromandel Coast region.
- endangered Dugong (Sea Cow), three species of endangered sea turtles, sea horses, several species of dolphins and whales etc.
- It is a part of UNESCO MAB (Man And Biosphere) programme.

National Adaptation Fund for Climate Change [NAFCC]

- Aim: To assist State and Union Territories that are particularly vulnerable to the adverse effects of climate change in meeting the cost of adaptation.
- NABARD has been appointed as National Implementing Entity (NIE) responsible for implementation of adaptation projects under the NAFCC

Prominent Corals in India

- Lakshadweep: Known as India's Coral Islands
- Andaman and Nicobar Islands
- **Gulf of Mannar**
- Gulf of Kutch
 - Netrani Island in Karnataka, Malwan in Maharashtra

conserving reefs around the world as The Great Barrier Reef in Australia has, perhaps, been irreversibly damaged due to coral mining.

5.8. EARTH OVERSHOOT DAY

Why in News?

In 2017, **Earth Overshoot Day** fell on August 2, the earliest date since ecological overshoot began in the early 1970s.

What Is It

- It is the date when humanity annual demand on nature exceeds what Earth can regenerate over the entire year.
- It is calculated by WWF and Global Footprint Network.

Highlight

- It signifies that we have emitted more carbon than the oceans and forests can absorb in a year, we caught more fish, felled more trees, harvested more, and consumed more water than the Earth was able to produce in the same period.
- Carbon component contribute 60% of the global Ecological Footprint.
- Food contribution is 26% of humanity Ecological Footprint.
- Solution: 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.



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.

World Wide Fund for Nature (WWF)

 Switzerland based International NGO, estd. in 1961 and engages in conservation of wildlife and natural habitat.

Objectives

- Conserving the world's biological diversity.
- Ensuring that the use of **renewable natural resources** is sustainable.
- Promoting the reduction of **pollution** and wasteful consumption.
- Enhancing active participation of all sections of society in nature conservation and environmental protection through environmental education, awareness and capacity-building.

5.9. BAN ON THE USE OF CHEMICALS IN FIRECRACKERS

Lead

Why in News?

Recently, Supreme Court imposed a ban on the use of antimony, lithium, mercury, arsenic and lead in the manufacture of firecrackers to prevent air pollution

Background

- The order came on a petition filed by three Delhi children who requested the court to intervene to regulate the use of crackers and fireworks during festivals like Diwali.
- Supreme Court in 2016 banned the sale of firecrackers in Delhi-NCR to check rising air pollution.

Antimony sulphides are used in the production of the heads of safety matches, military ammunition, explosives and fireworks.Risks: The elemental antimony metal does not affect human and environmental health. Inhalation of antimony trioxide (and similar poorly soluble sulphides of antimony) is considered harmful and suspected of causing cancer.

A mercury compound called "Mercury(II) fulminate" is a primary explosive It is extremely sensitive to friction, heat and shock and is mainly used as a trigger for other explosives in percussion caps and blasting caps.

Arsenic is generally non-combustible. But certain compounds of arsenic are highly explosive and figure on the health hazard lists of several countries and thinktanks.

Arsenic Arsenic, is a flammable, pyrophoric, and highly toxic gas while being

explosive and figure on the health hazard lists of several countries and thinktanks Arsine, for instance, is a flammable, pyrophoric, and highly toxic gas while being one of the simplest compounds of arsenic. Arsine is used as an agent in chemical warfare, thus several countries have regulations on its use owing to its highly inflammable nature.

The most common primary explosives are lead azide and lead styphnate, compounds of lead found in most heavy grade explosives. Due to its explosive nature, lead azide is used in most detonators to initiate big explosions. Lead styphnate is also an explosive used as a component in primer and detonator mixtures for less sensitive secondary explosives

Lithium A highly volatile element, lithium is flammable, and it is potentially explosive when exposed to air and especially to water, though less so than other alkali metals

• **Central Pollution Control Board[CPCB]** labeled above five chemicals as toxic in the manufacturing of firecrackers.

Highlight

- SC entrusted the Petroleum and Explosive Safety Organisation (PESO) with the responsibility of ensuring compliance
- At present, there are no standards on air pollution caused by the bursting of firecrackers.
- SC asked the CPCB to clarify on the use of strontium, another chemical branded toxic by the pollution body, in firecrackers.
- SC asked CPCB and PESO to make collaborative efforts for standardization of firework industry and provide details of its impact on environment.

Petroleum and Explosives Safety Organisation (PESO)

- It is the apex department to control and administer manufacture, storage, transport and handling of explosives, petroleum, compressed gases and other hazardous substances in India.
- It functions under the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry. HQ at Nagpur
- It administers the responsibilities delegated under the Explosives Act 1884 and Petroleum Act 1934.
- Procurement of raw materials for fireworks does not come under the purview of the Explosives Act. The PESO has been testing samples of crackers only for adherence to the sound limit of 125 decibels at a distance of four metres.

5.10. BLACK CARBON IN STRATOSPHERE

Why in news?

 According to a group of scientists, aeroplanes may be ejecting significant amounts of black carbon (BC) and this may be depleting the ozone layer.

What is Black Carbon (BC)?

- It is produced both naturally and by human activities as a result of the incomplete combustion of fossil fuels, biofuels, and biomass.
- BC particles strongly absorb sunlight and give soot its black color.
- It is emitted directly into the atmosphere in the form of fine particles (PM2.5).
- It's known to be one-fourth as potent as carbon dioxide in whetting global warming.

Adverse effects of black carbon

- Ozone depleting Agent: It can linger long enough to provide a fertile ground for other chemical reactions that can deplete the ozone layer.
- Potential to upset monsoon: They can strongly absorb solar and terrestrial radiation and heats up the atmosphere.
- Enhance melting of glaciers: if deposited on snow, it could accelerate the heating of snow.

Aircraft emissions Scattered solar radiation of incoming and state of the solar radiation of the surface of the solar radiation of the surface of the surface

Vienna Convention for the Protection of the Ozone Layer [1985]:

- It acts as a framework for the international efforts to protect the ozone layer.
- It paves the way for a legally binding treaty through protocol called Montreal protocol.

Montreal Protocol [1987]

- It aims at reducing the production and consumption of ozone depleting substances (ODS).
- It has been ratified by 197 parties making it universally ratified protocol in United Nations history.

Kigali agreement to amend the Montreal Protocol [2016]:

- **Aim:** To phase out Hydrofluorocarbons (HFCs), a family of potent greenhouse gases by the late 2040s.
- It will be binding on countries from 2019.

• **Health hazard:** It is known to aggravate breathing disorders.

Highlight

- This is the first time that any group in the world has shown that black carbon from aircraft can go to the stratosphere and affect the ozone layer.
- Last year the Indian Meteorological Department (IMD) launched a System of Aerosol Monitoring and Research (SAMAR) to study the concentration of black carbon in the atmosphere due to air pollution and its impact on climate.
- The expected air traffic increase in future would only aggravate the situation.

5.11. EL NINO AIDED IN MASSIVE CARBON DIOXIDE RELEASE

Why in news?

Recently, scientist concluded that El Nino of 2014-16 caused over 3 billion tonnes of carbon to get released
into the atmosphere, pushing carbon dioxide concentration to record levels.

Highlight

- Scientist analysed the data collected by Nasa's Orbiting Carbon Observatory-2 (OCO-2) satellite, which measures level of carbon dioxide in the atmosphere.
- The El Nino led to excessive carbon dioxide releases in following ways:
 - ✓ Hot weather and drought caused extensive wildfires in south-east Asia.

EL NINO

- El Nino means The Little Boy, or Christ Child in Spanish.
- It is a complex phenomenon that causes waters to warm up in east-central Pacific Ocean, which in turn causes huge changes in wind directions bringing less rain to south-east Asia and the Indian subcontinent, while increasing rain in other parts of the world.
- El Nino effect typically last 9 to 12 months.
- It occurs on an average every 2-7 years.
- ✓ **Drought in the Amazon rainforest** stunted plant growth, reducing the amount of carbon they absorb while growing.
- Flattening of emissions from fossil fuels: CO2 emissions from burning of fossil fuels had flattened out to about 36.2 billion tonnes in 2014 and 2015 and similar is projected for 2016.

5.12. RENEWABLE ENERGY GENERATION: DISCREPANCIES BETWEEN GUIDELINES

Why in news?

Madhya Pradesh has become the latest state stonewalling Centre's bid to promote renewable energy by ranking available sources of generation based on the ascending order of prices, after Tamil Nadu and Rajasthan

Details

To promote use of energy from renewable sources, the Electricity Act, National Electricity Policy and National Tariff Policy have accorded energy from renewable sources a "must run" status. This status emanates from the Indian Electricity Grid Code notified by the Central Electricity Regulatory Commission (CERC) and adopted by the state regulators.

- Recently Madhya Pradesh has floated a proposal that would take away the "must run" status of renewable energy and subject it to "merit order dispatch" by the state grid operator.
- The "merit order dispatch" is a principle followed for conventional generation sources that essentially ranks available sources of electrical generation based on the ascending order of prices and sequences them accordingly.

Impact

- A shift to the merit order dispatch would push costly solar and wind power down the pecking order. This will put the cash flows of most of the smaller renewable firms under severe stress.
- The uncertainty in payments will lead to decline in investments in renewable sector and will hamper India's aim to ramp up the share of green power in the country's electricity supply mix from the current seven per cent to nearly 20 per cent by 2022.

Capacity addition in the renewable energy sector has shown its strongest performance in 2016-17, with a record capacity addition of 11,320 MW that eclipsed the thermal power segment's 11,551 MW during the fiscal.

- As of March 31, the total grid-connected renewable power capacity in the country stood at 57,260 MW (close to 20 per cent of India's overall installed capacity of 3,29,000 MW).
- Based on the current capacity addition targets, India is forecast to meet 19 per cent of its power demand from renewable energy sources in five years, by fiscal year 2022.

5.13. EXPLORATION OF POLYMETALLIC NODULES

Why in news?

India's exclusive rights to explore polymetallic nodules from seabed in Central Indian Ocean Basin (CIOB) have been extended by five years by International Seabed Authority.

Details

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.

- India had signed a 15 year contract for exploration of Polymetallic Nodules in Central Indian Ocean Basin with the International Seabed Authority on March 25, 2002. In 2016 the govt approved extension of this contract upto 2022.
- India is implementing a long-term programme on exploration and utilization of Polymetallic Nodules (Polymetallic Nodules programme) through Ministry of Earth Sciences.
- India is presently having an area of 75,000 square km, located about 1600 km away from her southern tip. Polymetallic nodules resource potential in this site is 380 million tonnes.

Importance

- India's exclusive rights for exploration of Polymetallic Nodules in the allotted area in the Central Indian
 Ocean Basin will continue and would open new opportunities for resources of commercial and strategic
 value.
- India is entirely dependent on imports to meet its requirements of cobalt, which is the most strategic of the three metals (cobalt, copper and nickel). As for copper and nickel, India is in a precarious position.

Economic significance

- Empowerment of coastal communities and attaining greater social and economic inclusion by providing Employment opportunities, skill-sets and capacities.
- Providing a boost to coastal and national economies and development of blue economy.
- Promoting entrepreneurship in new areas of economic activity and new development in electronics industry.

Strategic advantages

- Presently, China is controlling more than 95% of rare earth metals. This move will nullify the increasing influence of China.
- It will strengthen the bilateral relationship of India with Japan, Germany and South Korea.

Challenges: Technological and Environmental issues

- The specialized drills and extraction-technology that would be required pulling out the metals from the deep sea would develop a major technical challenge.
- Deep sea mining may cause a drastic disturbance and imbalance in the aquatic ecosystem. It is considered as the last resources to depend on. The deep sea mining may distract the keystone and the foundation species.

International Seabed Authority (ISA) is a UN body set up to regulate the exploration and exploitation of marine non-living resources of oceans in international waters. India actively contributes to the work of International Seabed Authority. Last year, India was re-elected as a member of Council of ISA.

The Polymetallic Nodules Programme (PNP): PNP is oriented towards exploration and development of technologies for eventual extraction of nodules from the Central Indian Ocean Basin (CIOB) allocated to India. It consists of four components viz. Survey and Exploration, Environmental Impact Assessment (EIA) Study, Technology Development (Mining) and Technology Development (Extractive Metallurgy).

Present status: The extraction of metals from the polymetallic nodules lying at the deep ocean floor is not yet found to be economically viable at this stage. However, a site has been identified in the CIOB for the First Generation Mine Site on the

basis of detailed surveys and analysis.

Pollymetalic nodules: A brief

What is it? Polymetallic nodules, also called manganese nodules, are rock concretions formed of concentric layers of iron and manganese hydroxides around a core.

Besides manganese and iron, they contain nickel, copper, cobalt, lead, molybdenum, cadmium, vanadium, titanium.

Distribution: First discovered in 19th century in the Kara Sea, in the Arctic Ocean off Siberia, they were found to occur in most oceans of the world. However, nodules of economic interest are more localized. Three areas have been selected by industrial explorers: the centre of the north central Pacific Ocean, the Peru Basin in the south-east Pacific Ocean and the centre of the north Indian Ocean. They can occur at any depth, but the highest concentrations have been found between 4,000 and 6,000m.

Formation: Several theories have been proposed to explain the formation of different types of nodules. Two of the more popular are:

- A hydrogenous process in which concretions are formed by slow precipitation of the metallic components from seawater. This is thought to produce nodules with similar iron and manganese content and a relatively high grade of nickel, copper and cobalt.
- A diagenetic process in which the manganese is remobilized in the sediment column and precipitates at the sediment/water interface. Such nodules are rich in manganese but poor in iron and in nickel, copper and cobalt.

Importance

- They contain Rare Earth Elements and metals which are important to high-tech industries.
- The amount of copper contained in the CCZ nodules is estimated to be about 20% of that held in global land-based reserves.

5.14. MOSS AS A CHEAP BIOINDICATOR

Why in news

 According to Japanese scientists, delicate mosses found on rocks and trees in cities around the world can be used to measure the impact of atmospheric change and monitor urban pollution.

Highlight

- Cost Effective: Bioindicators such as mosses - which generally absorb water and nutrients from their immediate environments - were often cheaper to use than other methods of environmental evaluation.
- Widely Available: Mosses are a common plant in all cities, so this method can be widely used in many countries to calculate pollution level.
- Better indicator: It can indicate indirect biotic effects of pollutants, when many physical or chemical measurements cannot.

Bioindicator

 A bioindicator is a living organism that gives us an idea of the health of an ecosystem. Some organisms are very sensitive to pollution in their environment, so if pollutants are present, the organism may change its morphology, physiology or behaviour, or it could even die, allowing scientists to calculate atmospheric alterations.

Examples:

- To monitor air Pollution: Lichens (a symbiosis among Cyano bacteria, algae, and/or fungi) and Bryophytes (a collective term for mosses, hornworts and liverworts).
- To monitor water pollution: Algae blooms are often used to indicate large increases of nitrates and phosphates (Eutrophication) in lakes and rivers.
- Microorganisms are often used as health indicators of aquatic and terrestrial ecosystems as they have a rapid rate of growth, and react to even low levels of contaminants and other physicochemical and biological changes ex: bacterium Vogesella indigofera.
- **Frogs** are considered accurate indicators of environmental stress as they are highly susceptible to environmental disturbances.
- Sparrow, butterflies etc.

6. SCIENCE AND TECHNOLOGY

6.1. BIG DATA

Why in news?

 Big data is being increasingly used by the government in policy formation. It has been effectively used to estimate inter-state trade and labour migration.

What is Big Data?

- Big data is a term that describes the large volume of data both structured and unstructured beyond the ability of commonly used software tools to capture, curate, manage, and process data within a tolerable elapsed time.
- It's what organizations do with the data that matters. Big data can be analyzed for insights that lead to better decisions and strategic business moves.
- Big data is characterized by 3Vs as shown in the figure.

Applications of Big Data

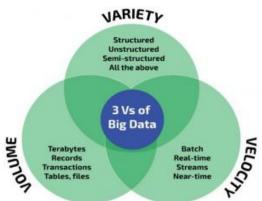
- Companies use big data to better understand and target customers by bringing together data from their own transactions as well as social media data and even weather predictions.
- Businesses optimize their processes by tracking and analyzing their supply chain delivery routes and combine that data with live traffic updates. Others use machine data to optimize the service cycles of their equipments and predict potential faults.
- Big Data is used in healthcare to find new cures for cancer, to optimize treatment and even predict diseases before any physical symptoms appear.
- Big Data is used to analyze and improve the performance of individuals (at sports, at home or work) where
 data from sensors in equipment and wearable devices can be combined with video analytics to get insights
 that traditionally were impossible to see.
- Police forces and security agencies use big data to prevent cyber-attacks, detect credit card fraud, foil terrorism and even predict criminal activity.
- Big Data is used to improve our homes, cities and countries by optimizing the heating or lighting in our homes, the traffic flow in our cities, or the energy grid across the country.

Big Data in India

- With a population of 1.2 billion, the relevance of Big Data becomes all the more pronounced for India.
- Recently, NITI Aayog also echoed the idea of evidence-based policymaking guided by Big Data.
- Discoms in India are using data from last mile sensors to implement measures of cutting down aggregated technical and commercial losses.

Challenges

- Inefficient infrastructure (data management centers) for data collection and management
- Constant evaluation of feedbacks generated from new data required: To use Big Data effectively for
 policymaking, the government must adopt a dynamic approach and be willing to be flexible regarding its
 policy structure and processes.



Data Protection Committee

- The government had constituted a 10-member committee to identify "key data protection issues" and recommend a framework for data protection law in the country under the former Supreme Court judge Justice B.N. Srikrishna
- The committee is expected to submit its report by the end of 2017.

Big Data Management Policy, 2016

 It was launched by CAG (Comptroller and Auditor General). It paved the wave for Data Analytics Centre (first of its kind in the country)

National Data Sharing and Accessibility Policy – 2012

India joined the Open Government Data
 Movement through this policy.
 Consequently, a website was launched
 by the National Informatics Centre (NIC)
 to share the data of various ministries
 with citizens.

• Anonymization of data or invasion of privacy and Data security: Lack of proper virtual safety raise grave concerns as most of Data today is generated online.

Way Forward

- In order to effectively analyze the large chunks of data available, government must establish well equipped data centres. It is essential to segregate the relevant data from the irrelevant.
- It must strengthen its cyber security in order to make the large pool of data available virtually safe.
- It must also address the ethical issues regarding big data analytics and formulate a policy regarding data privacy.

6.2. PROJECT BRAINWAVE

- Microsoft has launched "Project Brainwave" deep learning acceleration platform for real-time artificial intelligence (AI).
- The 'Project Brainwave' uses the massive field-programmable gate array (FPGA) infrastructure.
- The system architecture reduces latency, since the CPU does not need to process incoming requests, and allows very high throughput, with the FPGA processing requests as fast as the network can stream them.
- The system is important because real-time AI is becoming increasingly important as cloud infrastructures process live data streams, whether they be search queries, videos, sensor streams, or interactions with users.

Artificial Intelligence

- It is branch of computer science dealing with simulation of intelligent behavior in computers vis-a-vis visual perception, speech recognition, decision making and translation between languages.
- It enables computer system to carry out task on their own that otherwise requires human intelligence.

6.3. HYPERSPECTRAL IMAGING SATELLITE

Why in news?

ISRO plans to launch HySIS (Hyperspectral Imaging Satellite) – a earth observation satellite, using a critical chip it has developed called "optical imaging detector array".

What is hyperspectral imaging?

- Hyperspectral imaging, or imaging spectroscopy, combines the power of digital imaging and spectroscopy.
- For each pixel in an image, a hyperspectral camera acquires the light intensity (radiance) for a large number of contiguous spectral bands.
- Every pixel in the image thus contains a continuous spectrum in the visible and near infra-red regions and can be used to characterize the objects in the scene with great precision and detail.
- Hyperspectral images provide much more detailed information about the scene than a normal color camera, which only acquires three different spectral channels corresponding to the visual primary colors red, green and blue.
- Hence, hyperspectral imaging leads to a vastly improved ability to classify the objects in the scene based on their spectral properties.

Sharper eye in the sky Hyperspex will add a new dimension to keeping an eye over India from space It will enable distinct Hyperspectral identification of maging Satellite objects on earth by (HySIS) reading the spectrum for each pixel of a scene from space It can be used for a range of activities. Anten including monitoring of ras first tried Non-cell side environment; finding oil of solar panel and minerals apart from BMS-1 and military surveillance Chip holds key . ISRO centres SAC, SCL. have developed an optical imaging detector chip to enable hyperspex imaging . With the chip, a satellite can identify 55 spectral or colour bands from 630 km above ground

6.4. LAUNCH OF ISRO'S IRNSS 1H UNSUCCESSFUL

Why in news?

• The launch of India's latest navigational satellite **IRNSS 1H** in its indigenous GPS system NavIC (Navigation with Indian Constellation) failed.

More About it

- It was carried on by PSLV (Polar Satellite Launch Vehicle)-C39. IRNSS 1H was to augment the existing seven satellites of the NavIC constellation.
- If successful this launch would have been historic because for the first time, the private sector has been has been actively involved in assembling and testing of a satellite. Earlier, the private sector's role was limited only to supplying components.

An **atomic clock** is a clock device that uses an electronic transition frequency of the electromagnetic spectrum of atoms as a frequency standard for its timekeeping element.

Atomic clocks are the most accurate time and frequency standards known, and are used as primary standards for international time distribution services, to control the wave frequency of television broadcasts and in global navigation satellite systems such as GPS.

- The launch of IRNSS 1H was also necessitated because of issues with all the three atomic clocks of IRNSS-1A.
- IRNSS (Indian Regional Navigation Satellite System (IRNSS) is an independent regional system developed by India on par with the US-based Global Positioning System (GPS), Glonass of Russia, and Galileo developed by Europe.
- The system, which offers services like terrestrial and marine navigation, disaster management, vehicle tracking and fleet management, navigation aide for hikers and travellers, visual and voice navigation for drivers. This system is called NavIC (Navigation with Indian Constellation)
- The seven navigation satellites launched earlier by ISRO are IRNSS-1G (28 April 2016); IRNSS-1F (10 March 2016); IRNSS-1E (20 January 2016), IRNSS-1D (28 March 2015), IRNSS-1C (16 October 2014), IRNSS-1B (4 April 2014); and IRNSS-1A (1 July 2013).

6.5. WATER AS PROPELLANT IN CUBESAT

Engineers at Purdue University in the US have designed and tested a micropropulsion system that uses liquid water as the propellant for orbital maneuvering of tiny satellites called **CubeSats**.

Pure water is chosen as the propellant since it is green, safe, easy to use and free from the risk of contaminating sensitive instruments by the backflow from plumes as in the case of thrusters using chemical propellants.

What is the need to use water instead of fuel?

- There are rapid developments in miniaturization of technologies including in satellites resulting in smaller CubeSats which typically weigh about two kilograms.
- Such CubeSats are believed to take over the sky in the future to carry out tasks like imaging and remotesensing currently performed by heavier satellites which are expensive to build and launch.
- However, today's CubeSats cannot totally replace their larger counterparts as they are incapable of changing orbit or performing complex maneuvers.
- A water propulsion system would allow such tiny satellites to correct their orbit or maintain their altitude, thereby prolonging their operating life in space before becoming space debris.

How does the water propulsion system work?

- CubeSat will be integrated with FEMTA thrusters. "Film-Evaporation MEMS Tunable Array", or FEMTA thruster uses capillaries thinner than human hair through which the propellant water can flow.
- Small heaters located near the ends of the capillaries turn the water into vapor, which, on escape from these tiny tubes, provides the thrust. Because the capillaries are only about 10 micrometers in diameter, the surface tension of the fluid keeps it from flowing out, even in the vacuum of space.
- The minuscule capillaries act like valves that can be turned on and off by activating the heaters.

6.6. INDIA'S FIRST PRIVATE MISSILE PRODUCTION FACILITY UNVEILED

Why in news?

Recently, India's first private missile production facility was unveiled near Hyderabad.

Details

- The missile sub-section manufacturing facility has been established as a joint venture (51:49) between Kalyani Group and Israel's Rafael Advanced Defence System Ltd.
- The Kalyani Rafael Advanced System Facility will initially manufacture Anti-Tank Guided Missile (ATGM) Spike.
- It further aims to provide one-stop solutions to locally re-design, develop, re-engineer and manufacture various land and airborne products and systems in India.
- The facility has been established in line with 'Make in India' initiative and Defence Procurement Policy, 2016 to 'Make (Indian)' and 'Buy and Make (Indian)'.
- The Domestic Content used in the plant is around 90% and it also puts into action the policy to encourage the private sector in defence production.

6.7. INCOIS UNVEILS OCEAN FORECASTING SYSTEM

Why in news?

INCOIS inaugurated an Ocean Forecasting System for Comoros, Madagascar and Mozambique at third meeting of Regional Integrated Multi-Hazard Early Warning System for Asia and Africa (RIMES).

Details

- Ocean Forecasting System has been developed by INCOIS for the Indian Ocean countries. The system is already operating in Seychelles, Sri Lanka and Maldives.
- It aims to provide information on Safety at Ocean by reporting on
 - high wave, currents, winds, tides, sub-surface ocean conditions
 - o port warnings, oil spill advisory services
 - Tsunami and storm surge warning.
- This information will cater the needs of fishermen, coastal population, tourism sector, coastal defence officials, marine police, port authorities, research institutes and off shore industries of the above mentioned countries.

Benefits

- Safe Navigation through forecast along the ship routes
- Minimise losses and improve operations at Sea
- Blue Economy will be benefitted through real time Ocean State Forecast.
- Rescue and Search operations can be carried on more efficiently
- Conservation of Marine Biodiversity through information on the sea surface and sub-surface temperature.

Importance for India

 The real time data received by INCIOS will also help Indian Coasts to avert natural disasters and improve
 Ocean State Forecast (OSF) and Early Warning System for India.

Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES)

- It is an international intergovernmental institution for generation and application of early warning information formed in the aftermath of 2004 Indian Ocean Tsunami by the efforts of African and Asian countries.
- It operates from the early warning centres located at the campus of the Asian Institute of Technology in Pathumthani, Thailand.
- It is registered with United Nations under Article 102 and is also supported by UNESCAP and DANIDA.
- It provides information related to Tsunami and extreme weather conditions. It also acts as a test bed for emerging technologies and help to enhance performance.

Member Countries: Bangladesh, Cambodia, Comoros, India, Lao PDR, Maldives, Mongolia, Papua New Guinea, Philippines, Seychelles, Sri Lanka and Timor-Leste.

Collaborating Countries: Afghanistan, Armenia, Bhutan, China, Indonesia, Kenya, Madagascar, Mauritius, Mozambique, Myanmar, Nepal, Pakistan, Russian Federation, Somalia, Tanzania, Thailand, Uzbekistan, Vietnam, and Yemen.



- It has been found that the OSF will be beneficial for predicting anomalies in Indian Ocean as many remotely forced waves originating from the southern and western Indian Ocean may cause damage to Indian Coasts.
- E.g. Wave surge and coastal flooding in Kerala and West Bengal (2016) were predicted well in advance through data relayed from Seychelles.

ESSO Indian National Centre for Ocean and Information Services (INCOIS)

- ESSO INCOIS is an autonomous body established under Ministry of Earth Sciences and it is a unit of Earth System Science Organisation (ESSO).
- It provides ocean information and advisories to the government, industry, society and scientific research community through sustained and continuous observations and improvement through systematic and focussed research.
- International presence of ESSO INCOIS:
 - Permanent member of IOC of UNESCO
 - Founding member of Indian Ocean Global Ocean Observing System (IOGOOS) and Partnership for Observing the Oceans (POGO)
 - Provides information to member countries of Regional Integrated
 Multi-Hazard Early Warning System for Africa and Asia (RIMES) etc.

6.8. NANOMATERIALS: COMBATING CLIMATE CHANGE AND PREVENT POLLUTION

Why in news?

Globally scientists are developing nanomaterial which can effectively help to reduce the Carbon Dioxide in the air and trigger bioremediation to get rid of toxic waste such as dyes, oil spill etc.

Details

- Environment nanotechnology involves use of nanoscale material for addressing environmental concerns such as bioremediation, water purification, product recycling and recovery, solid waste management.
- These nanomaterials have unique properties such as chemical reactivity, electronic properties and antimicrobial activity.
 Therefore they hold potential to address issues such as combating Climate Change and reduction of pollution.

Solid waste remediation Heavy metal pollution remediation Application of nanomaterials in bioremediation Uranium remediation Hydrocarbon remediation

Areas where Environment nanotechnology can be used

Combating Carbon Emission

- The researchers have developed nanoCO2 harvester which can suck CO2 from the atmosphere and convert it into methanol which can further be used as vehicular fuel.
- The NanoCO2 Harvester can capture more CO2 than usual and is more efficient fuel converter.

Cleaning Water

- The magnetically charged nanoparticles have been proved potent in researches to have effectively carried on adsorption process to remove heavy metals and dyes from the water bodies and they do not readily degrade.
- They can also be used to clean the underground water contaminated with toxic materials such as arsenic, lead, chromium and mercury. They can also be used to clean up oil spills by using nanosponges

Accelerating Biodegradation (Solid Waste Management)

- The method of converting the organic waste into organic manures and fertilizers can also be quickened through use of Nanoparticles.
- Thus they can reduce the time consumed in solid waste management and increases the production of biogas. According to researchers, Iron oxide particles which are non-toxic can be used for the same.

Challenges

- The Nanoparticles being small in size have tendency to clump up which make them inactive with prolonged use.
- Synthesising useful nanoparticles is also challenging as production of a consistent size is tough.

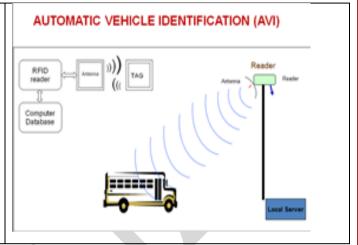
- The viability of Nanoparticles such as nanosponge still remains a laboratory success and hasn't been tested on large-scale.
- The usage of Nanoparticles also raises health concerns as due to their small size they can be easily transported inside human as well as animal bodies.
- Due to their ability of long persistence, they may raise concerns such as bio-magnification as well.

6.9. NHAI LAUNCHES MOBILE APP MYFASTAG AND FASTAG PARTNER

Radio-Frequency Identification (RFID) is the use of radio waves to read and capture information stored on a tag attached to an object. A tag can be read from up to several feet away and does not need to be within direct line-of-sight of the reader to be tracked. It is applied for tracking items or as a pass.

Near Field Communication (NFC) is a short-range high frequency wireless communication technology that enables the exchange of data between devices over about a 10 cm distance. It is used in credit card related payments, ebooking etc.

Barcode scanner detects the light reflected from the barcode. This needs to be kept in range of several inches to several feet to read the code.



Why in news?

Recently National Highways Authority of India launched two mobile apps **MyFASTag and FASTag Partner** to facilitate Electronic Toll Collection.

Details

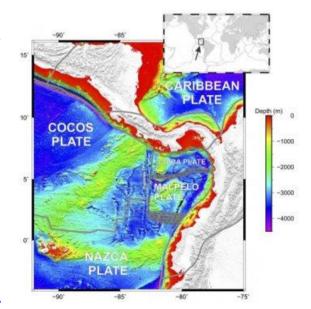
- NHAI launched the **Electronic Toll Collection** program to reduce human interventions and increase the seamless passage of vehicles on the highway. However, the biggest hurdle in the implementation of the program was the cumbersome method of purchase of FASTags and their recharge thereon.
- FASTag is a device which uses RFID technology for making a prepaid payment directly from the prepaid account.
- Therefore, NHAI in consultation with RBI and NPCI has launched online facility as well as two Mobile App to purchase FASTag for easy purchase, recharge and grievances redressal.

6.10. NEW TECTONIC PLATE DISCOVERED

The Malpelo Plate, named after an island and an underwater ridge it contains, is the 57th plate to be discovered and the first in nearly a decade. The plate is discovered off the coast of Ecuador in the eastern Pacific Ocean.

How was it discovered?

- It was discovered by studying the movements of other plates and their evolving relationships to one another as the plates move at a rate of few millimeters to centimeters per year.
- The researchers were studying the junction between three other plates in the eastern Pacific Ocean.
- The plates move on the mantle, which behaves as a fluid (in geological time). Since they are all connected like puzzle pieces, when one moves, it affects all others.
- When they added up the angular velocities of these three plates, they ought to sum to zero but in this case, it came to 15 millimeters a year indicating a misfit.



Their analysis revealed the presence of a diffused plate boundary running from the Panama fault east to a deep ocean trench off the coasts of Ecuador and Colombia.

Significance

- The plate movements may explain a mysterious series of very deep, large earthquakes known as the **Vityaz earthquakes**, which originated in the mantle between Fiji and Australia.
- With the Malpelo accounted for, the new circuit still doesn't close to zero and the shrinking Pacific Plate isn't enough to account for the difference either hence laying the ground for probable discovery of Plate number 58.

6.11. PERSEID METEOR SHOWER

Why in news?

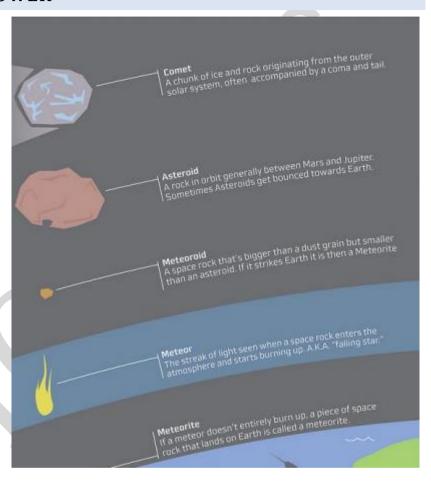
 Perseid Meteor Shower fell on Earth in August peaking on August 12.

What is Perseid Meteor Shower?

- Perseid meteor Shower is the dust of Comet Swift Tuttle which passes through Earth every year.
- The meteor shower is caused when debris heat up as they enter the atmosphere and burn up in a bright burst of light.
- When the debris is in space, they are called "meteoroids," but when they reach Earth's atmosphere, they're designated as "meteors."

Comet Swift-Tuttle

- Comet Swift-Tuttle, having a nucleus of about 16 miles (26 kilometres) wide, is the largest object known to repeatedly pass by Earth.
- The Comet last passed nearby Earth during its orbit around the sun in 1992. It will next pass by the Earth in 2026.



6.12. DRAFT GUIDELINES FOR STEM CELL RESEARCH

Why in news?

 The Indian Council of Medical Research (ICMR) in association with the Department of Biotechnology recently released the revised Draft Guidelines for Stem Cell Research, 2017 for comments. The draft guidelines seek to ensure that all research with human stem cells is conducted in an ethical and scientifically responsible manner.

Key Features of the Guidelines

- The draft guidelines are applicable to various stakeholders, including individual researchers, sponsors, and oversight/regulatory committees associated with both basic and clinical research involving human stem cells. The guidelines will not apply to research concerning non-human stem cells.
- Intellectual Property Rights (IPRs) associated with the outcome of research on stem cells may have commercial value. The option of sharing such IPRs should be indicated in the informed consent form which must be procured before the commencement of the research.

A National Apex Committee for Stem Cell Research and Therapy currently monitors and oversees research
activities at the national level. The Institutional Committee for Stem Cell Research approves and monitors
stem cell research (both basic and clinical research) at the institutional level. These committees will ensure
that review, approval and monitoring process of all research projects related to stem cells is carried out in
compliance with the national guidelines.

6.13. US APPROVES GENE THERAPY

Why in news?

• U.S. Food and Drug Administration has approved first gene therapy for the treatment of acute lymphoblastic leukaemia.

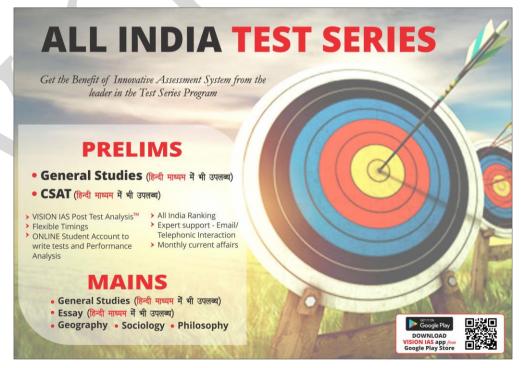
What is it?

- This gene therapy uses the patients own immune cells (T-cells) along with patient's white blood cells.
- The cells are first removed from the patient through a special blood filtration process, genetically encoded with a viral vector, reprogrammed, and returned to the patient.
- This type of immunotherapy is known as a CAR-T cell therapy (previously known as CTL019).

6.14. IIT TEAM MAKES "IMPLANTABLE PANCREAS"

- Researchers at the Indian Institute of Technology (IIT) Guwahati have successfully created an **implantable** bioartificial pancreas model grown within a 3D silk scaffold.
- The scaffold is coated with a semi-permeable membrane which allows insulin to be released in the blood stream but does not let immune cells enter to destroy the islet cells inside pancreas. The "pancreas", which encapsulates insulin-producing cells, is capable of naturally producing insulin in a sustained manner.
- The scaffold was embedded with drugs that suppress the immune system so that the body's system does not reject the implant.
- Further trials on animals and humans are yet to be carried out. If successful, it can be used for treating people with Type 1 diabetes.

TYPE 1 Diabetes		TYPE 2 Diabetes	
•	Type 1 diabetes is an autoimmune disease. It is	•	Type 2 diabetes is caused when your body loses sensitivity to
	caused when the body's immune system kills the		insulin or fails to respond to the insulin produced by the body.
	beta cells (cells responsible for producing insulin)	•	Type 2 diabetes has a stronger link to family history and
			lineage than type 1



7. SOCIAL

7.1. SC RULING ON TRIPLE TALAQ

Why in news?

 On August 22, Constitution Bench set aside the practice of instant triple talaq (talaq-e-bid'a) by a 3:2 majority in Shayara Bano case.

Positive outcomes of judgement

- Ensure equality by upholding fundamental rights provided under Article 14 and 21 of the Indian Constitution. It held that right to equality includes right against arbitrariness, thus, instant irrevocable triple talaq not preceded by the efforts at reconciliation is unconstitutional
- **Ensures Gender justice** for muslim women as triple talaq impacted their social status & dignity
- **Eradicate discrimination** on the ground of sex as provided under Articles 15 and 16
- **Uphold core constitutional provisions** by pronouncing personal laws could not override constitutionally guaranteed rights of individuals.

• Encourage establishment of mediation centres by legally and theologically informed Muslim intellectuals to help Muslim couples amicably resolve their marital disputes

Arguments against judgement

• Goes against constitutional protection – given under Article 26 as according to All India Muslim Personal Law Board, triple talaq is a 1,400-year-old practice.

• Unstable external reforms - There would always be problems in resumption of the matrimonial relationship between the divorced couple as it is considered to be both sinful and illegal by society. Thus, people needs to be educated

• Internal reforms were promised by AIMPLB - The board has decided to issue a code of conduct and warn those who give talaq without Sharia (Islamic law) reasons will face social boycott.

- Outside judicial domain It is not the court's role "to determine the true intricacies of faith". Also there is contention that Muslim Personal Law (Shariat) Act of 1937 has not codified talaq-e-bidat into statutory law, thus, it does not come under definition of Article 13.
- Existence of several schools of Islamic law Since case before apex court is about Hanafi law as Shayara Bano is Hanafi, the court should ideally examine authoritative Hanafi books and this school deems this practice as valid.

Conclusion

- It is hoped that the judgement would open up Islam to modern interpretations within the framework of its original sources and usher in the process of reforms in the Muslim personal law.
- The biggest challenge, however, would be to inform the Muslim masses that the abolition of talaq-e-bid'a is not against the Shariah but has, on the contrary, brought it closer to the original principles of Islam.
- In general, the decision should generate debate on following issues
 - o religion-based personal laws in the country, which generally places women in inferior position as compared to men
 - broader issues of constitutional rules versus social norms
 - o addressing the tension between freedom of religion and other fundamental rights.

Why need of this judgement after Shamim Ara case 2002?

- In 2002 case, a two-judge bench of the Apex Court had delegitimised this instant talaq. However, it was invalid only when it was not properly pronounced and preceded by attempts at reconciliation.
- In 2008, Justice Badar Durrez Ahmed of the Delhi High Court ruled in Masood Ahmed that three divorces at one go counted as just a single talaq.
- This latest ruling completely and unconditionally invalidates talaq-e-bid'a
- The Koranic procedure of talaq is the only way by which Muslim husband will be able to divorce his wife from now on.

Article 26 of the Constitution guarantees freedom "in matters of religion" to not only "every religious denomination" but also to "to any sect thereof". Thus, the Hanafi school enjoys constitutional protection.

7.2. VOLUNTARY NATIONAL REVIEW REPORT: SDGS

Why in News?

 Government recently presented Voluntary National Review Report at UN-High Level Political Forum.

What is Voluntary National Review?

- It is an effort towards SDG-Goal 17 as a part of follow-up and review mechanism.
- It aims to facilitate the sharing of experiences, including successes, challenges and lessons learned, with a view to accelerate the implementation of the 2030 Agenda.
- The current report encapsulates the progress made with Development Goals. respect to Goals 1, 2, 3, 5, 9, 14 and 17 and shows the linkages of one effort towards other Goals.

High level Political Forum (HLPF)

Established in 2013, under United Nations Conference on Sustainable Development (Rio+20) by replacing the Commission on Sustainable Development.

The Forum meets annually under the auspices of the Economic and Social Council for eight days.

It has a central role in the follow-up and review of the 2030 Agenda for Sustainable Development Goals.

SDGs	Efforts	Results
Goal 1: End Poverty in	Rapid growth (SDG 8) Supplement with increasing purchasing	Sharp reduction of poverty
All its Forms	power and fiscal health of the government is the key weapon	from 45.3% in 1993-94 to 22%
Everywhere	for combating poverty.	in 2011-12 to the economic
	Fiscal consolidation, inflation targeting, improved	growth after liberalisation.
	governance all around, accelerated infrastructure	
	development (SDG 9), curbing of corruption (SDG 16),	
	Aadhaar Act, Insolvency and Bankruptcy Act, Goods and	
	Services Tax (GST), further liberalization of Foreign Direct	
	Investment (FDI) and strategic disinvestment.	
	MGNREGA (SDG 8), Deen Dayal Antyodaya Yojana- National Livelihaada Missian provides skilled ampleument	
	National Livelihoods Mission provides skilled employment to marginalized communities (SGD-10).	
	 Housing for all by 2022 (Goal 11), National Rural Drinking 	
	Water Programme, (Goal 6) Under the Open Defecation	
	Free India by 2019 Goal 3 and 6).	
Goal 2: End hunger,	Programmes under the National Food Security Act and the	Significant progress has been
achieve food security	Public Distribution System are one of the largest food	made in improving food and
and improved nutrition	security initiatives in the world.	nutrition security.
and promote	Mid-Day Meal Programme. The latter provides nutritious	Stunting among children less
sustainable agriculture	cooked meals to 100 million children in primary schools.	than 5 years has declined from
	National Mission on Sustainable Agriculture, Soil Health	48% to 38.4% between 2005-
	Cards,	06 & 2015-16.
	Doubling farmers' income by 2022.	During the same period, the
	National Agricultural Marketing platform the Pradhan	percentage of underweight
	Mantri Fasal Bima Yojana, has also been launched	children has declined from
Goal 3: Ensure healthy	The National Health Policy 2017	42.5% to 35.7%. India has made significant
lives and promote well-	The National Health Policy, 2017, Mission Indeedhouseh for partially possineted and	strides in improving various
being for all at all ages	Mission Indradhanush for partially vaccinated and unvaccinated child.	health indicators.
being for an at an ages	unvaccinated cinia.	IMR has declined from 57 in
		2005-06 to 41 in 2015-16.
		Institutional deliveries have
		increased from 38.7% in 2005-
		06 to 78.9% in 2015-16.
Goal 5: Achieve gender	A flagship initiative is Beti Bachao Beti Padao (Save the	While much more progress
equality and empower	Girl Child Educate the Girl Child), under which State	remains to be made, a
all women and girls	Governments are implementing a range of measures	number of indicators
	suited to their local contexts to elevate the status of the	pertaining to the status of
	girl child.	women in India have moved in
	Maternity Benefit Act 2016, Shop and Establishment act	the right direction over the
	2016, strive to achieve gender justice.	years.

		CO 40/ - f
		68.4% of women were literate
		in 2015-16, as compared to
		55.1% in 2005-06.
		53% of women were
		independently using a bank or
		savings account in 2015-16
		from 15.1% in 2005-06.
Goal 9: Build resilient	• The objective of the Digital India initiative is to build a	The Bharat Broadband
infrastructure, promote	digitally empowered society by focusing on broadband	Network Ltd has provided
inclusive and	highways, mobile connectivity and Internet as well as e-	high-speed connectivity to
sustainable	Governance	18,434 local village councils,
industrialization and	The new Manufacturing Policy raises the output target	thus far. Till December 2016,
foster innovation	from 16% of GDP to 25% by 2025. India is developing into	there were 432 million
	a high-tech and global manufacturing hub because of the	internet users in the country.
	emphasis on 'Make in India' and a substantial increase in	internet users in the country.
	FDI inflows.	
	Start-up and Stand-up India, Atal Innovation Mission,	
	National Capital Good Policy 2016.	
Goal 14: Conserve and	National Fisheries Action Plan The development of an eco-	There has been a net
sustainably use the	friendly marine industrial and technology base as well as	increase of 112 square km in
oceans, seas and marine	implementing	the mangrove cover of the
resources	• Implementing the revised National Oil Spill Disaster	country.
	Contingency Plan.	
	• Further, the Sagarmala programme is focused on	
	improving port connectivity, port-linked industrialization	
	and coastal community.	
Goal 17: Revitalize the	Swachh Bharat Cess (Clean India Cess) has also been	
global partnership for	levied for mobilizing resources for the Clean India	
sustainable	Campaign.	
development	 Enhanced international cooperation is also being fostered 	
	through the leadership of the International Solar Alliance.	
	• Intended Nationally Determined contribution towards	
	global partnership for sustainability.	
	implemented to substantially enhance fiscal devolution to	
	States (from 32% to 42% of the central pool of tax	
	proceeds) and Local Governments.	
	Enhancing development cooperation with neighbouring	
	and other countries of the global South brings India's	
	innovation and expertise to the service of these countries	

Conclusion

• For effective transformation of country growth paradigm, in-sync with Sustainable Development Goals, government and associated stakeholders has been engaged in "Collective efforts and inclusive development".

7.3. SWATCH BHARAT ABHIYAN

Why in News?

• Various Civil Societies and assessment groups had come up with data about the sanitation on third year 2017 of Swatch Bharat Abhiyan.

Swatch Bharat Abhiyan (SBA)

- The campaign aims to achieve the vision of a 'Clean India' by 2nd October 2019 on the mark of 150th birth anniversary of Mahatma Gandhi.
- Launched, under two submission namely; SBA Gramin and SBA Urban, implemented by the Ministry of Drinking Water and Sanitation and the Ministries of Urban Development respectively.

Performance of the SBA

- Rural sanitation coverage has gone up from 39 per cent to 67 per cent in three years and over 230 million people in rural India have stopped defecating in the open.
- Five states, 186 districts and over 2, 31,000 villages have been declared as ODF.
- The number of schools with separate toilet facilities for girls has increased from 0.3 million (30%) to almost one million (91%) in last three years.
- **Quality Council of India** found that national usage of toilets from May-July 2017 was 91 per cent.
- An Independent assessment unit found out that more than 15 percent of 1000 respondents in a survey accepted that open defecation violation of dignity especially that of women and girls, and adds to the disease burden, especially of children below the age of five.

How different from earlier Initiatives?

- SBM had moved from outputs (number of toilets built) to outcomes (ODF villages).
- It emphasizes on sustainability by giving verification mechanism (90-day) on Post ODF-declaration, because it is possible that the village may witness some 'slip back' into open defecation due to old habits.
- Behaviour change campaigns through effective information, education and communication (IEC) such as;
 - "Darwaza Bandh" (on open defecation) campaign.
 - o Incentive based trained grass roots level motivators, or swachhagrahis, to stimulating community-level demand for toilets.
 - o Involving locally elected representatives, grass roots-level organisations, NGOs and school students and least one trained grassroots-level swachhagrahi in each village in India.

Way Ahead

- Safe Disposal of waste and water by **BUMT** (Build, Use, Maintain and Treat) mechanism is need of the hour.
- Sanitation is community problem, the focus on individual behaviour change would not yield intended results until **Community Led Total Sanitation (CLTS)** programme is adopted.
- There is no one size fit all policy for behaviour change, for this STATES AND LOCAL BODIES must be make empowered to utilize the devolution following the recommendations of the **14th Finance Commission**.

7.4. OBC RESERVATION

Why in news?

- The union cabinet has approved setting up of a commission under Article 340 to examine whether sub-quotas need to be created within central list of OBC reservation. It will also work out the mechanism, criteria, norms and parameters-- in a scientific approach-- for the sub-categorisation
- The creamy layer ceiling for the OBC category has been increased from existing Rs 6 lakh to Rs 8 lakh per annum for central government jobs by cabinet.
- A proposal to extend the creamy layer decision to the PSUs was under "active consideration" of the government.

Earlier Initiatives on Sanitation

In 1986, government launched the first nationwide sanitation program under Central Rural Sanitation Program (CRSP).

In 1999, CRSP had been restructured under **Total Sanitation Campaign (TSC)**, augmented with incentives scheme in the form of an award for total sanitation coverage, maintenance of a clean environment and open defecation-free panchayat villages, blocks and districts, called Nirmal Gram Puraskar.

Urban Sanitation Policy (NUSP) in 2008, instated a framework for cities to prepare City Sanitation Plans under the scheme of a State Sanitation Strategy. Urban Sanitation awards and ratings were also introduced, based on the benchmarking of sanitation services.

Centrally sponsored schemes such as JNNURM, Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), Rajiv Awas Yojna, etc. provide funds for creation of sanitation assets like individual toilets, community toilet blocks and wastewater disposal and treatment facilities at the city level.

In 2012, the TSC was renamed to **Nirmal Bharat Abhiyan** (NBA). On October 2, 2014 the campaign was relaunched as Swachh Bharat Abhiyan

Article 340

The President may by order appoint a Commission

- to investigate the conditions of socially and educationally backward classes within the territory of India and the difficulties under which they labour
- to make recommendations as to the steps that should be taken by the Union or any State to remove such difficulties and to improve their condition
- to recommend the grants that should be made for the purpose by the Union or any State

 A government bill was passed in Lok Sabha which seeks to accord constitutional status to the National Commission for Backward Classes.

Terms of reference of commission

- To examine the extent of inequitable distribution of benefits of reservation among the castes/ communities included in the broad category of OBCs in the Central list.
- To work out the mechanism, criteria, norms and parameters, in a scientific approach, for sub-categorization within such OBCs.
- To identify the castes/communities in the Central List of OBCs and classifying them into their respective subcategories.

Arguments in favor of sub-quotas

- The National Commission for Backward Classes had given a similar proposal in 2011.
- The Supreme Court in its order in Indra Sawhney case observed that there is no Constitutional or legal bar to a State categorizing backward classes.

Possible impacts if sub-quota is implemented

 It will ensure that dominant OBC castes do not get all the benefits as the most backward OBC groups will compete among themselves for government jobs, educational seats etc. rather than with the better-off OBC castes.

Parity check

The panel will report on the extent of inequitable distribution of benefits, including quotas, among the OBCs and work out scientific norms of sub-categorisation

Nine States already have OBC sub-cat-egorisation, but the Cabinet move would take the concept to the Central level too

POLITICAL MEANING

Politically, this means an outreach to more backward castes among the OBCs but it may mean that the quotas available for betteroff OBC groups shrink. The Centre cannot breach the cap of 50% imposed on quotas by the SC

OBCs as a whole are estimated to number anywhere between 41%-52% of the country's total population

- It may trigger political churning that could bring together a coalition of non-dominant castes, seen by some as Mandal 2.0 moment for Indian politics
- It may adversely impact the more advanced castes among the OBCs as sub-category quota can come only from within 27% quota pie because of 50% cap to total reservation by Supreme Court.

7.5. LOCATION-SPECIFIC MERGERS OF SCHOOLS

Why in News?

- The Centre is looking to execute location-specific mergers of nearly 260,000 small government schools as part of a rationalization process to ensure maximum use of resources, following the Rajasthan model of "merging" government schools with low enrolment.
- Human Resource Development Ministry has released guidelines for public comments regarding the same.

Background

- Sarva Shiksha Abhiyan (SSA) has been operational since 2000-2001 to provide for a variety of interventions for universal access and retention, bridging of gender and social category gaps in elementary education and improving the quality of learning.
- SSA interventions include, opening of new schools, construction of schools and additional classrooms, toilets and drinking water, provisioning for teachers, free textbooks & uniforms and support for improving learning achievement levels, etc.
- Further after the enactment of **Right to Education Act, in 2009**, Right to Education became the fundamental right.
- The title of the RTE Act incorporates the words 'free and compulsory' which casts an obligation on the government and the local authorities to provide and ensure admission, attendance and completion of elementary education by all children in the 6-14 age group.
- Therefore, the focus of the government was excessively on building new schools to make education accessible for all children in the country.
- As part of the Sarva Shiksha Abhiyan, the government created some 367,000 schools. At present, it has more than 1.5 million schools across all levels.

Why consolidation is needed?

- According to the government it is time for a "re-look at the expansion of schooling facilities made in previous years and call for a nationwide consolidation of schools".
- As per the draft guidelines, as of 2015-16, at least 187,006 primary schools (Class I-V) and 62,988 upper primary (Class VI-VIII) schools were running with fewer than 30 students. Besides, 7,166 schools had zero enrolment. Further, some 87,000 schools have a single teacher.
- It has been noted that the surplus small schools adversely affect the:
 - provisioning of resources
 - o learning process, and
 - monitoring and supervision

Solution suggested by the Guidelines

- To reallocate the resources in the "best interest of the children" and minimize under-utilization and wastage
 the ministry will reallocate staff and other resources from schools where they are in excess to the schools
 where they are needed.
- The children and resources, within a habitation, spread over two or more small schools are suggested to be combined together. It will not only provide a better teaching-learning environment but will also make schools RTE compliant.
- The merged schools post the rationalisation process must necessarily adhere to the neighbourhood norms defined in each state's RTE Rules.

Challenges

- Activists fear that as the distance between home and school increases for the students of the closed schools, the poorer among them would not be able to bear the cost of commuting and drop out.
- This can go against the intentions behind Sarva Shiksha Abhiyan and the move of making Right to Education universal.

Way Forward

- The Indian school sector needs a big shake up—both in terms of quality and infrastructure requirements. Any attempt to reform the sector is a positive step but it must happen in a time-bound manner
- The focus now must shift to outcome at schools than just input based model prevalent for years

7.6. MADHYAMIK AND UCHCHTAR SHIKSHA KOSH

Why in News?

The Union Cabinet has accorded its approval for creation of a non-lapsable pool in the Public Account for secondary and higher education known as "Madhyamik and Uchchtar Shiksha Kosh" (MUSK).

Background

- During the 10th Plan, an education cess of 2% on all central taxes was imposed to make available additional resources for basic education/elementary education to augment the existing budgetary resources.
- A need was felt to give a similar fillip to the effort of the Central Government in universalizing access to secondary education and expanding the reach of the higher education sector.
- The proposal for the creation of such a fund was first proposed by the ministry of Human Resource Development in July 2010. But it was not accepted.
- The issue was raised again in February 2016, which was later accepted by the **Department of Economic Affairs.**

Education Cess Rate:

 A cess is a tax that is levied by the government to raise funds for a specific purpose.

The rate at which education cess is calculated is a combination of the two types of cess applied on the taxable income.

- The education cess the rate is 2% of the tax payable and
- The Secondary and Higher Education Cess (SHEC) the rate is 1% of the tax payable. Together they form the education cess rate of 3% of the tax payable.

- As per the provisions of Section 136, of the Finance Act 2007, a 1% cess on the central taxes called the "Secondary and Higher Education cess" is to be imposed to provide finance and promote the secondary and higher education.
- Recently the Union Cabinet has approved the creation of MUSK.

About the Fund

- Administration and maintenance of the MUSK pool would be done by the Ministry of Human Resource Development.
- The Ministry of Human Resources Development can allocate funds for any future programme/scheme of secondary and higher education, based on the requirement, as per prescribed procedures.
- The expenditure on schemes of the Department of School Education & Literacy and Department of Higher Education would be initially incurred from the gross budgetary

support (GBS) and the expenditure would be financed from the MUSK only after the GBS is exhausted.

Utilization of the Fund

The fund would be utilised for:

- For Secondary Education-
 - ✓ ongoing Rashtriya Madhyamik Shlksha Abhiyan Scheme
 - ✓ National Means-Cum-Merit Scholarship Scheme and
 - ✓ National Scheme for Incentives to Girls for Secondary Education.
- For Higher Education-
 - ✓ Ongoing Schemes of Interest Subsidy and contribution for guarantee funds, Scholarship for College & University Students
 - ✓ Rashtriya Uchchtar Shiksha Abhiyaan
 - Scholarship (from Block Grant to the institutions) and National Mission on Teachers and Training.
- The fund would be operationalised as per the present arrangements under Prarambhik Shiksha Kosh (PSK) wherein the proceeds of cess are used for Sarv Shiksha Abhiyan (SSA) and Mid-Day Meal (MDM) Schemes of the Department of School Education & Literacy.
- The MUSK would be maintained as a Reserve Fund in the **non-interest bearing** section of the Public Accounts of India.

7.7. THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC): REVISED RULES

Why in news?

The National Assessment and Accreditation Council (NAAC) has launched a revised accreditation framework.

Why is there a need for new law?

- NAAC has been facing criticism for poor rigour and subjectivity.
- In the earlier system, the process of accreditation was heavily reliant on field inspection by the officials of universities and colleges leading to high subjectivity in the process.

NAAC

- It is an autonomous body established by the University Grants Commission in 1994
- It undertakes periodic assessment and accreditation of institutions of higher education and its units across the country.

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What is the new process?

- In the new framework, there will be two stages of assessment, of which 70% will be done off-site at NAAC. Institutions keen to be assessed should submit an Institutional Information for Quality Assessment (IIQA) and Self Study Report (SSR) to NAAC. The data submitted will then be validated. Punitive measures have been put in place for colleges submitting incorrect data. After this assessment, 30% of ranking is based on on-site grading by NAAC officials.
- A Student Satisfaction Survey has also been introduced in the accreditation process. NAAC will consider responses from 10% of the total enrolled students, and the result of the survey will be a part of the overall cumulative grade point average (CGPA) awarded to the institution.
- The Revised Accreditation Framework is ICT enabled, objective, transparent, scalable and robust.

7.8. PRICE CAP ON KNEE IMPLANTS

Why in News?

73

• Recently, NPPA capped the prices of knee implants, in a move to reduce product prices by as much as 69%.

www.visionias.in

 The central drug regulator has requested the Union Ministry of Health and Family Welfare to set up a committee to work out ways to bring heart valves, orthopaedic implants and intra ocular (eye) lenses under the National List of Essential Medicines (NLEM).

Background

NPPA in February 2017, capped coronary stents prices to make them more affordable for patients.

Significance

Increase Affordability and accessibility:
 It will check out-of-pocket expenditure on drugs and increase accessibility of sophisticated medical implants to all sections of the society.

National List of Essential Medicines (NLEM)

- NLEM 2015 contains 376 medicines.
- Criteria for inclusion into this list includes public health emergency, cost effective medicine etc.
- Core Committee formed by the Ministry of Health, reviews and revises the medicines in the NLEM
- Once a drug or medical device is included in NLEM, its price can be capped by NPPA

National Pharmaceutical Pricing Authority [NPPA]

- It is an independent body under **Department of**Pharmaceuticals under **Ministry of Chemicals and Fertilizers**.
- Its functions are:
 - ✓ To fix/revise the controlled bulk drugs prices and formulations.
 - ✓ To enforce prices and availability of the medicines under the Drugs (Prices Control) Order, 1995/2013.
 - ✓ To recover amounts overcharged by manufacturers for the controlled drugs from the consumers.
 - ✓ To **monitor** the prices of decontrolled drugs in order to keep them at reasonable levels.
- **Check unethical pricing:** Move will curb exponential pricing markup by companies and will benefit common people.

Concern

- Hindering innovation: Price cap might not incentivize company to increase their R&D budget. International
 pharma companies may withdraw specialised products from Indian markets that involve expensive research
 and development.
- **Non conducive environment**: The current duty structure favors imports constituting about 75 % of the Indian medical technology, reducing the growth potential of the indigenous medical technology industry.
- **Dominance of foreign company**: MNCs dominate the high-end medical equipment segment, while domestic firms manufacture low technology products such as disposables.
- Short term remedy: In a market dominated by big players, a price cap can be a band-aid at best. In the longrun, the move could deprive the patient of the latest products and defeat the DGCI's intention of benefiting the common man.
- Cost of the implant is only a part of the expense of a knee replacement surgery. The hospitals may raise other associated costs which would lead to overall expensive surgery.

Way Forward

- There is a need of two pronged strategy to make medicines and medical devices affordable:
 - ✓ Government should **monitor expenditures** jointly in partnership with the community, use regulation where needed, and raise public spending on health.
 - ✓ Promote generic medicines.

7.9. INTENSIFIED MISSION INDRADHANUSH

Why in News?

- Union Health Ministry plans to achieve full immunisation coverage under its 'Mission Indradhanush' by 2018.
- The plan is to launch Intensified Mission Indradhanush (IMI) from October, 2017.

Highlight

• Greater focus on urban areas and other pockets of low immunization coverage: It will be done through mapping of all underserved population in urban areas and need-based deployment of ANMs (auxiliary nurse midwife) for providing vaccination services in these areas.

- Monitoring and accountability mechanism: Centre will monitor the programme at different levels starting from cabinet secretary at the Centre to chief secretaries in states
- Emphasis given on integration of IMI sessions into routine immunization microplans after completion of its four rounds.
- IMI will focus on children up to 2 years of age and pregnant women who have missed out on routine immunization. However, vaccination on demand to children up to 5 years of age will be provided during IMI rounds.
- A distinctive feature is that there is greater focus on convergence with other ministries, especially women and child development, Panchayati Raj, urban development, youth affairs etc.

Intensified Mission Indradhanush will primarily focus on:

- Areas with vacant sub centres-ANM not posted or absent for more than 3 months
- Unserved/low coverage pockets in sub-centre or urban areas, due to issues around vaccine hesitancy of program reach; sub centre/ANM catering to populations much higher than norms

Universal Immunization Programme (UIP) 1985

- It prevents mortality and morbidity in children and pregnant women
- Vaccination is provided for 12 life threatening diseases: tuberculosis, diphtheria, pertussis (whooping cough), tetanus, poliomyelitis, measles, Hepatitis B, Diarrhoea, Japanese Encephalitis, rubella, Rotavirus and Pneumonia (added in May 2017)

Mission Indradhanush. 2014

- It is a **strategic endeavour** under Universal Immunisation Programme 1985
- It targets to immunize all children below two years of age either unvaccinated, or are partially vaccinated as well as all pregnant women.
- Mission Indradhanush, depicting seven colours of the rainbow, targets to immunize all children against seven vaccine preventable diseases namely Diphtheria, Pertussis, Tetanus, Childhood Tuberculosis, Polio, Hepatitis B and Measles.
- In addition to this, vaccines for Japanese Encephalitis, Haemophilus influenza type B, inactivated polio vaccine, Rotavirus vaccine and Measles Rubella vaccine are also being provided in selected states.
- Four phases of Mission Indradhanush have been completed in 528 districts across the country with 75% of children below 12 months of age were fully immunised by 2016-end, compared to 65% in 2013.
- Villages/areas with three or more consecutive missed routine immunization sessions.
- High risk areas identified by the polio eradication program that are not having independent routine immunization sessions and clubbed with some other routine immunization sessions such as;
 - ✓ Urban slums with migratory population
 - ✓ Nomadic sites (brick kilns, construction sites, other migrant settlements-fisherman villages, riverine areas with shifting populations, underserved and hard-to-reach populations-forested and tribal populations, hilly areas, etc.)
 - ✓ Areas with low routine immunization coverage identified through measles outbreaks, cases of diphtheria and neonatal tetanus in the last two years.

7.10. INFANT MORTALITY RATE

Why in News?

• As per latest data, IMR has reduced by 58% in India during the period of 1990-2015 which is more than the Global decline of 49% during the same period.

What is IMR?

- The **Infant Mortality Rate** is the number of deaths under one year of age occurring among the live births in a given geographical area during a given year, per 1,000 live births occurring among the population of the given geographical area during the same year.
- The latest government data on child health indicators shows that India's IMR is now at 39 per 1,000 live births as against 40 the previous year.
- The target for IMR under National Health Mission is 30 per 1000 live births by 2020.

Various steps taken by the Government (under the National Health Mission)

• Under Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakaram (JSSK), the number of institutional deliveries have improved. These programmes entitles all pregnant women delivering in public

health institutions to absolutely free ante-natal checkups, delivery including Caesarean section, post-natal care and treatment of sick infants till one year of age.

- India Newborn Action Plan (INAP) was launched in 2014 to make concerted efforts towards attainment of the goals of "Single Digit Neonatal Mortality Rate" and "Single Digit Stillbirth Rate", by 2030. Under this plan various Newborn Stabilization Units (NBSU) and Kangaroo Mother Care (KMC) units have been established for care of sick and small babies.
- Ministry of Health and Family Welfare launched MAA-Mothers' Absolute Affection programme in August 2016 for improving breastfeeding through mass media and capacity building of health care providers in health facilities as well as in communities.
- Village Health and Nutrition Days (VHNDs) are observed for provision of maternal and child health services and creating awareness on maternal and child care including health and nutrition education.
- Universal Immunization Programme (UIP) is being supported to provide vaccination to children against many life-threatening diseases.
- Rashtriya Bal Swasthya Karyakram (RBSK) for health screening, early detection of birth defects, diseases, deficiencies, development delays including disability and early intervention services has been operationalized to provide comprehensive care to all the children in the age group of 0-18 years in the community.
- **Iron and folic acid (IFA) supplementation** for the prevention of anaemia among the vulnerable age groups.
- Various trainings are being to build and upgrade the skills of health care providers in basic and comprehensive obstetric care of mother during pregnancy, delivery and essential newborn care.
- Low performing districts have been identified as High Priority Districts (HPDs) which entitles them to receive high per capita funding, relaxed norms, enhanced monitoring and focused supportive supervisions and encouragement to adopt innovative approaches to address their peculiar health challenges.

Way Forward

- There have been improvements in terms of various health indicators in the country yet there are many districts and regions that require improvement. The key lies in spreading awareness among the people.
- Oversight and governance needs to be improved. It can be done through civil society organizations and information technology (IT)-enabled platforms
- There is requirement of addressing environmental factors such as lack of nutrition, safe water, sanitation and hygiene etc.

The **National Health Mission** is India's flagship health sector programme to revitalize rural and urban health sectors.

The National Health Mission comprises of **4 components** namely the National Rural Health Mission, the National Urban Health Mission, Tertiary Care Programmes and Human Resources for Health and Medical Education.

The National Health Mission represents India's endeavour to expand the focus of health services beyond Reproductive and Child Health, so as to address the double burden of Communicable and Non-Communicable diseases as also improve the infrastructure facilities at District and Sub-District Levels.

SDG 3 provisions related to child and maternal health-

By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1.000 live births.

Ama Sankalpa in Rayagada of Odisha

- This initiative has brought down the infant mortality rates in district from 48 to 33 out of 1,000 in 1 year
- Measures included
 - keeping track of pregnant women's expected date of delivery
 - ✓ upgrading primary health centres
 - directing Anganwadi and ASHA workers, ANMs to identify pregnant women in high risk category & bring them to Maa Gruhas
 - operating Maa Gruhas round the clock to ensure medical assistance and nutritional food to women
 - promoting vegetable cultivation in rural parts of the district through Integrated Tribal Development Agency.

7.11. FAMILY PARTICIPATORY CARE

Why in news?

• Ministry of Health and Family Welfare had released the Operational Guidelines for Planning and Implementation of Family Participatory Care (FPC) for What is Family Participatory Care (FPC)?

improving new-born health.

 The FPC initiative is under Norway India Partnership Initiative (NIPI) which aims to reduce neonatal and infant mortality by strengthening capacities and improving access and utilization of public health services.

Why is FPC needed?

- The increasing institutional delivery and neonatal care is stressing the need for Family Participatory health care services.
- Various data showed that 10 percent of total neonatal discharge from the new born care unit survives for only one year.
- Of the 27 million babies born in India annually, approximately 13% (3.5 million) are born preterm and 28% (7.6 million) with low birth weight, increasing their risk of dying in the neonatal period.
- Hospitalization of sick neonatal separates the baby from his/her mother which generates high-stress level, helplessness and limits the decision making regarding their own baby.

What is Family Participatory Care (FPC)?

FPC means involving the family of sick and preterm new-born as partners in caregiving and decision making in the new born care facilities.

Benefits of FPC

Family	Newborn	Staff
 Greater parent and family satisfaction More informed parents Better coping with stress and anxiety Enhanced parentinfant attachment and bonding Improved breastfeeding rates Better confidence and mental health among mothers Better communication between parents and health staff 	 Better weight gains Shorter length of hospital stay Higher breast feeding rates before discharge Improved long term outcomes Reduced need for rehospitalization 	Work sharing Better quality of care Better allocation of resources

Operationalization of FPC

- Parents-attendants are involved with Special New-born Care Units (SNCU) for maintaining hygiene, alerting the staff if they notice anything unusual with baby.
- SNCU will sensitize the parents about Kangaroo Mother Care (**Skin-to-skin contact** between the baby's front and the mother's chest).
- FPC envisions to build the capacities of parentsattendants in new-born care through a structured training programme.
- The guidelines stressed the need for building infrastructure, attitudinal change and extended care giving through ASHA workers.
- FPC action initiative will be an apparatus for India New-born Action Plan (INAP) 2014.

India New Born Action Plan

- Aimed at achieving single digit Neonatal Mortality and Stillbirth Rate by 2030.
- Implemented within the existing Reproductive, Maternal, New-born, Child and Adolescent health (RMNCH+A) framework of the National Health Mission (NHM).
- Build and strengthen surveillance capacity and expand the availability of standardized and accurate data on congenital anomalies.

7.12. SURROGACY BILL

Why in News?

• A Parliamentary Standing Committee has recommended certain changes to the bill keeping in mind the changes that have taken and are taking place in the Indian society.

Surrogacy Laws in India

• In 2002, the Indian Council of Medical Research (ICMR) laid out guidelines for surrogacy, which made the practice legal, but did not give it legislative backing that protected, to an extent, the surrogate mother and the commissioning parents.

- It prohibited sex-selective surrogacy, required the birth certificate to only have the names of commissioning
 - parents, required one of the commissioning parents to be a donor, required a life insurance cover for the surrogate mother and ensured right to privacy of the mother and the donor, among other things.
- However, the necessity of legal protection was enforced through the case of Baby Manji vs Union of India.
- A draft **ART** (Assisted Reproductive Technology) Bill was formulated in 2010, but was never passed as a law. There were various loopholes in the bill.
- A study conducted in July 2012, backed by the UN, put the surrogacy business at more than \$400 million with more than 3000 fertility clinics all over the country.
- 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.

 In light of this, the Surrogacy (Regulation) Bill, 2016 was introduced in Lok Sabha which was then referred to the standing committee.

Background

- As per the provisions under the bill, surrogacy would be allowed only for infertile Indian married heterosexual couples where the woman is between 23-50 years and the man is between 26-55 years.
- The couple cannot have a surviving child either biological or adopted.
- Under the bill, all surrogacy clinics will have to be registered, the surrogate mother cannot be paid directly
 and there will be national and state surrogacy boards which will be the regulating authorities for the
 practice.
- The bill also disallows childless or unmarried women to be surrogate mothers

Observations made by the Committee

- It has faulted the "altruistic-surrogacy-for-married couples" premise behind the Surrogacy (Regulation) Bill, 2016. The definition of 'altruistic' surrogacy, according to the panel, 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.
- It has further recommended that couples, including the ones in a live-in relationship, should have the freedom to choose their surrogates from both within and outside the family.
- It also **questioned the narrow premises of the bill** as it did not include live-in partners, widows and divorced 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.
- However, it supported the provisions of the bill that debar foreigners from availing surrogacy services in India.
- The panel also agrees that **no women should be a surrogate more than once** "surrogacy cannot be a way out for women opting for surrogacy due to poverty and should not be allowed as a profession".
- The committee has also recommended the creation of **a national database** where surrogacy cases are tracked.

Manji vs Union of India

A Japanese couple commissioned a surrogate mother in India but they ended in a divorce. The single male parent wasn't granted custody of the child and the mother refused to accept it. Japan gave the child humanitarian visa and allowed the grandmother to take the child on behalf of her son, given his genetic relation with the baby. During the case, however, the Supreme Court recognised that the parent of a surrogate child may be a male and recognised surrogacy as a positive practice.

The term "altruistic surrogacy" generally

refers only to those arrangements in which the surrogate does not receive compensation

for her services beyond reimbursement for

other

reasonable

and

medical

costs

pregnancy-related expenses.

Way Forward

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. In this direction, the recommendations by the panel are a welcome step.

7.13. MINIMUM WAGE UNDER MGNREGA

Why in news?

Nagesh Singh panel gave recommendations regarding wages paid under MGNREGA.

Background

In 2014, an expert committee, headed by Professor Mahendra Dev held that MGNREGA workers should be

paid at least the minimum wages paid to agricultural workers in the states, if not more, to meet basic needs.

This year's MGNREGA budget of Rs 48,000 crore is the highest ever but the wage revision this year was at a mere 2.7 percent (the lowest in the scheme's ten-year legacy) leading to a mere Rs 1-3 per day hike in several states. Due to this, MGNREGA wages are far lower than minimum wages paid in 17 states and Union Territories.

Recommendations

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- There is no need to maintain parity in minimum wages paid by various states under MGNREGA.
- Divergence in pay: Disparity is found between the minimum wages and NREGA wages due to
 - Minimum Wages are fixed by the states which arbitrarily increased it without following any scientific principles. Wage Indices In India
- Panel recommended to switch over to CPI-R from **CPI-AL** for wage calculation because
 - ✓ Comprehensive picture of inflation in rural areas: CPI-Rural index is a better representative of rural households and will protect workers from inflation as it takes in to account the changes in prices for the entire rural population of the country.

CPI- Agricultural Labourers (CPI-AL): Computed by Labour Bureau under Ministry of Labour

Minimum wage: It guarantees bare subsistence needs of

✓ They are fixed under the Minimum Wages Act,

✓ These are declared at the national, state, sectoral

Living Wage: It is the level of income for a worker which

will ensure a basic standard of living including good

health, dignity, comfort, education and provide for any

Fair Wage: It is that level of wage that not just maintains a level of employment, but seeks to increase it keeping

in perspective the industry's capacity to pay.

Revision of minimum wage rates is based on a 'cost

life like food, shelter and clothing.

and skill/occupational levels.

of living index'

contingence.

- CPI-Rural Labourers (CPI-RL): Computed by Labour Bureau under Ministry of Labour.
- CPI-Rural (CPI-R): Computed by CSO under Ministry of Statistics and Programme Implementation.

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NREGA wages are fixed by Central Government using CPI-AL, which is based on the consumption pattern of 1983. On the other hand, CPI-R is based on present consumption pattern.

7.14. CHAMPIONS OF CHANGE INITIATIVE

- It was organised by the NITI Aayog where Prime Minister of India interacted with young entrepreneurs
- It was aimed at bringing together young businessmen at a place and share ideas in an effort to bring together diverse strengths for the benefit of the nation and society
- Themes of discussion: Include building New India by 2022, Doubling Farmer's Incomes, Creating Cities of Tomorrow, Taking Forward Make in India, Reforming Financial sector, Building World-Class Infrastructure.
- PM said the different groups of entrepreneurs could be attached with the relevant ministries on a permanent basis to suggest policy initiatives.

8. CULTURE

8.1. 75TH ANNIVERSARY OF QUIT INDIA MOVEMENT

Why in news?

Recently the nation celebrated 75th Anniversary of the Quit India Movement. Theme of this year's celebration was "Sankalp se Sidhi" urging the people to take a pledge to fight poverty and malnutrition.

Quit India Movement

- In July 1942 Congress Working Committee at Wardha passed a resolution to end British Rule in India. It also declared that free India will be against the aggression of Nazism, Fascism and Imperialism.
- Reasons behind the launch of Quit India Movement:
 - o Failure of Cripps Mission due to lack of British will to address Indian demands.
 - o Public discontent due to increased wartime disparities such as price rise, shortage of food items etc.
 - Reversals faced by British in South-East Asia enhanced popular willingness to overthrow British rule from India.
 - o Britishers' discriminatory behavior against Indian refugees in south-east Asia
- On August 8, 1942, Quit India Movement was launched from Gowalia Tank, Bombay. However, all the leader including Mahatma Gandhi, J.L. Nehru, Patel, Azad etc. were arrested.
- The movement saw massive public upsurge and attack on symbols of authority especially in Eastern UP, Bihar and Bengal.
- During the movement
 - Underground activities provided line of command.
 - o Parallel government was carried on in Balia, Tamluk and Satara.
 - o Participation of youth, women, workers, peasants etc. was seen.

8.2. PROMOTION OF TRADITIONAL SPORTS

Why in news?

Sports Minister has recently notified in Rajya Sabha about the promotion and development of traditional sports through an exclusive component "Promotion of Rural, Indigenous and Tribal Games".

Background

- Sports is a state subject and the responsibility of development and promotion of sports falls on state government.
- SAI has revamped the Khelo India proposal to include the exclusive component "Promotion of Rural, Indigenous and Tribal Game" for promotion of rural and indigenous games.
- SAI promoted Indigenous Games and Martial Arts (IGMAs) are as follows:
 - o **Kalaripayatu** It is a martial art form which originated in Kerala, originally from northern and central parts of Kerala and southern Tamil Nadu.
 - o Silambam It is a weapon based martial art practised in Tamil Nadu. Bamboo staff is used as weapon.
 - Archery It is a sport from Jharkhand in which a bow and arrow are used. Traditionally Archery was practised for hunting and recreational purposed.
 - **Kabaddi** This is a team sport in which two teams compete to remain outnumbered till the end. This game is widely played in Telangana, Andhara Pradesh and Maharashtra.
 - Malkhamb This traditional sport is a combination of acrobatics and aerial yoga. It is performed on a
 wooden pole and the player demonstrates wrestling grip throughout the performance.
 - o Mukna It is a form of folk wrestling from Manipur.
 - o Thangta It is a martial art form from Manipur and traditionally known as Huyel Langlon.
 - o **Khomlainai** It is a martial art performed by the Bodo community in Assam.
 - o **Gatka** It is a traditional combat training in which wooden sticks are used to simulate swords.

8.3. BUDDHA STATUE AT GHANTASALA

- A proposal to build a 70 ft. Buddha statue in Ghatasala in Krishna district in Andhra Pradesh has been passed by the government.
- The new facility will be themed on the **Mahaparinirvana** of the Buddha.
- Buddha will be lying on the right flank, his head resting on a cushion or on his right elbow, supporting his head with his hand.

Mahaparinirvana

• The word "Mahaparinirvana" refers to the **ultimate state of Nirvana (everlasting, highest peace and happiness)** entered by an Awakened Being (Buddha) or "arhat" at the moment of physical death; but it can also refer to that same state reached during such a being's physical lifetime too.

Significance of Ghantasala

• Ghantasala was a renowned Buddhist centre. Excavations in the late 19 and early 20th century led to the discovery of Maha Chaitya or Stupa.



9. ETHICS

9.1. MEDICAL ETHICS

In medical sector the overcharging is rampant, be it in terms of prescription of unnecessary diagnostic tests, prescription of expensive medicines, inflation of hospital bills or insurance company frauds. Recently, NPPA's decision to put a price cap on knee implants also shows degrading medical ethics as hospitals and doctors were indulging in unethical profiteering. The ethical issues in such unfair pricing can be as follows:

- Low trust patient-doctor trust is reducing as awareness is increasing about medical malpractices. To reduce trust gap, initiative like Poona Citizen Doctor Forum could be taken where public database of ethical doctors is created by patients.
- **Shift from service orientation to commercialization** Doctors are given inducements to prescribe expensive drugs which prompts them to prescribe it even when they are not needed.
- **Professional misconduct** It is considered as an unethical conduct under Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002.
- **Undermine reputation** It not only undermines reputation of individual doctor or hospital but also hurts image of India as provider of high quality & affordable healthcare to foreign patients.
- **Unfair** It is unfair for the patients who may slip down in poverty due to high expenditure on healthcare services. It is also an unfair trade practice as it forces industries to collude with hospitals to maintain sales and remain in competition.
- **Promotes greed** Although hospitals should have some margins as it provides facilities such as sterilization, storage etc. yet margins can't be exorbitant and irrational. In NPPA report, the average margin on a full set of orthopaedic implant seems to be 313 per cent.
- **Information asymmetry** At times lack of detailed brief about the benefits or limitations of the new technology, patient opt for the newer and costlier technology just on doctor's word

As, patient trusts the doctor for his most important thing, that is life, doctors should feel their inherent responsibility to follow the following medical ethics:

- **Patient's first** Health care is a noble art where doctors should compassionately treat people irrespective of class, nationality, gender, caste etc.
- Fair charges which should be known to the patient in advance
- Values of care and trust Doctors should develop trust with patients and support the patients psychologically through polite interactions
- **Transparency** regarding various treatments available and pros and cons of the same so that patient can make informed decision
- **Confidentiality** personal information shared by patient in the course of treatment should not be disclosed by the physician
- **Professionalism and beneficence** A physician should uphold the dignity and honour of his profession where his prime objective should be service to humanity
- Sympathy The doctor should be sensitive to the patient's pain and sufferings during treatments

This is not to say that doctors should charge bare minimum. Medical practitioners also have a legitimate right to appropriate levels of remuneration but balance needs to be struck between professional virtues and business considerations.

9.2. ETHICS OF WINNING IN ELECTION AT ALL COSTS

Free, fair and transparent elections are the hallmark of democracy. This ensures that people have faith in democracy. For making election ethical, all roleplayers including voters, organisers as well as political parties should take their duties and responsibility seriously. There should be accountability to people

Election Commissioner recently gave a warning regarding new normal of political morality. It was a brave and assuring warning that institution of conducting and administering elections recognizes deforming political culture.

There are various ethical issues involved in placing maximum premium on winning at all costs:

- Unethical means to achieve ends such as poaching, bribing of legislators, misuse of state machinery is being rephrased as smart political management or resourcefulness and has become the new normal of Indian polity,
- **Procedural breach** as has been pointed out by EC in its use of powers under Article 324 to invalidate votes on account of breach of due process
- Focus on power than serving Predatory attitude of political parties bring the democratic process to a new low
- Promotes distrust— among and within political parties as defector is associated with no guilt or possible criminality.
- **Cynicism in public** there would be lack of faith and respect for the election outcome.
- **Dominating attitude** Such tactics undermine checks and balances of a constitutional framework and also can be used by parties later on to suppress dissent.
- Thwarting of democratic principles and rule of law Increasing importance of money power in elections may result in policy capture by a handful of people

Degradation of political culture also goes against the values of diversity. It should serve as a reminder to the institutions about the need to speak up and speak back to the powers and reassert & reclaim their role in a layered and intricate polity. In general political parties should follow the following ethical principles:

- **Transparency** in dealing with all their finances and not resort to bribing which will ensure full trust of people in electoral process
- **Internal democracy** to enable the members to raise their voices and elect leaders who have required leadership skills as well as good moral character
- **Public service spirit** they should put interests of their communities above their own or those of their parties
- Respecting diversity The party should be accommodative and they should treat people with respect for their beliefs & choices
- **Honesty and integrity** Be truthful and not mislead people in any way by making false promises. Members of political parties should make sure that their conduct is above reproach.
- **Commitment to work** They should not emphasize on hiring PR firms to shape public opinion online rather their work should speak for itself
- Emphasizing right means This means following the rule of law in letter and in spirit.

In fact our political culture needs to be such that it incorporates ethical standards for all the persons involved in the election process. As of now, it seems that our political culture is hitting a new normal where certain unethical practices in elections are not witnessing registration of protests by even citizens, the biggest stakeholder of a democracy. They need to be active part of polity in order to upheld rule of law, liberty, equality etc.



10. MISCELLANEOUS

10.1. OLYMPIC TASK FORCE

Why in news?

Prime Minister's Olympic Task force has submitted its report with a comprehensive action plan to improve the performance of Indian Sportspersons in Olympic Games.

Background

- In the background of performance of Indian Sportspersons in 2016 Olympic Games, Prime Minister has announced formation of Olympic Taskforce in 2016 to prepare a plan for **effective participation of Indian Sportspersons in next three Olympics** i.e. 2020, 2024 and 2028.
- The **taskforce members** were P.Gopichand, Abhinav Bindra, Rajesh Kalra, OmPathak, Viren Rasquinha, S. Baldev Singh, Prof. G. L. Khanna and Sandeep Pradhan.

Major Suggestions of Olympic Taskforce

- The Olympic Taskforce has suggested **restructuring the role of Sports Authority of India (SAI)** from just a facilitator to being a provider of training and preparation of elite athletes.
- SAI should provide academies of excellence for elite athletes to train them in train-to-compete and train-to-win stage.
- Replace the bureaucrats in SAI with qualified professionals and ending the concept of deputing government officers and professionalizing the body by hiring the specialists on contractual basis with clearly defined roles.
- SAI should also be given **full financial autonomy** along with ways to raise resources to run their programs.
- The Taskforce also suggested that the sports person should be considered active only till the age of 28 years, after which they should be "reskilled" as a Coach or referee, depending on their national ranking.

10.2. NATIONAL SPORTS TALENT PORTAL

- The Government of India launched the National Sports Talent Search Portal.
- It is an initiative of the Ministry of Youth Affairs and Sports in order to attract sporting talent from across the country.
- The portal is also available as a Mobile App, which can be downloaded on the smartphones.
- All interested citizens can apply online using the portal for various schemes of the Sports Authority of India (SAI) through a three step simple process.
- Eligible youth will be called for selection trials. The admission to the schemes will be subject to fulfillment of the eligibility criteria and battery of tests as well as skill tests.

10.3. YUVA-DELHI POLICE SKILL DEVELOPMENT INITIATIVE

Why in news?

 Recently YUVA initiative, a skill development programme under Pradhan Mantri Kaushal Vikas Yojana was launched.

More about YUVA

- It aims to connect with youth by upgrading their skill as per their competencies. It will help them to get a gainful employment under **Pradhan Mantri Kaushal Vikas Yojna**.
- Under this scheme, the Delhi police will open up skill development centres at the police stations.
- Delhi Police has tied up with National Skill Development Corporation (NSDC) and Confederation of Indian Industry (CII).

Pradhan Mantri Kaushal Vikas Yojana

- Launched in 2016, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE).
- The objective of this scheme is to enable youth of the country to take industryrelevant skill training that will help them in securing better jobs.
- Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL).

- National Skill Development Corporation shall be providing skill training to the youth under (PMKVY) and CII will provide job linked training through its Sector Skill Councils which are connected to industry and thereby provide job guarantee.
- Youth in the age group of 17-25 years who belong to categories such as School dropouts, Juvenile offenders, Victims of crimes and families in dire state due to incarceration of the bread earner of the family, mostly from the underprivileged colonies have been identified from 13 districts of Delhi.

National Skill Development Corporation (NSDC)

- It is a public-private company with the primary mandate of catalysing the skills landscape in India.
- It has been designated as the implementation agency for PMKVY.

It is one of the key initiatives

undertaken by government of Odisha

It promotes women's SHGs with a

specific aim of economic empowerment

for women empowerment

Mission Shakti

Significance

- Such an initiative will improve the reputation of Police force and increase its social interaction with the common masses.
- It will give an opportunity to past offenders to start afresh and find jobs.
- It will increase employability among the youth.

10.4. 'SHEMEANSBUSINESS' PROGRAMME

- Recently Odisha Government launched SheMeansBusiness program to train women entrepreneur and Self Help Groups (SHGs).
- Under the Scheme, 25,000 women entrepreneurs and Self Help Groups will be provided training on Digital Marking skills within next one year free of cost.
- Facebook will also develop a database of entrepreneurs and track their growth, turnover and profit after one year.
- This is a joint venture between MSME Department, Directorate of Mission Shakti and Facebook.

10.5. OPERATION ALL-OUT

- Recently Jammu and Kashmir Director General of Police has notified that Operation All-Out will continue till Kashmir is freed from violence and peace prevails.
- Operation All-Out was launched in March 2017 to counter the militant violent attacks in Kashmir.
- This Operation is based on planning and intelligence gathering.
- Around 130 local and 128 foreign militant groups have been identified as targets e.g. Hizbul Mujahideen, Al-Qaeda, Lashkar-e-Taiba etc.
- So far, many top leaders of militant groups have been killed such as Abu Dujana, Sabzar Bhat, Junaid Mattoo, Bashir Lashkari
- Previously in December 2014, Operation All out was also launched by Government in violence hit Assam against **Bodo Militants**. The operation proved to be a massive success.

10.6. SUNREF HOUSING PROJECT

Recently National Housing Bank (NHB) along with French Development Agency (FDA) and the European Union, have joined hands to launch SUNREF housing project in India.

SUNREF (Sustainable Use of Natural Resources and Energy Finance) Housing India will provide financing of €112 million to NHB, through a credit line of €100 million and a grant of €12 million financed by the European Union. The credit facility and grant agreements were signed with the NHB in July 2017.

10.7. GOBINDOBHOG RICE: GI TAG

Why in news?

Gobindobhog rice, a speciality from Burdwan district of West Bengal, has got the geographical indication (GI) status. The region of Burdwan is known as the rice bowl of Bengal.

What is GI tag?

- The GI tag is an indication that is definite to a specific geographical territory. It is used for agricultural, natural and manufactured goods having special quality and established reputation.
- The GI tag is governed by the Geographical Indications of Goods (Registration and Protection Act), 1999.
- This Act is administered by the Controller General of Patents, Designs and Trade Marks, who is also the Registrar of Geographical Indications.

GI Tag for other Rice variety in India:

- Kalanamak Rice: Uttar Pradesh
- Basmati rice: Punjab, Haryana, Himachal Pradesh and Uttarakhand and parts of Uttar Pradesh and Jammu & Kashmir
- Ambemohar Rice: Maharashtra
- Palakkadan Matta Rice, Navara rice, Pokkali Rice, Wayanad Jeerakasala Rice, Wayanad Gandhakasala Rice, Kaipad Rice: Kerala

Other GI product from WEST Bengal

Darjeeling Tea, Santiniketan Leather Goods, Laxman Bhog Mango, Fazli Mango, Himsagar (Khirsapati Mango), Santipore Saree, Baluchari Saree, Dhaniakhali Saree, Joynagarer Moa, Bardhman Sitabhog and Bardhman Mihidana.

• The registration of a GI is valid for 10 years after which it needs to be renewed

10.8. MERGER OF NCRB WITH BPRD

Government has recently notified the merger of National Crime Records Bureau (NCRB) with Bureau of Police Research and Development (BPRD).

- NCRB is an attached office to the Ministry of Home Affairs which was established in 1986 to empower Indian
 Police with the power of information Technology solutions and criminal intelligence to enforce the law
 effectively.
- BPRD was established in 1970 as a national police organisation to study, research and develop on subjects and issues related to policing.
- Reason for merger
 - o boost crime data collection and research efforts
 - o improve administrative efficiency
 - o optimum utilisation of resources
 - Better outcome to crime data collected by NCRB and research work done by BPRD.

