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NOVEMBER 2017

G.S PAPER I

Centenary of October Revolution

What is October Revolution?

- October Revolution, also called Bolshevik Revolution, (Nov. 6–7, 1917), was the second and last major phase of the Russian Revolution, with the first being February Revolution.
- By 1917 the bond between the tsar and most of the Russian people had been broken.
- Governmental corruption and inefficiency were rampant.
- The tsar's reactionary policies, including the occasional dissolution of the Duma, or Russian parliament, had spread dissatisfaction even to moderate elements.
- The inefficient prosecution of World War I was the final straw.
- Ill-equipped and poorly led, Russian armies suffered catastrophic losses against German armies.
- Riots over the scarcity of food broke out in the capital, Petrograd on February 24 (March 8), 1917.
- Tsar Nicholas II was forced to step down.
- More than 300 years of rule by the Romanov dynasty came to an end as a result of February Revolution.
- A committee of the Duma appointed a Provisional Government to succeed the autocracy.
- Soon the provincial government proved to be incompetent.
- At the end of October Revolution, the Bolsheviks led by Lenin replaced the provisional government, inaugurating the Soviet regime.

What are the positive impacts of Russian Revolution?

- It brought home to the ruling classes of Europe the urgency of making concessions to workers.
- These took the form of the public provision of health, education and housing.
- It is built on the premises that all value is created by labour, entitling them to a larger share of the surplus than the bare necessities.
- The other consequence of the Russian Revolution was for Europe's colonies.
- The early communist movement had a global ambition aiming for the emancipation of all subject peoples. This was to have an impact on India.
- The Soviet declaration of equality of all nations and assertion that the people can change the entire property system for their own good were ideas that directly affected our National Movement after 1917.
- This influence is reflected in the Karachi resolution of the Congress (1931) — outlining what free India would be like — in the country's five-year plans, public sector expansion and land reforms in the first 30 years of Free India.
- Our Constitution was framed (and amended) so as to make this possible. As our Constitution's preamble stands today, we ought to be a "secular, socialist" republic.

What are the negative impacts?

- Historical events are to be evaluated in terms of their consequences, not by its intentions or sentiments.
- The glory of the revolution was short lived till the death of Lenin.
- The vacuum created by his demise was taken advantage of by Josef Stalin to assume power.
- For the next three decades, his role was not very different from that of the Tsar who had been deposed.
- The opposition was annihilated, labour camps for dissidents established, the free press disbanded and the peasantry dispossessed.
- Among the nationalities, the Ukrainians who had once dreamt of independence were suppressed.
- Grain was shipped out of their country to the rest of the Soviet Union, causing famine and deaths. A people were crushed.
- Dissenters were assigned to work in nickel mines with their bare hands in sub-zero temperature.
- It is worse than those of the European regimes in their colonies because the communist movement & the Russian Revolution were premised on the promise of power to the people.
- Instead, under Stalin, it gave rise to a bureaucracy, the rationale of which was to maintain the regime perpetrated by the communist party.
- Despite the internationalist stance of the Comintern, Stalin was not sympathetic to the Indian national movement, painting it as bourgeois in character.

What lies ahead?

Communism collapsed in 70 years. But the fact that socialism was successfully implemented and maintained for so long is an indication that it remains (with some modifications) as a practicable and equitable alternative to capitalism.

'Padmavati' Controversy - The Past and the Present

Why in news?

Protests have broken out across the country for alleged erroneous depiction of Rajput queen Rani Padmavati in the upcoming movie 'Padmavati'.

Who is Padmavati?

- **Poetry** - The earliest source to mention her is "Padmavat", an epic fictionalized poem written in 1540 CE.
- It was written by Malik Muhammad Jayasi, a Sufi poet and a resident of Jayas in Awadh, a very long way from Chittor, Rajasthan.
- The story with elements of fantasy portrays her as an exceptionally beautiful princess of the Singhal kingdom (Sri Lanka).
- Ratan Sen, the Rajput ruler of Chittor, who heard about her beauty went on an adventurous quest, won her hand in marriage and brought her to Chittor.
- Following this, Alauddin Khalji, the Sultan of Delhi who heard about her beauty laid siege to Chittor to obtain her.
- Many events occurred during the period of the siege including the killing of Ratan Sen, till the Fort was finally captured by Khalji.
- But before the capture, Padmavati and her companions committed Jauhar (self-immolation) to protect their honour.
- But this is just a story.
- There are just only two historical facts relevant to the story - i) Khalji's attack on Chittor, ii) Ratan Sen's defeat.
- **Oral tradition** - Besides the verifiable historical facts, there are other facts, culturally constructed through the oral tradition of telling and retelling stories.
- For the common people who are untrained to distinguish historical facts from cultural and popular memory, this acquires the status of history.
- Evidently, this popular memory is subject to quick metamorphoses just as the Padmavati story.
- The story has travelled place and time from North India and Rajasthan to Bengal from the 16th to the 20th century and has undergone several mutations.

What is the controversy?

- There are arguments that there were differentiation between historical facts and the popular versions of the story as depicted in the film Padmavati.
- **Khalji** - Sultan Alauddin Khalji had earned a reputation among contemporary and modern historians for several achievements.
- These include:
 - i. successful thwarting of Mongol invasions of India
 - ii. conquest of large territories
 - iii. strictly enforcing low prices of commodities in the markets for the common people's daily purchases
 - iv. declared defiance of the Shariat in matters of governance, etc
- But Khalji was certainly not known for his lustful pursuit of women.
- The movie revolving around Khalji's conquest of Chittor for Padmavati undermines the respect for the ruler.
- **Padmavati** - For the Rajput women, she is a heroic queen who had committed Jauhar to save her honour against a lusty Muslim invader.
- She is thus a revered queen and seen as the epitome of sacrifice.
- But rather than highlighting her sacrifice, the film is criticised of highlighting the romantic angle instead.
- The visuals of the heroine singing and dancing evidently go against the patriarchal telling of Padmavati's story, circumscribed by notions of purity and honour.
- **Caste honour** - Karni Sena is a self-styled Rajput organisation which is very particular of caste honour.
- This is now raising anxiety about the film's scheduled release as it alleges that the film wrongly depicts the traditions in relation with the Rajput clan.



What are the larger implications?

- **Law and order** - The UP government has written to the Union I&B Ministry requesting that the CBFC be alerted of the “public sentiment” about distortion of “facts” in the film.
- The characterisation and depiction of Muslim invaders and Hindu clans in the film could possibly lead to a communal clash.
- Thus, there is an apprehension that the release of the film would lead to law and order disruption.
- **Freedom of expression** - However, the Supreme Court observed in *S. Rangarajan vs. Jajjivan Ram*, a mere threat to public order cannot be a ground to suppress freedom of expression.
- The insistence on demanding accuracy in period dramas is an infringement on creativity.
- Notably, this is a film based on a work of fiction.
- However, the controversy now is centred on the question of “historical facts” in connection with the film.
- It is also to be noted that none of the protestors have seen the movie and so it is absurd to claim any of this.
- Reacting to this in legal terms is like endorsing the notions of Rajput honour and Hindu-Muslim enmity fuelled by random groups.

Chittor Fort

- The Chittor Fort or Chittorgarh in Rajasthan is one of the largest forts in India.
- It is designated as a World Heritage Site by the UNESCO.
- The fort was the capital of Mewar and is today situated in the Chittorgarh town.
- It sprawls over a hill above the plains of the valley drained by the Berach River, a tributary of the Banas River.

G.S PAPER II

1. POLITY

1.1 Special Courts For Trying Politicians

Why in news?

SC has recently asked the Centre to set up special courts for trying criminal cases involving ‘political persons’.

What is the need?

- Criminalisation of politics is an issue that worries the country's administration for long.
- The political class manages to escape the serious criminal cases because of a delayed and repeatedly postponed trial.
- The criminal tendencies of these politicians get carried on to the bureaucracy and the police and more importantly into law making.

What are the court's directives?

- The Centre should frame a central scheme for setting up of **special criminal courts** exclusively to deal with criminal cases involving political persons.
- These courts would function on the lines of the fast track courts.
- The directive for a **common central scheme** comes with the Centre's argument that setting up such courts would depend on the availability of funds with the States.
- The court also said that the scheme should provide **details of the funds** required to set up such courts.
- The Centre should also submit a report card on the **status of around 1500 criminal cases pending** against MPs and MLAs at the time of the 2014 elections.
- It is also required to report if the **court's earlier order** to complete the trial in all these cases within a year's time had been complied with or not.
- Besides, the SC said that it would **directly interact with the state governments** on issues like appointment of judicial officers, public prosecutors, court staff and other requirements.

Is the differential treatment justified?

- Special courts exist at present to try various classes of offences including corruption, terrorism, sexual offences against children and drug trafficking.
- However, creating special courts for a particular class of people such as politicians violates Right to Equality.



What are the challenges and possible solutions?

- **Shortage of judges** - Bringing in place the additional special courts would create the demand for more judges.
- **Prosecutors** - Appointing prosecutors who are not attached to any political party is another challenge in the working of the special courts.
- A directorate of prosecution headed by a retired senior judge could be created.
- **Delay** - Another threat is that the main trial could be obstructed by interim orders.
- Political leaders finding legal counsel and filing multifarious interim applications could delay the process, defeating the whole purpose.
- **Besides** all these, the concern with ensuring availability of funds, especially from the States has to be addressed by a central scheme.

1.2 Over-reach of the TN Governor

What is the issue?

- Tamil Nadu Governor recently met with government officials in Coimbatore to review directly the various government programmes.
- This is perceived to be an interventionist over-reach.

What are the conventional provisions?

- The Governor of a State is not expected to review the work of government officials personally, when an elected regime is in place.
- But Mr. Purohit, the TN Governor justified his action saying that he was seeking to familiarise himself with the administration.
- Article 167 of the Constitution says that the CM has to keep the Governor updated on all major government decisions in both the executive and legislative domains.
- Additionally, the CM is also required to furnish any specific administration related information if the Governor demands.
- There may even be occasions when the Governor asks a top bureaucrat or a police officer for a report.
- But such an action too should be rarely resorted to and be for some specific purpose of importance.
- Presently, the TN government's majority status in the Assembly is doubtful, after the disqualification of 18 dissident MLAs.
- Given this, the governor's move adds to the apprehension that the state government was being arm twisted by the Centre.

What is the way forward?

- Governors of the States can indeed work independently as per the constitutional mandate.
- However, they should also ensure that their functioning is within the bounds of established norms and conventions.

1.3 Concerns with Parliamentary Sessions

What is the issue?

- Parliamentary sessions are measures for scrutinizing the government.
- But there are various concerns with the commencement of parliamentary sessions in India.

What is a parliamentary session?

- The period during which the House meets to conduct its business is called a session.
- In India, the parliament conducts three sessions in a year -
 1. Budget session - February to May
 2. Monsoon session - July to September
 3. Winter session - November to December



- The Constitution empowers the President to summon each House at such intervals that there should not be more than a six-month gap between two following sessions.
- Since the President acts on the aid and advice of the Council of Ministers, the duration and the time of summoning of the session is decided by the Government.
- Similar provisions exist for the State legislatures as well, in reference to the Governor of the State.

What are the concerns in this regard?

- **Power** - In a parliamentary democracy, the executive is accountable to the Parliament.
- Making the Government decide itself the time and duration of the Parliamentary sessions, goes against this very principle of accountability.
- **Sittings** - Lok Sabha met for an average of 130 days in a year during the 1950s; but these sittings have come down to 70 days in the 2000s.
- Notably, the parliamentary sessions are being shortened or even merged.
- **Functioning** - Reduced sessions lead to less scrutiny of the government's actions, and even that of bills and budgets.
- There is an overall reduced parliamentary business transactions, than in the last couple of decades.
- There is also a lower rate of functioning of the Question Hour due to disruptions, which reduce the number of questions that may be answered orally.
- While Parliament may sit for extra hours to transact other business, time lost during Question Hour is not made up at all.

What measures need to be taken?

- The structural issue of the government deciding when to summon the legislature and its ability to adjust the dates in response to emerging circumstances needs to be addressed.
- A calendar of sittings could be announced at the beginning of each year, for a largely pre-planned undertaking of the functions.
- In addition, if there is an urgent need for parliamentary approval, additional sittings could be held.
- The National Commission to Review the Working of the Constitution has earlier recommended that the Lok Sabha and Rajya Sabha should have at least 120 and 100 sittings in a year respectively.
- There can be a mechanism which scrutinizes and answers the questions asked in the Question Hour with required inter-ministerial expertise.
- Notable practices in other countries in relation to these concerns include:
 1. British Parliament -
 - ✓ It has year-long sessions. Thus, the five-year term of Parliament consists of five sessions of a year each.
 - ✓ UK has the Prime Minister's Question Time on weekly basis to address the questions posed by MPs. Such measures can be adopted.
 2. Pakistan's constitution -

Role of Parliament in a Democracy

- The Constitution provides for the **legislature**
 - i. to make laws
 - ii. to scrutinise the functioning of the executive
 - iii. to hold the executive accountable for its decisions
- The **Members** of Parliament are tasked to
 - i. raise issues of public importance in the Parliament
 - ii. examine the Government's response to problems being faced by the citizens
 - This is executed largely through the **instruments** of -
 1. Debate - which entails a reply by the concerned minister
 2. Motion - which entails a vote of the members
- **Motions** are intended for purposes like -
 - i. discussing important issues such as inflation, corruption, drought, etc
 - ii. adjourning the business in the house
 - iii. expressing no confidence in the Government
- The Parliament may use various methods including debates on Bills and issues, questioning ministers during Question Hour or in parliamentary committees meetings.
- Notably, the Question Hour is one of the effective means of holding the Government accountable for its actions, wherein MPs pose questions to the ministers regarding the implementation of laws and policies.
- The Government, in all, is collectively responsible to the Parliament for its actions.



- ✓ It requires a session of parliament within 14 days if one-fourth of its membership demands one. It also states that the Parliament should meet at least 130 days a year and there should be at least three sessions.

1.4 Right Against Torture

Why in news?

The Law Commission, as part of its 273rd Report, submitted a draft Prevention of Torture Bill, 2017 for the consideration of the government.

What are the major recommendations?

- **Ratifying the 'UN Convention** against Torture and other Cruel, Inhuman and Degrading Treatment or Punishment'
- Defining 'torture' in a broader way to include any **physical, mental or psychological injury**
- Considering as torture an injury that is either inflicted intentionally or involuntarily, or even an attempt to cause such an injury
- Inserting a new section in the Indian Evidence Act to ensure that in case a person in police custody sustains injuries, it is presumed that those injuries have been inflicted by the police
- Placing the **burden of proof** on the authority concerned to explain such injury
- Authorising the courts to decide upon a "**justiciable compensation**" to victims after considering the socio-economic background of the victim
- Taking into account the nature, purpose, extent and manner of injury, including mental agony caused to the victim for compensations
- **Amending** the Criminal Procedure Code, 1973, and the Indian Evidence Act, 1872, to accommodate provisions regarding compensation and burden of proof respectively
- Curbing the menace of torture and having a deterrent effect on such acts through imposing **fine and stringent punishment** like life imprisonment
- Putting in place an effective **mechanism to protect victims** of torture, complainants and witnesses against possible threats or ill-treatment
- Making State own the responsibility for injuries caused by its agents on citizens as per the idea of '**liability follows negligence**'
- Acknowledging the principle that **sovereign immunity could not override the rights** assured by the Constitution to an individual

What is the significance?

- **Extradition request** - India has made many requests for extradition of offenders from other countries.
- However, conditions in India's prisons, especially over-crowding and torture, are a reason for India's extradition requests failing.
- E.g. extradition courts in the UK refused to send two persons to India to face trial, on the ground of ineffective system of protection from torture.
- Having an anti-torture legislation in place is thus a practical necessity in India's interest to make countries accede to extradition requests.
- **Moral Commitment** - Custodial violence continues to be prevalent in the country.
- Suspects being forced to confess for undone wrongs is a continuing practice against individual right; the most recent instance is the faulty accusation in Ryan school murder case.
- Enacting a law to eliminate all forms of torture and other cruel, inhuman and degrading forms of treatment is thus a moral liability for India.
- Ratifying the UN Convention and following it up with a domestic law against torture can give shape to these moral and legal commitments.

1.5 Judges Bribery Case

Why in news?

A five-judge Constitution Bench of the Supreme Court led by the CJI has recently said the Chief Justice has the sole prerogative to determine which Bench of judges hears which cases.



What is the case about?

- The case essentially involves settling a matter relating to a medical college that was barred from admitting new students for particular courses.
- The allegations are that some people had taken bribes by using the names of senior judges for securing a favourable judgement.
- Notably, there were allegations against the Chief Justice of India as well.
- In an SC hearing, a two judge bench ordered that the case be heard by a 5 judge Constitution bench of the senior-most judges of the SC.
- However, the following day, a 5 judge constitution bench headed by the CJI over ruled this order.
- It also ruled that "no judge can take up a matter on his/her own, unless allocated by the CJI, as CJI is the master of the roster (the registry of judges and the cases handled).
- This has indeed highlighted the administrative impropriety and a tussle within the top judiciary on the authority of constituting a bench.

What is the concern?

- **Authority** - The Chief Justice, reasserting his own administrative powers of allocating Benches largely undermines the moral authority of the position.
- The CJI being part of the hearing (where the scandal allegedly implicates a judgment the CJI wrote, even though he has not been named in the FIR) is contentious.
- This possible conflict of interest certainly leaves scope for doubting the process of justice delivery itself in the case.
- Also, making the CJI the master of the roster certainly weakens the larger public significance of the role.
- **Corruption** - The judiciary has failed to find a mechanism to deal with allegations of corruption within its ranks.
- The challenge lies in ensuring that the anti-corruption measures taken do not undermine the independence of the judiciary.

What is the way forward?

- An independent investigation is necessary into this case where the personal probity of individuals in the judiciary is in doubt.
- But besides, the Court cannot stand on formality and sacrifice substantive justice for a mere conception of prerogative power.
- The convention based cardinal principle that the Chief Justice of India is the master of the roster must be re-examined.
- Balancing the task with another judge would not undermine the CJI's role but would only be mindful of the changing demands of accountability.

1.6 Independence of Judiciary

What is the issue?

- With the recent judges bribery case, it becomes imperative to understand the various provisions in place for protecting the independence of judiciary.

What are the legal protections available for Judges?

- **FIR** - A five-judge Constitution Bench of the Supreme Court had earlier made clear the procedure in registering FIR.
- Unless the government first "consults" the CJI, no criminal case shall be registered under Section 154 of the CrPC (FIR) against a judge or Chief Justice of the HC, or a judge of the SC.
- CJI's assent is imperative as he/she is a "participatory functionary" in the appointment of judges.
- If the Chief Justice is of the opinion that it is not a fit case for proceeding under the Act, the case shall not be registered.
- If the CJI allows registration of FIR, the government shall, for the second time, consult the CJI on the question of granting sanction for prosecution.



- If the CJI himself/herself is the person against whom the allegations are received, the government shall consult any other judge or judges of the Supreme Court.
- Notably, the majority in the Constitution Bench classified a judge as a “public servant”.
- **Arrest** - The Supreme Court has also laid down guidelines for the arrest of a judicial officer of the subordinate judiciary.
- The court has held that a judicial officer should be arrested for any offence only under intimation to the District Judge or the High Court.
- The immediate arrest shall only be a “technical or formal arrest”.
- After that, it should be immediately communicated to the District and Sessions Judges of the district concerned and the Chief Justice of the concerned HC.
- The arrested judicial officer shall not be taken to a police station without the prior orders of the District Judge.
- And no statements shall be recorded from him/her except in the presence of a counsel. He/she will also be not handcuffed.
- **Proceedings** - Provisions in Judges (Protection) Act, 1985 protects judges and former judges of the SC and HCs from any civil or criminal proceedings.
- This applies for any act, thing or word committed, done or spoken by him/her in the course of their judicial duty or function.
- No court shall entertain such complaints.
- Section 77 of the Indian Penal Code also exempts judges from criminal proceedings for something said or done during judicial duties.
- The government can however initiate criminal proceedings against a sitting or former judge of a superior court if it can produce material evidence to show that a judgment was passed after taking a bribe.

1.7 Right to Water and Information

Why in news?

Chief Information Commission (CIC) has denied information on J&K hydel projects' negotiations.

What is the recent tussle about?

- In 2006, the Rangarajan Committee recommended the transfer of two hydel projects that was transferred to NHPC back to J&K.
- The three Interlocutors appointed by the UPA government recommended the return of all Central sector power projects to J&K as a confidence-building measure.
- The NHPC is not publicising details of negotiations.
- It argues that the issue has not been resolved yet and publicising would lead to speculation and confusion.
- The Chief Information Commission also ruled that that it would not disclose details of the negotiations.

What was CIC's justification?

- The CIC's interpretation of RTI Act was invoked to prevent disclosure on NHPC.
- By RTI law, the protection for commercially confidential information is available only to "third parties" and not to a public authority that holds the requested information.
- While deciding the appeal against the NHPC, the CIC treated itself as a "third party”.
- In a ruling, the Delhi High Court had clearly held that a public authority could not become both the "second party" and the "third party" in relation to one RTI application.
- CIC had ignored this principle laid in the court judgment.

Problems with the power projects

- In 2000, the J&K government signed MoUs with the Central government transferring seven hydro power projects to NHPC for funding, execution and operation.
- The MoUs covered Kishanganga, Uri-II, Bursar, Sewa-II, Pakal Dul, Nimmo Bazgo, and Chutak projects for a period of ten years.
- Currently, NHPC generates close to 30% of its national total annual output from the hydel projects located at Salal, Uri, Dulhasti, Sewa, Nimmo Bazgo and Chutak in J&K, earning it about Rs.200 billion annually.
- Under the terms of the MoUs, 12% of the electricity generated is supplied free of cost to J&K.



- The CIC also denied information in the lines with protecting the investor interests; but the fact is that the government is 90% shareholder of the NHPC.

What should be done?

- India ratified the **International Covenant on Economic, Social and Cultural Rights** in 1979, which recognises every human being's right to water.
- In 2002, the Covenant's monitoring body declared that the right to water includes people's **right to access information about water**.
- Both water and information controlled by the governments and their agencies are **public goods**.
- Thus, both must be readily accessible to the people on demand, and nobody should be allowed to claim proprietorial rights over either of them.
- Publicising details of government's negotiations is the first step towards ensuring to the people of Jammu & Kashmir the control over their natural resources.

2. GOVERNMENT BILLS, POLICIES AND INTERVENTIONS

2.1 Karnataka Private Medical Establishments (Amendment) Bill

Why in news?

The private health sector in Karnataka is protesting against the state government-proposed Karnataka Private Medical Establishments (KPME) (Amendment) Bill 2017.

What is the bill about?

- The KPME Act was passed in 2007, aimed at being a legal control over PME in the state.
- The KPME (Amendment) Bill 2017 intends to bring the PMEs under the purview of the government.
- The amendments are based on the recommendations of former SC judge Vikramajit Sen.
- Passing the bill would facilitate the rolling out of the State's Universal Health Coverage (UHC) scheme called 'Arogya Bhagya'.

What are the proposed amendments?

- The Bill makes the **registration** of PMEs mandatory and lays down guidelines to ensure their **quality**.
- It increases the fine for running non-registered PMEs.
- Similarly, it increases the fine and term of imprisonment for non-adherence to the rules regarding maintenance of **clinical records and payments**.
- It makes it mandatory to provide life saving **emergency measures** without insisting on advance payment.
- And in the event of death, the body of the deceased should be released without insisting on payment of dues.
- Every PME should display prominently the **Patient's Charter and PME's Charter**.
- The amendments will pave the way for the government to **fix the rates** for each class of treatment, and also provide **grievance redressal** systems.

What are the concerns?

- The private health sector finds contentious the provisions like price capping of various procedures, imprisonment of doctors and setting up of a grievance redressal cell.
- There are demands for making the provisions applicable to the government hospitals as well.
- The protests call for enhancing the standards of **health care at government hospitals**, before regulating private medical establishments.

What is the way forward?

- There is a need to ensure parity in services offered by government and private institutions and to end the neglect of public facilities especially in rural areas.
- Beyond regulation of prices for some drugs, streamlining the processes for centralised procurement and free distribution of essential medicines to all should also be done.

2.2 Srikrishna Committee - White Paper on Data Protection Framework

Why in news?

As part of its mandate to draft a data protection and privacy Bill, the Srikrishna Committee recently released a white paper in the regard.



What is the need?

- The Committee was set up by the Ministry of Electronics and Information Technology following the decision to make Aadhaar compulsory for many government services.
- Private entities are also increasingly using Aadhaar for the purpose of authentication and financial transactions.
- Notably, Aadhaar is being issued by the UIDAI after collecting individual's personal and biometric data.
- Despite an obligation to adopt adequate security safeguards, no database is 100 per cent secure.
- Evidently, despite UIDAI's various in-built data protection mechanisms, it is not bound to inform an individual in cases of misuse or theft of his/her data.
- Thus, the interplay between any proposed data protection framework and the existing Aadhaar framework would have to be analysed.

What are the highlights?

- The committee has identified seven key principles for the data protection law, which include:
 1. **Technology agnosticism** - flexibility of the law for adapting to changing technologies and standards of compliance
 2. **Holistic application** - governing both private sector entities and the government; differential obligations for certain legitimate state aims
 3. **Informed consent** - ensuring by law the informed and meaningful consent of the individual
 4. **Data minimization** - data that is processed ought to be minimal, only for targeted and other compatible purposes
 5. **Controller accountability** - data controller shall be held accountable for any processing of data
 6. **Structured enforcement** - a high-powered statutory authority with sufficient capacity and decentralized mechanisms for enforcement of the data protection framework
 7. **Deterrent penalties** - penalties on wrongful processing of data to ensure deterrence
- **SPDI** - The white paper has laid down for the protection of sensitive personal data or information (SPDI) by which a person is identifiable.
- This essentially means that any social media site, search engine, telecom operator or government agency cannot sell or disclose SPDI of individuals.
- It has identified health and genetic information, religious beliefs and affiliation, sexual orientation, and racial and ethnic origin as SPDI.
- It has also placed caste and financial information in this category.
- The committee prescribes punishments in case of violations of regulations in using SPDI.
- At present, the IT Act rules on security practices and sensitive personal data are applicable only to private or corporate entities.
- **Data Breaches** - The law may require that individuals be notified of data breaches where there is a likelihood of privacy harms.
- However, the paper noted that fixing too short a time period for individual notifications might be too onerous on smaller organisations.
- As, such organisations may not have the necessary information about the breach and its likely consequences.
- It is suggested that both the government and private entities be brought under the ambit of the proposed law.
- **Exemptions** - The Committee has made certain exemptions in relation to collecting information.
- This is in reference to investigating a crime, apprehension or prosecution of offenders, and maintaining national security and public order.
- But, the committee also insists on devising an effective review mechanism.
- **Penalty** - A civil penalty of a specific amount may be imposed on the data controller for each day of violation.

- **Besides**, it suggested setting up a data protection authority, data auditing, registration of data collectors, enacting provisions for protecting children's personal data, etc.

2.3 PDS and Aadhaar

Why in news?

An 11-year-old girl died of starvation in Jharkhand after the local PDS shop refused to provide her family with any food, as their ration card was not linked to the Aadhaar.

What is the government's directive in this regard?

- The Central government has been insisting on 100% Aadhaar "seeding" across various schemes.
- These include the Public Distribution System, MGNREGA and pensions.
- **Seeding** refers to the practice of entering Aadhaar numbers for each household member on the ration card.
- Seeding is a pre-requisite for the **Aadhaar-based Biometric Authentication (ABBA)** system.
- ABBA is a practice of using an electronic point of sale (PoS) machine to authenticate each transaction in the PDS.

What is the recent problem?

- To achieve 100% Aadhaar-seeding targets, some field functionaries just deleted the names of those who did not submit Aadhaar details.
- Some others waited until the deadline and then struck off the names.
- In some cases, the middlemen does the seeding wrongly, thus denying the beneficiaries of their rights.
- Resultantly, the government claims these ration cards to be "fake" as detected with Aadhaar details.
- This procedural mishap is considerably depriving many families of their entitlements through the Public Distribution System.

What are the shortfalls?

- **Awareness** - The aggrieved are being blamed for failing to seed Aadhaar but the reality is that many of them are unaware of the seeding requirement.
- When pensions in Jharkhand suddenly stopped for many pensioners, they had no idea why.
- **Technical** - Seeding is not as simple as it sounds and is one of the many barriers that the ABBA has created in the smooth functioning of the PDS.
- At the time of purchase, the authentication process under ABBA requires:
 - i. power supply
 - ii. a functional PoS machine
 - iii. mobile and Internet connectivity
 - iv. State and Central Identities Data Repository (CIDR) servers to be 'up'
 - v. fingerprint authentication to be successful
- Given all these, the Finance Ministry's latest Economic Survey, based on micro-studies, reports high biometric failure rates.
- **Corruption** - Biometric Authentication for transactions has no role in reducing corruption.
- Either seeding or the ABBA can do little to stop the quantity fraud which is the practice of cheating on quantities sold.
- PDS dealers continue to cheat people by cutting up to a kg of their grain entitlement despite successful ABBA authentication in some regions.

What should be done?

- Continuing with mandatory ABBA would only disrupt the PDS, which is significantly a lifeline for the poor.
- Identity fraud, for example in the form of duplicate ration cards, requires only Aadhaar-seeding.
- Certainly, the ABBA is unnecessary in many ways, and some flexibility is lost when it is made mandatory.

- E.g. If an elderly person asks a neighbour to fetch their grain, it would count as identity fraud under mandatory ABBA.
- The mandatory biometric authentication (ABBA) can be withdrawn from the PDS and pensions.
- Instead, alternative technologies such as smart cards could be put in place.
- This will allow offline PoS machines with smart cards and rule out the need for internet dependence and biometric authentication.

2.4 Critically Evaluating the Swachh Bharat Mission

What is the issue?

Independent studies on the Swachh Bharat Mission – SBM (rural) contradicts with the government's claims on the mission outcomes.

What was the focus of SBM (Rural)?

- The primary priority of the SBM-rural was to ensure an **'Open Defecation Free' India by 2018**.
- To achieve this, the government imposed a Swachh Bharat Cess to raise funds and set out on a vigorous campaign.
- It set ambitious targets for every 'administrative village' for constructing toilets within specific deadlines to ensure 100% latrine access.

What does the official data say?

- Over Rs. 60,000 crore has been spent on the programme thus far.
- Apart from the government's data, the only other comprehensive data source is with the 'Swachh Survekshan Gramin' – SSG 2017.
- SSG survey was conducted by the Quality Council of India (QCI), a body set up jointly by the Government of India and industry.
- Both sources portray a similar picture, which rated nation-wide latrine coverage at around 60%.
- Moreover, the QCI survey also claimed that around 90% of those with access to a toilet actually used it.

What are the problems with the official data?

- Despite the lack of other comprehensive data pointers, the independent studies on a smaller scale have largely contradicted the official version.
- **Quantitative Approach** - Implementation of the program was highly number intensive, with focus only on building physical structures.
- After the targeted number of latrines being constructed, a village would be declared 'open defecation free'.
- Hence, there seemed to be little effort to look into whether the latrines are being used and open defecation has really gone down.
- **Exaggerating Count** - Unused structures constructed under UPA government's latrine building programme "Nirmal Bharat" have also been counted under SBM.
- In fact, pictures of many such defunct latrines can be seen on the SBM website categorised as uploaded, approved and counted.
- Also, certain villages have been declared "ODF verified villages" where less than 30% households have a latrine.
- **Nudged questionnaires** - The questionnaire used for surveys by government was biased to get an outcome in support of latrine use.
- Evidently, QCI survey says that around 90% of those having access to latrines use them, which is not the true case.
- On the other hand, surveys that employed a balanced questionnaire highlighted more open defecation practices.
- Distorted claims defeat the very purpose of the programme, which is to bring in a behavioural change among people for achieving sustained cleanliness.



- **Forcing Compliance** - The study found that in most villages, coercive measures and threats were used to promote the SBM.
- Name shaming and harassment of people by officials burdened with targets was found in many places.
- Notably, less than a quarter of households said that it was their own initiative to build the toilet.
- **Debt Burden** - The programme operated on a 'build first and get reimbursed later' model, to promote project ownership among people.
- But considering the cost (anywhere between Rs. 12-25 thousand to build a latrine) and the kind of institutional pressure to comply, many were forced to borrow from informal source.
- These kinds of finding are certainly contrary to the government's claim that the SBM was a people's movement.

2.5 Haj Subsidy

Why in news?

Union government has decided to phase out the Haj subsidy as early as 2018.

What are the shortfalls with the subsidy scheme?

- Many pilgrims claim that the real beneficiary is Air India, as the subsidy is actually a discount on an overpriced air fare.
- Besides, the government was also providing Haj subsidies to Muslims identified by the central government as VIPs and special dignitaries.
- There are eminent person nominations of 3,000 Muslims per year under so-called Goodwill Delegation to Saudi Arabia.
- In the lines of these, there have been requests by Muslims, including some Muslim MPs, to withdraw the subsidy as it was against Islam, despite being beneficial.

Haj Subsidy

- It is not a direct subsidy to individual pilgrims.
- It is rather a subsidy to the airlines flying the Haj pilgrims.
- Pilgrims pay the Haj Committee of India (HCoI) a fixed amount for the airfare, and this amount is decided every year by the government.
- The balance fare payable to the airlines is paid by the Ministry of Civil Aviation as a subsidy.

What is the government's recent move?

- A Supreme Court order recommended, in 2012, for phasing out the Haj subsidy gradually, with 2022 as the outer limit.
- The Court ruled that the subsidy was not only unconstitutional but inconsistent with the teachings of Quran.
- On these lines, the government is planning to phase out the subsidy as early as 2018, by reducing it to "almost nil" from the Rs.450 crore being spent this year.
- Instead, it is planning to invest that amount in education and other development measures for the minority community.

3. SOCIAL JUSTICE

3.1 Child Protection – Adoption Procedure and Safeguards

What is the issue?

- A 3-year-old adopted Indian-American child was found dead in mysterious circumstances in Dallas, USA.
- There is an overall decline in child adoptions, both within and outside India, which is being attributed to tightened norms to protect the adopted children.
- However, despite the safeguards, not all adopted children actually stay safe.

What do the present Indian guidelines say?

- Adopting parents must be financially capable and physically, mentally, and emotionally stable.
- They should also be free from life threatening health conditions.
- All singles less than 55 years of age are eligible for adopting, with the exception that a single male could not adopt a girl child.
- A couple must be married at least two years before adoption, and their cumulative age at the time of adoption cannot exceed 110 years.

- The minimum age difference between the child and either of the adoptive parents should not be less than 25 years.
- Preference shall be given to place the child in adoption in his/her own socio-cultural environment, as far as possible.

What is the procedure for adoption by overseas residents?

- All prospective parents, irrespective of nationality, have to register with the **Central Adoption Resource Authority (CARA)**.
- Then, the appropriate local authorities are called for a home study.
- Subsequently, registration with the 'Child Adoption Resource Information and Guidance System' is done.
- After registration, the children are assigned by turn, and foreign couples are treated at par with Indian ones.
- Countries that are signatories to the '**Hague Adoption Convention**' have standardised and streamlined such processes.
- Alternatively, the Indian diplomatic missions in the respective countries can also be approached.

How does it work?

- **Matching** - The home study report, looking at the couple's family, circumstances etc, is prepared by the adoption agency.
- It remains valid for two years, and is the basis of any adoption attempts that the couple make during that period.
- Parents are given a chance to adopt on a first registered, first served basis.
- Photographs, child study reports and medical examination reports of up to six children in their preferred category are shown.
- The process of matching must be completed in 15 days.
- **Eligibility** - A child has to be declared legally free to be adopted before being shown to a couple for adoption.
- If an unclaimed child is found, the 'District Child Protection Unit' has to advertise the particulars and photograph in a state-level newspaper with wide circulation within 72 hours.
- Local police have to submit a report about the child's parents or any living family.
- Subsequently, if there no response, 'Child Welfare Committee' can declare the child legally free for adoption.
- **Legal Procedure** - The adoption petition is filed in court by the adoption agency and the proceedings are to be completed within two hearings.
- The petition has to be disposed within two months of its filing and the certified copy of the order has to be obtained within 10 days.
- Obtaining the birth certificate of the child with the names of the adoptive parents is also mandatory.

3.2 Concerns in Child Labour Eradication

Why in news?

It is estimated recently that it would be difficult to achieve the child labour eradication target by 2025.

What is the global status of child labour?

- The International Labour Organisation (ILO) estimates that eight years from now, around 121 million boys and girls would still be engaged in various occupations.
- The present figure is around 152 million children, aged 5-17.
- A large proportion of them are concentrated in the agriculture sector, with a substantial number undertaking unpaid work in family units.

What are the implications for India?

- **Target** - In 2015, union government set a target to eradicate child labour by 2025.
- At a recent conference in Buenos Aires, India told that it would miss the deadline.
- The fact is that realising the objective could take well over 20 years after the expiry of the 2030 Sustainable Development Goals (SDGs).



- **Challenges** - There is a slowdown in the overall reduction of child labour, during the period from 2012 to 2016.
- More worrisome is that there is almost no progress with respect to the rescue of children under 12 years.
- Notably, the decline in child labour among girls was only half the proportion of that of boys during the period.
- The slow progress in these fronts remains a challenge for India in taking forward the efforts on child labour eradication.

What are the reasons for the lack of progress?

- There is an **absence of national legislation** to give effect to the global conventions on the employment of children in hazardous industries as well as on the minimum age of work.
- Notably, these two instruments have received the largest number of ratifications among countries.
- It thus brings to light the lack of harmony between global commitments and domestic priorities in India.
- India also witnesses an incoherency between laws that prescribe a minimum age for employment and those for completion of compulsory school education.
- Due to the absence of strong collective bargaining mechanisms and effective social protection policies, it is becoming hard to address the social evils like child labour.

3.3 Protecting Vulnerable Witnesses

Why in news?

The Supreme Court has recently ordered that within 3 months there should be at least two special deposition centres under every High Court's jurisdiction.

What is the need?

- Vulnerable witnesses in criminal cases often find the **courtroom experience** intimidating.
- They include children, often minor survivors of rape, victims of sexual abuse, and even whistle blowers.
- '**Secondary victimisation**' is something that vulnerable witnesses often experience in cases of sexual violence.
- This refers to the harm that occurs not due to a criminal act but through **insensitive response** of institutions, systems and individuals.
- Deposition centres will help create a conducive atmosphere for children and other such vulnerable witnesses, to testify without any fear or intimidation.

What did POCSO specify?

- The recent direction takes forward the principle already contained in laws relating to children.
- The Protection of Children from Sexual Offences Act (POCSO) provides for child-friendly procedures during a trial.
- It specifies that:
 - i. the officer recording a child's statement should not be in uniform
 - ii. during court proceedings, steps must be taken to ensure that the child is not exposed to the accused
 - iii. the court is allowed to record a child's statement through video conferencing, or using one-way mirrors or curtains
- **Implementation** - At present, Delhi has four such deposition centres, backed by guidelines framed by the Delhi High Court.
- The Delhi High Court's guidelines are inspired by the UN Model Law on Justice in Matters involving Child Victims and Witnesses of Crime.

What lies ahead?

- For now, the term 'vulnerable witnesses' is limited to children, but the principle needs expansion to include adults who may be equally vulnerable.
- Given the above limitation, it is felt that special centres are needed in criminal cases that involve other vulnerable witnesses as well.

- The creation of such special centres would have to imply much more than a safe space for recording the testimony.
- More importantly, the procedure should ensure that it is minimising harm and preventing ‘secondary victimisation’.
- Multiple depositions and hearings at which witnesses have to be present should be avoided.
- In particular, they should not be made to needlessly wait for their turn or be subject to procedural delays.
- Ideally, every district in the country needs a special deposition centre.

3.4 Protecting Borrowers in Informal Lending

Why in news?

Alleged harsh treatments by moneylenders have recently led to a number of suicides in Tamil Nadu.

What is the real problem?

- **Formal lending** - Even in the formal financial system, lenders can offer loans at relatively higher interest rates.
- In the case of default, however, the lenders know that they cannot torture borrowers to get back their money.
- So, they are generally wary of making high-risk loans unless they have access to collateral or are ready to negotiate a proper settlement in the case of default.
- **Informal lending** - Given the above regulations, informal borrowing naturally becomes the option.
- Notably, the lending standards in the informal sector are generally looser.
- As, the lenders have little reason to worry about the creditworthiness of the borrower.
- This is because of the possibility of the chance to resort to violence to extort money in case of a default.
- **Political affluence** - When aggressive and politically powerful lenders deal with weak borrowers, the inability to repay leads to violence.
- In many cases, even the local law enforcement authorities function hand in glove with these lenders.
- This ultimately leaves the borrowers in extreme distress with no legal recourse.

How can this be addressed?

- The recent cases of suicides have been linked to harassment by financiers.
- It thus has to be understood that high-interest lending per se is not the problem but the harsh dealing resorted to by some informal lenders is.
- Any attempt to outlaw all high-interest or usurious lending would impact the borrowers who genuinely benefit from informal lending.
- **Overall lending rates can be lowered**, particularly in rural India, by allowing the **free flow of capital** in search of investment opportunities in the untapped markets.
- E.g. Deregulation of microfinance by RBI led several microfinance institutions to enter the rural market, attracted by the high return on capital offered by the sector, and eventually helped lower borrowing rates.
- Despite the source being a financial one, the recent incidence of deaths is more a **law and order problem**.
- It is for the governments to bring in **mechanisms to protect the borrowers**.

4. HEALTH

4.1 Addressing Malnourishment – Is RUTF Effective?

What is the issue?

- ‘Ready-to-Use Therapeutic Food – RUTF’ is being promoted as a solution for malnutrition.
- However, India has largely been critical of this, and ‘Ministry of Women & Child Development’ recently clarified that RUTF is not an official policy.

What is RUTF?

- RUTF is a medical intervention to improve the nutrition intake of children suffering from Severe Acute Malnutrition (SAM).

- It is also referred to as ‘**Energy Dense Nutritious Food – EDNF**’ due to its high calorific value.
- It is a packaged paste of peanuts, oil, sugar, vitamins, milk powder and mineral supplements containing 520-550 kilocalories of energy per 100g.
- Additional ingredients may include nuts, legumes, grains and sweeteners to improve the taste.
- Usually, it is given to children aged between 6 months and 6 years, on a doctor’s prescription.
- RUTF use is common in **Africa**, where the incidence of malnutrition among children is high.

What are the demonstrated benefits of RUTF?

- A study in Mumbai’s Sion Hospital put RUTF’s efficacy at 65-70%.
- The United Nations Children’s Fund (UNICEF) supports community-based management along with RUTF.
- UNICEF notes that RUTF is safe, cost-effective and has saved the lives of hundreds of thousands of children.
- India is one of the 16 countries where local manufacturers of RUTF are being given UNICEF accreditation.

What is the case with India?

- **MALNUTRITION** - The **Global Hunger Index report, 2017** ranks India in the 100th place in a list of 119 countries.
- National Family Health Survey-4 (2015-16) found around 35% children aged less than 5 years being **underweight**, and around 38% being **stunted**.
- There is consensus on a large-scale intervention to address this but there are several differences on the appropriate approach.
- **RUTF USE** - In India, the global collaborative ‘**Scaling Up Nutrition**’ movement has tied up with Maharashtra, Uttar Pradesh and Jharkhand to promote therapeutic food.
- Pilot projects to treat severely malnourished children with RUTF have been undertaken in all these three states and in Bihar.
- **GOVERNMENT’S STANCE** -The central Government maintains that **enough evidence is not available** to substantiate the benefits of RUTF vis-à-vis other interventions.
- A joint assessment done by Department of Biotechnology, Indian Council of Medical Research and the Health Ministry found RUTF to be **only temporarily helpful**.
- The Centre had even asked various state governments to stop distributing RUTF packets to malnourished kids.
- Maharashtra, which was planning to distribute RUTF through its anganwadis had asked for reconsideration.
- **CONCERNS** - The debates on the concept of therapeutic food in India revolves around concerns over whether RUTF would be effective in India or not, considering its varying food habits.
- There is a concern that it would disturb the **traditional food habits** of the Indian children.
- Some studies have shown that children who were given RUTF found it too heavy to eat anything else after that.
- Also, this might encourage discontinuing breastfeeding in children older than six months.
- A slip back to malnutrition once RUTF was stopped was also noticed in a considerable number of cases, raising concerns over the **sustenance of the benefits**.
- While there is no large-scale study of post-RUTF treated children in India so far, health activists say it cannot be a permanent solution
- Moreover, RUTF is a medical intervention, and at Rs 25 per packet, a single child’s treatment will cost Rs 2,250 a month.
- As over a third of all children aged under five years are stunted or underweight, RUTF will require massive financing, raising concerns of **financial burden**.

How else can the problem be addressed?

- **Family-centric approach instead of food-centric approach** for handling malnutrition is being considered.
- The Health Ministry is working to develop guidelines and a toolkit for early childhood development.

- This is to better equip the frontline workers for **counselling families** on nutrition, feeding practices, and on family planning to ensure that low birth weight babies are not born.
- Consistent government support to target families is essential for optimal childcare practices, along with adequate hygiene and sanitation.
- Ensuring regular meals for children through properly streamlining the anganwadis could also significantly reduce malnourishment.

4.2 Anti-Microbial Resistance -Mass-Bathing in the Ganga

Why in news?

A government-commissioned study has reported that mass-bathing in the Ganga during pilgrimages might be contributing to anti-microbial resistance (AMR).

What are the findings of the study?

- The **water and sediments** were sampled at seven sites along the Ganga in different seasons.
- The report highlights how the rivers and groundwater have been **contaminated** by drug-resistant bacteria.
- And this is subsequently augmenting the **vulnerability of people** using that water.
- It states that levels of **resistance genes** were found to be about 60 times greater during the pilgrimage months than at other times of the year.
- Other than 'cultural factors' such as bathing, the drivers of AMR included excessive use of antibiotics in the **livestock industry** and unchecked discharge of **effluents by the pharmaceutical industry**.
- Notably, in 2014, India was the highest consumer of antibiotics, followed by China and the United States.
- Resultantly, India has some of the highest antibiotic resistance rates among bacteria that commonly cause infections in the community and healthcare facilities.

AMR

- Antimicrobial resistance is the ability of a microorganism like bacteria, viruses and some parasites to stop an antimicrobial drug from working against it.
- The resistance **reduces or eliminates the effectiveness of these drugs**, chemicals, or other agents designed to cure or prevent infections.
- Resultantly, standard **treatments become ineffective**, infections persist and even spread to others.
- Microbes resistant to multiple antimicrobials are called multidrug resistant (MDR) or sometimes 'superbugs'.

How does it spread?

- When antibiotics are used in humans or animals, approximately 80 - 90% of the **ingested antibiotics are not broken down**.
- They eventually pass through the body intact and **enter the environment** as waste.
- Thus, they retain their ability to affect bacteria and promote antibiotic resistance even after they enter the soil or water as a waste product.
- Any bacteria that acquire resistance genes have the ability to resist one or more antibiotics.
- **Bacteria** can transfer this **resistant genetic material**, including genes encoding resistance to antibiotics.
- Antimicrobials, particularly, antibiotics are called **societal drugs** as antibiotic resistance can pass from bacterium to bacterium.
- Resultantly, the resistant bacterial infections can pass from person to person.
- Thus, **antibiotic use and antibiotic resistance** can eventually **affect an entire community**.

What should be done?

- Improving **waste management** can address the spread of resistance-genes at key pilgrimage sites
- However, this is only part of the problem.
- In spite of the challenge, too little work had been done so far to understand the major drivers of anti-microbial resistance.
- The recent mapping exercise indicates that AMR research studies in India were of limited scope and needed a comprehensive focus.



4.3 India's Health Crisis

Why in news?

A report titled “**India: Health of the Nation’s States**” has been released collaboratively by various Indian agencies.

What are the findings of the report?

- **Life expectancy** -Indians have gained nearly a decade of life expectancy since 1990; notably, women more than men.
- **Communicable disease** -Despite signs of progress, diarrhoea, iron-deficiency - anaemia, and tuberculosis still cause a disproportionate amount of ill health, and claim lives.
- **Non-Communicable Disease (NCD)** - It includes diabetes, chronic respiratory diseases, mental health and neurological disorders, cancers, cardiovascular diseases, chronic kidney diseases and musculoskeletal disorders.
- The overall picture is that, the contribution of communicable diseases to deaths in India has largely reduced while that of NCDs has considerably risen.
- Notably, in the last 26 years, diabetes increased by around 170 % and ischaemic heart disease (IHD) went up by 104%.
- **Malnutrition** – It continues to be a curse in some of the poorer states such as Chhattisgarh, Bihar, Madhya Pradesh, Jharkhand, Rajasthan, Odisha, Uttarakhand, Uttar Pradesh, and Assam.
- There is a higher incidence of malnutrition among women.
- **Mortality rates** - Under-five mortality rate has decreased significantly in all states.
- However, in absolute terms, there is a wide gap among different states.
- E.g. States such as Assam and Uttar Pradesh recorded the highest number of under-five mortalities.
- Notably, the rates are four times higher than the states with the lowest incidence, such as the relatively more prosperous Kerala.
- **Lifestyle** - Rapid urbanisation is getting to be the cause of rising deaths in terms of both diseases and road accidents.
- Lifestyle and resultant non-communicable diseases along with accident injuries have overtaken infectious and maternal-child diseases as causes of health burden almost in every state of India.
- The contribution of non-communicable diseases is fuelled by unhealthy diets, high blood pressure, blood sugar and overweight.
- Besides, air pollution and tobacco smoking also continue to be major contributors to health issues.

4.4 Lifestyle diseases - A New Normal

What is the issue?

- Lifestyle diseases were earlier prevalent among the affluent sections of the society.
- A recent study based on lifestyle diseases highlights that lifestyle diseases are now considerably prevalent among all economic sections and is a “new-normal” disease.

What are lifestyle diseases?

- Lifestyle diseases characterize those diseases whose occurrence is primarily based on the daily habits of people.
- They include heart disease, stroke, obesity, hypertension, type 2 diabetes, etc.
- These are certainly a result of an inappropriate relationship between people and their environment.
- The main factors contributing to lifestyle diseases include bad food habits, physical inactivity, wrong body posture, and disturbed biological clock.
- Smoking, alcohol and drug abuse are also causes associated with these diseases.

What is the new study about?

- The study identified the distribution pattern of a range of lifestyle diseases across per capita consumption expenditure of persons.



- Using this, the diseases have been classified into “affluent”, “normal” and “deprived”.

What does the classification signify?

- **AFFLUENT** - The diseases under this category affects **rich people** more than the poor.
- **NORMAL** - The diseases under this category are the ones that proportionately affect **all economic sections** of the society.
- The proportion of incidence under this category has had a **sharp increase**.
- E.g. heart-related diseases and diabetes, earlier associated with the affluent, are now prevalent among other sections too, particularly in rural areas.
- This clearly suggests that many more people are now being affected by “normal” diseases than before.
- The increase is observed relatively more in the case of **urban India**.
- Kerala (rural) and Andhra Pradesh (urban) have found to be witnessing significantly high proportion of “new-normal” diseases.
- **DEPRIVED** - The diseases under this category are prevalent more among the poor than the rich.
- Emergence of new 'normal' lifestyle diseases and resultant predominance of diseases in urban India has shifted the figures of disease among the deprived sections in rural India.
- Notably, the study has found a reduction in percentage of diseases associated with the deprived sections of the rural India.

4.5 Reducing Salt Intake

What is the issue?

USA and 74 other countries have been advocating for lowering the salt intake.

What is the health risk?

- **Sodium Levels** - Both sodium and chloride that make up salt are essential nutrients for the body.
- Our kidneys are themselves fine-tuned machines for keeping blood levels of sodium within a physiologically healthy range.
- Thus, when there is too much sodium, the kidneys dump it into urine for excretion, and when more is needed, they reabsorb it.
- However, with a chronic excess of sodium to deal with, the kidneys can get worn out.
- Resultantly, sodium levels in the blood could rise, along with water needed to dilute it, resulting in increased pressure on blood vessels (BP).
- **Diseases** - Salt added to our foods by processors and restaurants is the main source of sodium in our diets.
- Excess sodium is responsible for most cases of hypertension in Western societies.
- It is a leading risk factor for heart attacks, strokes and kidney failure.
- Some studies have concluded that only people with hypertension need to reduce their salt intake.
- However, most experts have called for comprehensive reductions in salt intake by all.

5. GOVERNANCE

5.1 Review of Kotak Panel Recommendations

What is the issue?

- Uday Kotak Panel, constituted by SEBI, recently released its recommendations focussing on issues with corporate governance. (For recommendations [refer 5.2 in IAS Parliament October CA Magazine](#))
- The recommendations need a review for it to be effective in implementation.

What are the limitations and challenges?

- **Spirit** - The success of any law on corporate governance largely depends on the intent and spirit than the letter of law.
- E.g. Both the Companies Act, 2013 and the SEBI regulations require a company to have at least one woman director on its board.



- But in reality, the woman director appointed is generally a relative or a family member of the promoter. (recent recommendation - appointment of "independent" woman director)
- Evidently, while the letter of law may have been complied with, the spirit of regulations has not been met.
- **Ease of doing business** - For any regulation aimed to enhance corporate governance, it is equally important that it should not result in difficulties in doing business.
- Ensuring this is essential for developing a true spirit for compliance instead of a forced one.
- **Roles** - Listed entities with more than 40% public shareholding should now separate the roles of a chairperson and MD/CEO.
- Making shareholding the only criteria for separation of roles may not be correct; instead, this should have been left to be decided on a case-by-case basis.
- Certainly, a profitable company would prefer sustaining the growth momentum by avoiding dual centres of power and retaining a single control.
- This proposal could specifically affect the family-promoted companies.
- **Efficacy** - Some of the recommendations, including increasing the minimum of directors from 3 to 6, could be harder for the companies to implement.
- Six being an even number, voting on a resolution and a deadlock, if any, requires a casting vote; this could lead to operational unease.
- **Besides** these, some easy to implement recommendations such as on meetings frequency, directors' attendance, liability insurance, etc, certainly may not have a big impact on corporate governance.

What lies ahead?

- A mere change in regulations or enhancing the punishment for violation is less likely to yield the intended results.
- Thus, change in attitude is a more important precondition for the success of any norm on corporate governance.
- India has significantly improved its ranking on protection of minority shareholders in the recent Ease of Doing Business index.
- It is now for SEBI to take forward this and modify the existing norms, make changes and implement the recommendations.

5.2 Concerns with Tribunals

Why in news?

The Law Commission of India, in its recent report, has highlighted the issues with tribunals in India and has made recommendations in this regard.

What are the notable concerns?

- **INDEPENDENCE** - Presently, the government makes **appointments** to the tribunals which form a pillar of the country's justice delivery system.
- The tribunals functioning under the very government department which may be a litigant before them, makes the tribunals subservient to the executive.
- There is an apprehension that this could disturb the independent functioning of the tribunals.
- Also, the provisions relating to the qualifications, appointment, tenure, etc do not conform to the standards laid down by the Supreme Court in its various decisions.
- The Law Commission has thus suggested that a **Committee led by the CJI** should be in charge of the appointments to important posts.
- These include the Chairman, Vice-Chairman and Judicial Members of the various central tribunals.
- It has also suggested that tribunals be monitored by a **single nodal agency** under the aegis of the Ministry of Law and Justice to ensure uniformity in affairs.
- **FUNCTIONING** - The **disposal rates** of tribunals in comparison to filing of cases per year is a welcoming 94%.
- However, the tribunals are still burdened with **high pendency** of cases.

- Also, the official data in respect of the working of some of the tribunals do not depict a satisfactory picture.
- Lack of infrastructure, unsatisfactory service conditions, delays engineered by lawyers and parties before the forums have been persistent problems.
- **VACANCY** - Another serious problem affecting the efficacy of tribunals is the large number of vacancies that are not filled for long periods.
- The commission recommends that the **procedure** for filling up vacancies **start six months before** the seats fall vacant.

What lies ahead?

- The concept of tribunals was developed to overcome the crisis of delays and backlogs in courts.
- However, over the years, the number of tribunals has increased and is estimated to be more than 30.
- The government recently reduced this number, by merging some tribunals with overlapping functions and is also working on further mergers.
- But before trimming the number of tribunals, there should be earnest efforts to **strengthen the high courts**.
- Also, the existing tribunals should be validated with proper measures to ensure their independence.

6. INDIA & ITS NEIGHBOURHOOD

6.1 Doklam Uncertainty

What is the issue?

- The resolution derived in the Doklam dispute by India and China is uncertain.
- A trilateral pact engaging India-China-Bhutan is needed to address the long-standing dispute.

What is the present status of the Doklam dispute?

- After a long standoff in Doklam, India and China paused the dispute peacefully by diplomatic moves.
- The 19th national congress of the communist party of China highlighted that the expeditious disengagement at Doklam was a peaceful and dialogue-based resolution.
- Even India has earlier stated that the de-escalation was based on mutual agreement, this reflects a trust factor.
- Nevertheless, both countries have embraced the disengagement as a diplomatic victory for their own sides.
- This resulted in subduing strong public sentiments in both countries.
- China even termed it as a victory for Asia, as these two big powers definitely have proven reasons to cooperate rather than to engage in conflict.

Why Doklam issue may haunt Sino-India ties in future?

- **Lack of legal frameworks** -The bilateral politico-legal frameworks are inadequate, with varying connotations and intent, both countries have been referring to the 1890 Convention of Calcutta signed between Great Britain and China.
- Such boundary disputes involving China, India and Bhutan had also been referred to in the letters exchanged in 1959 between Prime ministers Jawaharlal Nehru and Zhou Enlai.
- These letters are frequently interpreted by both countries to justify their contemporary stances.
- **Volatile Location** -India argues that the tri-junction lies near Batang La, China positions it further down south at Mount Gamochen.
- Persisting claims and counter-claims related to patrolling the disengaged region, widening of the road by China just 10 km from Doklam, and the activity of armed forces is never-ending.



- In 1965-66, China complained about the presence of Indian troops in the Doklam region.
- But Bhutan claimed that the area in question was under Bhutan's sovereignty.
- India claimed that Chinese intrusions happened at regular intervals in 1988 as well as in 2000.
- **Stand of Bhutan** -It cannot be dictated to either by India or China.
- Both India and China have been trying to make inroads into Bhutan but the post-Doklam scenario clearly suggests that China has the advantage.
- China and Bhutan entered into a border-related agreement in 1988 and subsequently in 1998 prohibiting unilateral measures.
- With India too, Bhutan had the friendship treaty to guide its foreign policy.
- However, since the treaty was amended in 2007, Bhutan is under no obligation to seek such guidance.

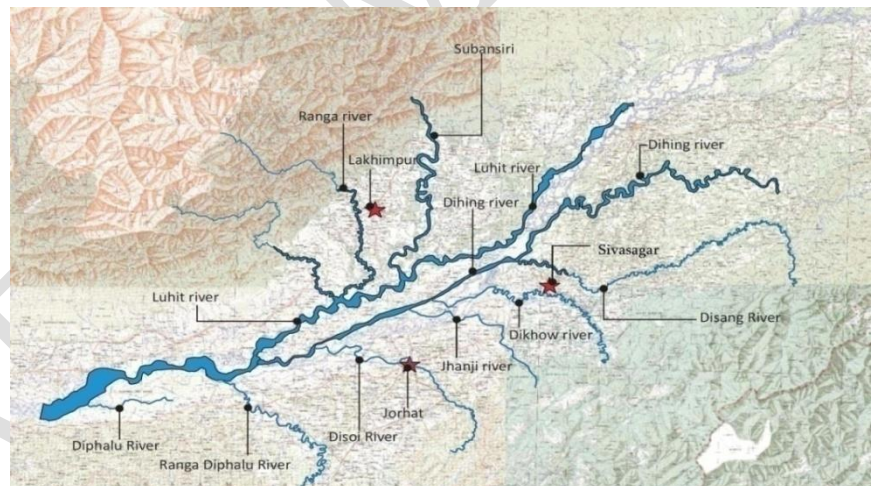
6.2 Worries about Brahmaputra

What is the issue?

- China plans to build a 1,000-km tunnel to divert water from the Brahmaputra in Tibet to the dry Xinjiang region.
- This has created worries about Brahmaputra getting dried up, especially in Assam.

What constitutes the drainage route of Brahmaputra?

- Out of the total length of the Brahmaputra of 2,880 km, 1,625 km is in Tibet flowing as Yarlung Tsangpo.
- 918 km is in India and known as Siang, Dihang and Brahmaputra.
- The rest 337 km in Bangladesh has the name Jamuna till it merges into Padma near Goalando.
- As a trans-Himalayan tributary, Yarlung is substantially fed by snow and glacial melts, in addition to rainfall.



Why India shouldn't be worried?

- These fears are hardly based on objective data-based analysis.
- Melting snow contributes merely 15-20% of the total volumetric discharge of the river.
- **Catchment** - With the Himalayas acting as the barrier, Tibet is a rain shadow region with an annual precipitation of about 300mm.
- As the tributaries cross the Himalayan crest line, the annual average precipitation reaches about 2000 mm.
- Hence, a very large component of the total annual flow of Brahmaputra is generated to the south of the Himalaya in India.
- **Flow Rates** - While the total annual outflow of the Yarlung River in China is estimated around 31BCM, the same for Brahmaputra towards the end at Bahadurabad in Bangladesh is about 606 BCM.
- Further, the peak flows at the 'Tsela Dzong' measuring station near the great bend in Tibet, is about 10,000 cumecs.
- But the peak flow at downstream Guwahati is around 40,000 cumecs and at Bahadurabad in Bangladesh is 50,000 cumecs.
- Similarly, during the lean season, flows at the mentioned locations read 400 cumecs, 4000 cumecs, and 5000 cumecs respectively.

- **Implication** – The above data implies that the Brahmaputra gets fatter and mightier as it flows further downstream.
- This is also because of the contributions of various tributaries like Dibang, Lohit, Subansiri, Manas, Sankosh, and Teesta.

Can water diversion affect sediment flow?

- Currently downstream Brahmaputra carries a huge sediment load on its run towards the sea.
- River volume in the Yarlung River is not sufficient to generate and transport large sediment load.
- Notably, the annual suspended sediment load near the Arunachal border in Tibet is around 30 million metric tonnes.
- This is miniscule when compared to 735 million metric tonnes at Bahadurabad in Bangladesh.
- Therefore, the large sediment load is created only in the downstream region in India.

What is the way forward?

- In the case of Brahmaputra, initial evidence suggests that Chinese diversions can't have a substantial impact on the Indian and Bangladeshi drainage networks.
- It should be understood that structural interventions does not always reduce downstream flows.

6.3 China-Rohingya diplomacy

Why in news?

China had announced a three stage plan on Rohingya diplomacy.

What are the developments?

- A military operation by Myanmar in Rakhine, resulted in around 600,000 Rohingya fleeing the province to Bangladesh.
- This snowballed into a humanitarian crisis and a war of words between Dhaka and Naypyidaw.
- In this background that China stepped in with its three-point plan.
- Subsequently, an agreement was reached between Myanmar and Bangladesh to repatriate Rohingya refugees.
- If the agreement took effect successfully, China had promised economic assistance for the long-term development of Rakhine.

What is China's strategy?

- Recently China announced that “as a friend of both Myanmar and Bangladesh, Beijing is willing to keep playing a constructive role for the appropriate handling of the Rakhine State issue”.
- It is an attempt to show itself in a new, more positive light in the region.
- The “three-stage plan” was described by China on Rohingya diplomacy
 1. **A ceasefire on the ground** - This is seen as an efficient plan, as people will no longer flee to neighbouring countries.
 2. **Talks between Myanmar and Bangladesh** - This is to work out the modalities of return of the Rohingya from their camps in Bangladesh to their homes in Rakhine.
 3. **Poverty alleviation** - As a long-term solution.
- Myanmar responded with the plan that it was in line with Myanmar's own views, and thanked China for its “assistance as a friend in between the eternal neighbours.”

What are the implications for India?

- Despite its old ties with Myanmar, India struggles to find the right tone in relations with that country.
- India missed a right moment to take leadership in a regional crisis due to limited views on the Rohingya.
- India has a misguided notion that even a bare mention of the humanitarian problem then unfolding in the Rakhine would anger Myanmar and send it rushing to China.
- Now it is clear that India has a long way to go, and a lot to learn from China.



Why has China been pro-active?

- China has put pressure on Myanmar because a protracted conflict in Rakhine will be decidedly against Beijing's economic interests.
- Rakhine is an important link in its Belt and Road Initiative and China is building a \$7.3 billion deep-water port in the province.
- It has also invested \$2.45 billion to build an oil and gas pipeline connecting coastal Rakhine to Yunnan province in Southern China.

What are the challenges?

- While the signing of a repatriation deal suggests some positives, the details of the agreement are very preliminary.
- The agreement had mandated an immediate ceasefire in Rakhine to halt further displacement which hasn't been declared yet.
- Also, the number of Rohingya who will be sent back or the timeline for repatriation hasn't been revealed.
- It is also not clear whether the refugees themselves want to go back to a place they had fled in such perilous circumstances.
- There is also no indication thus far, that a resettlement plan is taking shape.

6.4 Refugees from Sri Lanka

What is the issue?

- Over 1 lakh Sri Lankan Tamil refugees have been living in Tamil Nadu ever since the anti-Tamil pogrom of 1983.
- India and Sri Lanka should take up their repatriation at the earliest.

What are the problems they face?

- Recently, media focus has been on the Rohingya refugees in India.
- But the plight of Lankan Tamil refugees, who have been here for nearly 35 years, has gone out of public consciousness.
- The pathetic condition of shelters, restrictions on movement, and limited scope of livelihood opportunities affect the community.
- The refugees also suffer from social and psychological problems as reports of suicides, school dropouts and child marriage show.
- Many middle-aged refugees worry about their children's future, given the fact that 40% of camp refugees are below 18 years.
- Among the Hill country Tamils of central Srilanka (Tea estate Tamils of Indian origin) statelessness is a major problem.

What have been the efforts to repatriate?

- Tamil politicians in Srilanka have been very keen & positively inclined to get these people across the Palk Strait.
- Also, as 28,500 refugees are said to be stateless, the Sri Lankan government, amended its laws to address this in 2009.
- Indian government along with United Nations High Commissioner for Refugees (UNHCR) also speeded up repatriation efforts in recent years.
- Yet, the voluntary reverse flow of refugees hasn't been significant even after the end of the Eelam War in 2009.
- In the past 8 years, hardly 10% of the refugee population (9,238 people) have gone back.

What are the reasons?

- **Pull Factor** - Over 62 thousand refugees have been receiving various relief measures of the Central and State governments.
- Notably, Tamil Nadu government recently even announced measures to facilitate the refugees to take up professional courses.



- Hence, regardless of the quality of housing and jobs, several refugees have experienced an improvement in their lifestyle.
- Besides, a whole new generation has been raised completely in Tamil Nadu for whom Sri Lanka has become an alien country.
- **Push factor** – Many refugees have no hope of a better future in Sri Lanka.
- This feeling has strengthened by UNHRC surveys that have found a “lack of livelihood opportunities”, for refugee who returned.
- This situation may not improve in the near future given the state of the Sri Lankan economy.
- Also, hill country refugees are landless and will not be inclined to go back unless provided land.
- They also seem uninterested to work in tea plantations as labourers for meagre wages anymore.

How does the future look?

- Tamil Nadu holds the distinction of hosting the largest number of refugees in India.
- While repatriation isn't currently a priority for both India and Sri Lanka, it can't be delayed for ever.
- While for India a long-standing problem would be resolved, for Sri Lanka it would be a step towards ethnic reconciliation.
- All concerned governments should come out with a fair package for repatriation, with due consideration for the aspirations of refugees.
- For those who want to stay back, India can consider providing them citizenship, like how Pakistani refugees were given.

6.5 Delaying Constitutional Reform in Sri Lanka

What is the issue?

- An interim report of the Sri Lankan Assembly's Standing Committee on constitutional reform was released recently.
- It is neither a final report nor a constitutional draft, but a statement of the various positions of groups in Parliament on reform topics.
- It reflects the rising opposition within the government for taking forward the constitutional reforms proposed earlier.

What were the key reform proposals?

- The constitutional reform process envisages an undivided and indivisible country, with the province as the unit for devolution of power.
- It introduces the concept of 'subsidiarity'.
- Under this, functions that can be performed by the lowest tier of government should be vested in it.
- The report also provides for the creation of a second parliamentary chamber representing the provinces.
- The report commits that the controversial terms 'unitary' and 'federal' be avoided.
- Instead, Sinhala and Tamil terms that suggest an undivided country be used to describe the republic.
- Besides, the electoral system solely based on proportional representation is proposed to be changed.
- A mixed method under which 60% of parliamentary members to be elected under the first-past-the-post system is to be introduced.
- Complying with earlier demands, the reforms aim at abolishing the executive presidency.
- The government has promised that the pre-eminent status given to Buddhism will remain as such; an assurance that may help overcome opposition from the majority.

What are the roadblocks?

- **Government** - The various factions within the government are divided on the nature and scope of the reforms.
- The Prime Minister Ranil Wickremesinghe and his team want a new Constitution and the abolition of the presidential system.

- On the other hand, the President Maithripala Sirisena and his Sri Lanka Freedom Party (SLFP) insist only on electoral reforms.
- **Buddhists** - The most ardent opponents of the reform initiatives now are Sinhalese nationalist forces, led by Buddhist monks.
- They are concerned that any further devolution would amount to giving in to the demands of the Tamil and Muslim minorities.
- It would also be appealing the Liberation Tigers of Tamil Eelam diaspora and foreign powers.
- Also, they worry that abolition of the presidential system would weaken the Sri Lankan state.
- The Buddhist Sangha leaders are concerned that the new Constitution might relax on the “foremost place” position accorded to Buddhism in the current Constitution.

How does the future look?

- The Prime Minister will certainly find it difficult to manage the politics of constitutional reform.
- Besides, the government of Sirisena and Wickremesinghe is no longer as politically strong as it was a year ago.
- Corruption scandals, slowing down of investigations against individuals of the previous government, and economic stagnation have all seriously undermined the political credibility.
- Unless the two leaders repair their relationship, any significant progress in the constitutional reform process is far from reality.

7. BILATERAL RELATIONS

7.1 Growing India-South Korea Relations

What is the issue?

- Recent political developments between India and South Korea have created an opening to share mutual security interests in Asia.
- However, cultural and political differences could present a challenge to forging effective regional ties.

What are the recent developments?

- **South Korea** - There is rising tension with China, concerning the US-supplied missile and radar deployment in its territory.
- The prolonged confrontation with China on the deployment of Terminal High-Altitude Area Defense (THAAD) constrained the relationship.
- The pros and cons of THAAD is debated among the US, South Korea, and China in terms of its purpose and application.
- **Bilateral - South Korea** is taking a bold step by inviting India into South Korea’s diplomatic domain.
- South Korean President dispatched a special envoy to Prime Minister Modi to reinforce bilateral relations.
- It reiterated its message of placing India on par with the US, Russia, China, and Japan.
- It expressed its desire for stronger security cooperation with India in designing various levels of official talks more regularly.
- It played a critical role in moderating opposing members in India’s application for the Nuclear Suppliers’ Group’s membership in a plenary meeting.
- **India**, on its part, started building an increasingly incompatible stance toward North Korea.
- It also implemented a plan to launch a strategic initiative, ‘Korea Plus’ to facilitate Korean FDI and forge larger economic cooperation.
- At Seoul’s request, it discontinued the provision of training courses to North Korean students in the Centre for Space Science and Technology Education in Asia and the Pacific, Dehradun.
- It also suspended the training of North Korean soldiers in Indian languages in a Madhya Pradesh-based military school.

What are the common interests?

- **Regional Stability** - The regional tensions in South Asia especially between India and China create a common interest for India and South Korea.
- This could be a collaborative approach for regional stability.
- **Nuclear** - South Korea's key interest in managing their nuclear neighbour (North Korea) is similar to India's considerations toward Pakistan.
- The US alliance system, established with South Korea and Japan, puts pressure on North Korea to cap its nuclear programme.
- Containing North Korea is beneficial to India's economic and regional ambit in East Asia.
- It also adds to its approach to nuclear non-proliferation regime as a responsible nuclear state.
- **Diplomatic** - There is long lasting regional security dilemma with the continued verbal provocations and a conventional arms race.
- Thus, despite the alliance system, Seoul appears to be in searching for a stronger diplomatic stand on imminent regional issues beyond the alliance system.
- South Korea's approach to India comes with strategic optimism for expanding ties to ensure a convergence of interest in planning global and regional strategic frameworks.

7.2 India - ASEAN Cooperation

What is the issue?

- In the midst of an imminent U.S. retreat and Chinese expansionism, India is seeking to chart its foreign policy course.
- Various meets held in Philippines recently, is a landmark event for the immediate future.

What happened in Philippines?

- Philippines recently hosted the Association of Southeast Asian Nations (ASEAN) and East Asia summits (EAS).
- Notably, 2017 also marks the 50th anniversary of ASEAN.
- Regional Comprehensive Economic Partnership (RCEP) leader's meeting and the ASEAN Business and Investment Summit were also held.
- Indian PM joined these meetings, and underscored India's commitment to deepening ties with the ASEAN states and the wider Indo-Pacific region.

What is the significance of Indo-Pacific?

- The Indo-Pacific region is now central to global politics and economics and recent days.
- Beijing is also more confident now of projecting its regional and global powers.
- Notably, it has benefited from the U.S. administration's lack of seriousness and consistency in its foreign policy.
- This makes this period of transition very significant for ASEAN and India that have a stake in the long-term stability of the region.

How is the status of India-ASEAN ties?

- ASEAN members and India together consist one of the largest economic regions with a total population of about 1.8 billion.
- ASEAN is currently India's fourth largest trading partner, accounting for 10.2% of India's total trade.
- India is ASEAN's seventh largest trading partner and its service-based economy complements the manufacturing-based ASEAN.
- While there is considerable scope for further growth and increased co-operation, formidable security challenges remain.

ASEAN

- The Association of Southeast Asian Nations (ASEAN) was established in 1967 in Bangkok, Thailand.
- It came in with the signing of the ASEAN Declaration (Bangkok Declaration) by the founding members namely Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Brunei Darussalam, Viet Nam, Lao PDR, Myanmar, and Cambodia joined in the course of time.

- Ensuring a favourable balance of power in the region for ensure regional stability is crucial.
- India needs to further domestic economic reforms and enhance regional connectivity to be seen as a favourable partner.

7.3 Lessons from ASEAN for SAARC

What is the issue?

- Both SAARC and ASEAN took birth with almost similar aspirations.
- While ASEAN celebrates its 50th year, being largely successful, the SAARC has remained stagnated.

Why has SAARC stagnated?

- **Cooperation** - The political animosity and military conflict between India and Pakistan have disturbed the regional cooperation.
- This witnessed a new low when India boycotted the 19th SAARC summit in Pakistan, as a result of the Uri terrorist attack.
- Subsequently the summit was cancelled with Bangladesh, Afghanistan and Bhutan following India's stance.
- **Trade** - Trade amongst the SAARC members stands only at 3.5% of their total volume of trade.
- Initiatives under the South Asian Free Trade Association have failed to make much headway.
- Sub-regional initiatives like the BBIN Motor Vehicle Agreement also have stalled.
- **Connectivity** - The SAARC Visa Exemption Scheme allows only certain categories of dignitaries to be exempt from visas.
- Ordinary citizens are excluded from accessing unimpeded travel in the region.
- Free movement of people between India and Pakistan is not that easy.
- It is even difficult to a get visa for citizens of other SAARC countries who have visited either India or Pakistan before and now wish to travel to the other.
- Poor infrastructure in SAARC countries also plagues connectivity.

What lessons do ASEAN hold for SAARC?

- **Mandates** - ASEAN, in its first two decades, focussed on a limited range of issues.
- Only after securing them, it expanded its mandate over time.
- Resultantly, it now deliberates on varied issues such as climate change, disaster management, counterterrorism, drugs and human trafficking, etc.
- **Cooperation** - ASEAN was able to ensure its sustainability by amicably resolving the disputes and adopting peaceful mechanisms to mitigate opposing claims.
- **Trade** - Trade in ASEAN has grown rapidly.
- It has focussed on promoting rapid economic growth and modernisation.
- It has created the ASEAN Comprehensive Investment Agreement (ACIA) for facilitating trade.
- This ensures liberalisation and protection of cross-border investments operations, together with best practices for the treatment of foreign investors and investments.
- **Connectivity** - ASEAN nations are planning to waive entry requirements amongst the member states.

SAARC

- The South Asian Association for Regional Cooperation (SAARC) was established with the signing of the SAARC Charter in Dhaka on 8 December 1985.
- SAARC comprises of eight Member States who are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

BBIN

- It is a regional sub-grouping proposed by India for ease of access among the four countries.
- It is seen as an alternative to Motor Vehicle Agreement (MVA) at the SAARC summit in Kathmandu in 2014 which Pakistan rejected.

ASEAN Comprehensive Investment Agreement

- ACIA was adopted in 2009 in the context of an integrated economic community.
- It was envisioned as ASEAN's instrument to create a free and open investment environment to increase global competition and enhance the attractiveness of ASEAN as a single investment destination.

- A feasibility study has been conducted on the development of a rail link from Singapore to Kunming in southern China.
- This boosts intraregional trade and people-to-people connectivity.
- Projects aimed at promoting the entire region as a tourist destination have also been undertaken.

What lies ahead for SAARC?

- SAARC countries should avoid building sub-regional ties at the cost of jeopardising the regional vision for unity.
- E.g. Attempting to isolate Pakistan by forming sub-regional initiatives like the BIMSTEC.
- Bilateral power struggle and animosity should not come in the way of keeping open the channels of engagement.

7.4 India and France - Indian Ocean Region

What is the issue?

- With recent bilateral diplomatic meets, India and France have decided to strengthen cooperation in the Indian Ocean Region (IOR).
- In the context of the developing Indo-Pacific quadrilateral grouping of India, US, Japan and Australia, it is essential for India and France to take forward the bilateral relationship with a new vigour.

How influential is France in the IOR?

- France is one of the notable countries with maritime traditions that shaped the contemporary Indo-Pacific power relations.
- With a colonial inheritance, it has a considerable influence through overseas territories in the Western Indian Ocean and South Pacific.
- Its military facilities in the Indo-Pacific include those in the Reunion Island, Djibouti and the United Arab Emirates.
- France also has a variety of coordination mechanisms in the Pacific with the United States, Japan, Australia, Britain and New Zealand.
- In addition, it plays a lead role in the Indian Ocean Commission.
- It is an intergovernmental organization that brings together the island states of Mauritius, Seychelles, Madagascar, Comoros and the French territory of Reunion.

What lies before India?

- India and France have long held partnerships in traditional areas of high-technology and defence cooperation and recently, climate change.
- The overall geopolitical scenario is changing with the rise of China, renewed tensions between Russia and Europe, uncertainty in the US political trajectory and loosening of the old alliances.
- It becomes essential in this context that India and France started offering a strong regional dimension to their strategic partnership.
- India and France have a potential scope to work together in the IOR, especially in the Western Indian Ocean.
- With Indo-Pacific quadrilateral grouping in the developmental stage, it is in India's interests to build its bilateral security cooperation.
- This should include both the members of the quad as well as other partners in the Indo-Pacific including France.
- India needs to intensify the exchange of maritime intelligence, negotiate agreements to share naval infrastructure facilities and put in place logistical support arrangements.

7.5 Indian Judge at the ICJ

Why in news?

An Indian Justice Dalveer Bhandari was re-elected as a judge to the International Court of Justice (ICJ).

How are judges elected to the ICJ?

- The ICJ has a bench of 15 judges to settle legal disputes submitted to it by States and to give advisory opinions on legal questions.



- Elections are conducted triennially, and five among these 15 judges are elected every three years for a nine-year term.
- This is to ensure a sense of continuity, especially in pending cases.
- A candidate needs to get an absolute majority in both the chambers i.e. the UNGA and the UNSC, to get elected.
- Judges are eligible to stand for re-election.
- After the Court is in session, a President and Vice-President are elected by secret ballot to hold office for three years.
- Of the 15 judges, it is mandated that -
 - i. three should be from Africa
 - ii. two from Latin America and the Caribbean
 - iii. three from Asia
 - iv. five from Western Europe and other states
 - v. two from Eastern Europe

International Court of Justice

- The International Court of Justice (ICJ) was established in 1945 after half a century of international conflict in the form of two World Wars.
- The ICJ functions with its seat at The Hague, Netherlands.
- It has the jurisdiction to settle disputes between countries and examine cases pertaining to violation of human rights.
- It adjudicates cases according to the tenets of international law and is the judicial arm of the United Nations.
- ICJ is not to be confused with ICC (International Criminal Court) which is a permanent tribunal created to prosecute individuals for genocide, crimes against humanity, war crimes and the crime of aggression.
- While ICJ is the primary judicial organ of the UN, the ICC is legally and functionally independent from the United Nations.

Why is the recent election so significant?

- **India** - India has got the third member of its origin to secure a prominent position in a United Nations (UN) body in recent months.
- Although he does not represent the Indian government, having a judge of Indian origin is seen as a strategic asset.
- It particularly gains significance in the backdrop of the Kulbhushan Jadhav case, which is currently pending before the ICJ.
- **UK** - In UN history, a seven-decade-old convention of the United Kingdom having a judge at the ICJ stands broken.
- The United Kingdom, which has had a judge since 1946, withdrew its candidate and gave way for India's nominee.
- It did so in the face of a defeat at the 193-member UN General Assembly; Bhandari, in the end, won 183 out of 193 votes at the UNGA and all 15 at the UNSC.
- Post-Brexit, London has found itself on a more lonely pitch.
- India emerging as a top economic partner and a potential market for a post-Brexit UK could also have played a role in Britain's decision.
- Further, UK wants India to play a lead role in the upcoming UK hosted Commonwealth Heads of Government summit to shed the image of it being a "white man's club".
- **Global** - Besides this doubted diplomatic move, the election has come as a sign of a beginning of change.
- And also as an opportunity to challenge the sense of entitlement among the permanent members and changing the status quo.
- India can now consider channelizing this energy and momentum to push for larger reforms at the United Nations Security Council.

Indian Members in the UN

- Recently, international law expert Neeru Chadha was elected to the UN body, the International Tribunal for the Law of the Sea (ITLOS).

- Soumya Swaminathan, director general of the Indian Council of Medical Research (ICMR), was appointed the deputy director general for programmes at the WHO very recently.

8. INTERNATIONAL ISSUES

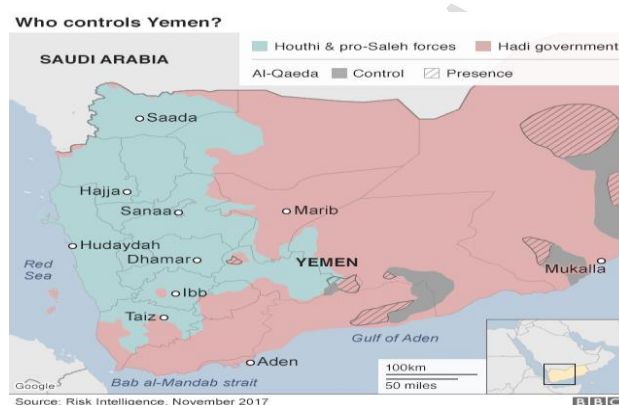
8.1 Yemen Blockade

Why in news?

Saudi Arabia has recently imposed a blockade on Yemen, which was already reeling from a humanitarian crisis.

What are the contours of the war?

- Yemenese civil war broke out when Shia Houthi Rebels captured large swathes of land in the western regions.
- They've captured the capital Sana and also enjoy the patronage of the country's Shia community and the previously deposed President 'Ali Abdullah Saleh'.
- The Saudi-backed 'Abdrabbuh Mansur Hadi' government which actually operates from the southern coastal city of Aden.
- Saudis see Houthis as Iranian proxies and have been bombing their territory with impunity for almost 3 years.
- Saudis also enjoy the steadfast support of successive U.S. administrations for their Yemenese aggression.
- While the war has entered a stalemate, more than 10,000 people have been killed and many more displaced.
- Notably, Al-Qaeda has grown in strength in the midst of this chaos.



Why was the blockade imposed?

- The Saudi-led coalition closed all air, land and sea access to Yemen on November 6.
- This was done following the interception of a missile fired towards the Saudi capital.
- Presumably, the blockade was imposed to prevent the Houthi rebels from smuggling high-end weaponry from Iran.
- But as a consequence, it led to one of the worst famines.

How worse is the famine?

- The American alert on Yemen said that a prolonged closure of key ports in Yemen led "unprecedented deterioration in food security" to the worst category of **Phase 5**.
- 17 million people who are already dependent on international aid for food and drugs will starve.
- Notably, about 80% of Yemen's basic food supplies are imported through ship deliveries along the Red Sea coast.
- Further, incessant bombing and the failure to provide basic services have resulted in a medical emergency.
- Incidentally, there is already a major cholera outbreak in the country due to non availability for clean water supply.

Phase 5

- The five-stage scale, with Phase 5 being famine, is used by humanitarian aid groups to anticipate the severity of potential hunger emergencies.
- Famine is defined as existing in areas in which at least one in five households suffers "an extreme lack of food and other basic needs where starvation, death and destitution are evident."

What is the way ahead?

- There has been no meaningful effort thus far, from the international community to end this humanitarian crisis.
- While the Saudis don't want the Houthis to control the country, they lack strategic depth and resources to shape Yemen's future.
- Hence, UN and other international bodies need act soon to prevent this man-made disaster from reaching catastrophic proportions.



8.2 Bloodless Coup in Zimbabwe

Why in news?

- The military in Zimbabwe launched a coup on November 15.
- The motive is claimed to target “criminals” surrounding long-time popular leader Robert Mugabe.

Who is Robert Mugabe?

- Mr. Robert Mugabe has been at the helm in Zimbabwe’s politics for 37 years, since its independence from British rule in 1980.
- At 93, Mr. Mugabe is the world’s oldest head of state and also the last of Africa’s generation of state founders who still wield power.
- His lengthy rule has been marked by brutal repression of dissent, mass emigration, vote-rigging and economic collapse.
- Despite this, he is popularity among the masses is relatively high and has seen him in wield near total control.
- His poor health has fuelled a bitter succession battle as potential replacements jockey for position.

What triggered the current stand-off?

- Recently, Mr. Mugabe sacked long-time ally and Vice-President Emmerson Mnangagwa.
- Notably, he was widely expected to succeed the Mr. Mugabe and take control of the ruling ZANU-PF party.
- This move was seen as an attempt to install his Mr. Mugabe’s wife Grace (52) for succeeding to the helm.
- Mr. Mnangagwa fled the country after his dismissal and many long term regime loyalists are said to have sided with him.
- Days later, the Army warned Mr. Mugabe to exhibit restraint in a series of political purges, which wasn’t heeded to.

What is the state of the Zimbabwean economy?

- Mr. Mugabe’s populist land reforms of 2000 saw black Africans seizing large tracts of agricultural land from the European settlers.
- These moves led to a production collapse in agriculture and eventually plunged the country into an economic crisis.
- Millions of economic refugees have streamed out of the country, mostly to neighbouring South Africa.
- Eventually in 2007-08, the country saw hyper-inflation that forced the abandonment of the local currency and a switch to dollars.
- In 2016, fears of economic downturn reappeared with inflation rating at around 50% for a month.
- Notably, the sacked vice-president Mr. Mnangagwa is said to have been planning to revitalise the economy through radical measures.
- He is even said to have vouched for rectifying the mistakes of the radical land reforms and patching up relations with the World Bank and IMF.

How did the coup unfold?

- Armoured vehicles blocked roads to the main government offices, parliament and the courts in central Harare.
- But the atmosphere in the capital remained calm and the public went about with their work as usual.
- Soldiers also seized the state broadcaster and announced that Mr. Mugabe and his family were safe which was later asserted by Mr. Mugabe himself.
- Barring the prolonged gunfire that was heard near Mr. Mugabe’s private residence, the situation has largely remained calm.
- Notably, the civilian government machinery and the Presidential Guard which remains loyal to Mr. Mugabe, is yet to react.

Is it an actual military coup?

- Though the action is in effect a bloodless coup, the Zimbabwean military chose to call it a bloodless political correction.
- Considering Mr.Mugabe’s popularity with the masses, it is also not clear whether this military action would end to his reign.
- The main goal of the generals appears to be ‘preventing Mugabe’s 52-year-old wife Grace’ from succeeding him.
- But irrespective of the outcome, it is likely to mark the end of the total dominance of the country by Mugabe.
- Notably, even the main opposition MDC party calling for civilian rule to be protected.

What next?

- Various countries have asked its nationals in Zimbabwe to stay cautious due to the prevalent uncertainty.
- Mr.Mnangagwa’s promised return would be a major event.
- The actions of the ZANU-PF’s party youth wing, which is aligned to Ms.Grace is also being closely watched.
- The army has promised to retreat as soon as its stated vision has been accomplished.
- Further actions of the military would decide the direction the current turmoil would take.

8.3 Burundi Pulls out of ICC

Why in news?

Burundi has become the first country to officially quit the International Criminal Court (ICC).

What is the situation in Burundi?

- Mr. Nkurunziza, two-term President of Burundi, won a third term in 2015.
- It was in contravention of a two-term limit that was agreed upon earlier.
- He has become very authoritarian in crushing protests using state machinery, ever since.
- The flight of refugees to neighbouring countries is said to have exceeded 400,000.
- International pressure to bring the situation in Burundi under control has proved ineffective.



What was the reason for quitting ICC?

- A UN commission investigating violence under the President had reported large-scale incidents of sexual abuse, torture, forced disappearances and executions.
- Hence it had called for the ICC’s intervention.
- Burundi feels that the ICC has shown itself to be a political instrument and “weapon used by the west to enslave” other states.
- It is also seen as a move to defend its “sovereignty and national pride”.
- Gambia and South Africa were also threatening to pull out.
- As most ICC investigation involves African governments, there is a popular perception that the institution is biased.
- The continent’s top intelligence officials signed a statement accusing the court of being “hijacked by powerful western countries” and “acting as a proxy” for foreign-led government change.



What are the Implications for ICC?

- ICC indeed faces hurdles to hold big global powers to account for human rights violations.
- But Burundi might still end up in the court’s sights.

- Under the Rome Statute, crimes in nonmember states can still be referred for investigation by the UNSC.
- The United Nations' commission of inquiry on Burundi recommended such a referral.

Quick Facts

International Criminal Court

- ICC is an intergovernmental organization and international tribunal that sits in The Hague in the Netherlands.
- The ICC has the jurisdiction to prosecute individuals for the crimes of genocide, crimes against humanity, and war crimes.
- It is intended to complement existing national judicial systems and it may therefore only exercise its jurisdiction when national courts are unwilling or unable to prosecute criminals.
- United Nations Security Council or individual states may also refer situations to the Court.

Rome Statute

- The Rome Statute is a multilateral treaty which serves as ICC's foundational and governing document.
- ICC began functioning on 1st July 2002, the date that the Rome Statute entered into force.
- States which become party to the Rome Statute by signing and subsequently ratifying it, become member states of the ICC.
- Withdrawal of Burundi brings the membership down by 1 to 122.
- While Russia had withdrawn its signature to the initial statute last year, it was never a member of ICC as it never ratified the statute.
- USA, Israel, UAE and several other countries are also signatories to the 'Rome Statute' but haven't ratified it as yet.

8.4 Balfore Declaration of 1917

Why in news?

It is now 100 years since the Balfour declaration of 1917.

How was the movement steered?

- The ruthless pogroms carried out by 'Czarist Russia' against the Jews caused a large exodus.
- The Jewish refugees who had to be settled somewhere, sought to make a country for themselves.
- **Uganda Offer** - Britain offered unrestricted immigration permits for Jewish people in Uganda, which was then under British rule.
- While interim solution was endorsed, it received a mixed response from the Jewish masses.
- The opposition was because many Jews wanted to make Palestine home, due to their historic and religious connection.
- Following death of Herzl's the leader of Zionist movement, Jewish polity was driven by a young professor named 'Chaim Weizmann' who was a Russian Jew.
- **Palestine Demand** - He single-mindedly steered the movement towards making Palestine a home for Jews.

How did the Jewish lobby during WW-1?

- Weizmann saw the peace conference that followed the World War I as best opportunity to push forth his agenda.
- A memo of demands was drafted and Weizmann lobbied hard to mobilise the support of powerful Jewish men worldwide.
- Subsequently, the Zionist leaders drafted a 'declaration a demands' in mid-1917, after fierce negotiations between extreme views.
- British Foreign Secretary '**Arthur Balfour**' was courted to move a Zionist statement in the cabinet.
- It was made during World War I (1914-1918) and was included in the terms of the British Mandate for Palestine after the dissolution of the Ottoman Empire.

What was Mandate System?



- The so-called mandate system, set up by the Allied powers, was a thinly veiled form of colonialism and occupation.
- The system transferred rule from the territories that were previously controlled by the powers defeated in the war - Germany, Austria-Hungary, the Ottoman Empire and Bulgaria - to the victors.
- The declared aim of the mandate system was to allow the winners of the war to administer the newly emerging states until they could become independent.
- Unlike the rest of the post-war mandates, the main goal of the British Mandate in Palestine was to create the conditions for the establishment of a Jewish "national home" - where Jews constituted less than 10 percent of the population at the time.

What were the contents of the Balfore Declaration?

- In late 1917, the Britain cabinet finally declared complete support for the Zionist demands and promised help for the same.
- The Balfour Declaration was a public pledge by Britain in 1917 declaring its aim to establish "a national home for the Jewish people" in Palestine.
- It added that the civil and religious rights of existing non-Jewish communities in Palestine shall be protected.
- It also vouched for protecting the rights of the Jewish people and the political status enjoyed by them in any other country.
- This came to be known as Balfore Declaration.

Why was it controversial?

- It was made by a European power about a non-European territory.
- It flatly disregarded both the presence and wishes of the native majority.
- When it was released, Britain had already promised the Arabs independence from the Ottoman Empire in the 1915.
- The declaration, however, meant that Palestine would come under British occupation and that the Palestinian Arabs who lived there would not gain independence.
- Finally, the declaration introduced a notion that was reportedly unprecedented in international law - that of a "national home".
- The use of the vague term "national home" for the Jewish people, as opposed to "state", left the meaning open to interpretation.
- Earlier drafts of the document used the phrase "the reconstitution of Palestine as a Jewish State", but that was later changed.

8.5 US Presidential Elections & Russian Tampering

Why in news?

There is an ongoing investigation on Russian involvement to tamper the American Presidential elections.

How did the case unfold?

- **The Controversy** - First signs of Russian complicity in hacking the emails of Hillary came when Mr. Trump began to speak of friendly relations with Russia.
- The situation snowballed into a crisis post-election, and Mr. Trump faces charges of colluding with a foreign government to rig the election in his favour.
- Notably, former Presidents Richard Nixon and Bill Clinton faced similar charges in the impeachment proceedings against them.
- **Investigation** - The investigation began with the appointment of Robert Mueller, as Special Counsel by the Justice Department.
- Also two Congressional committees were constituted for the same.
- Evidence is mounting that Mr. Trump's camp colluded with the Russians to gather information about Ms. Clinton.
- The allegation is that Mr. Trump's close aides met with several other Russians during the campaign trail.
- Based on these initial leads, Mr. Trump's campaign chairman, Mr. Paul Manafort became the first Republican to be accused.

What is the impact on bilateral ties?

- As the Special Prosecutor closes in on the President, U.S.-Russia relations are on a downward spiral.
- The U.S. sanctions against Russia, tensions in Syria & Korean Peninsula, and the stalemate over Ukraine are problems that defy solutions.
- Mr. Putin recently deplored what he termed an “unprecedented” anti-Russia campaign in the U.S.
- As Russian diplomatic facilities were closed and Russia media has been stifled by US authorities, Putin has promised a symmetrical counter response.

How does the future look?

- Russia probably did meddle in the U.S. elections.
- But even if the Mueller investigation throws up evidence, the President might turn out to be not guilty.
- As it is highly improbable to pin the investigations directly down till the president, an impeachment is not likely on this account.
- But the shadow such evidence casts on elections in the U.S. and U.S.-Russia relations will be dark and deep.



8.6 Ireland's Impact on Brexit

What is the issue?

Tension over Northern Ireland's border issues is hampering Brexit talks

What is the history of Ireland?

- Ireland is an island that lies to the west of the British mainland and has two separate politically independent territories.
- Northern Ireland which is about 1/6th of the total island is a part of the UK and is administered as a relatively autonomous region.
- The rest of the island forms the 'Republic of Ireland' and is an independent sovereign nation since 1922.
- **Religious Tensions** - The Republican Ireland has a predominantly catholic population of native Irish dissent.
- Contrarily, Northern Ireland has a Protestant majority of British dissent, with a significant Catholic minority of Irish dissent.
- Between 1960s and 1990s, Northern Ireland saw political tensions between pro-UK protestant unionist and Catholic nationalists.
- While the former had the backing of the government and were wealthy, the latter wanted to merge with the Republican South.
- After prolonged negotiations, the 1998 “Good Friday Agreement” ended tensions to a great extent.

What has been the island's relationship with the EU?

- **Economic Integration** - Both the Republic of Ireland and UK (thereby Northern Ireland) became members of the European Economic Community (EEC) in 1973.
- EEC later evolved to become the EU and also to a great extent helped to ease the tensions between the Unionists & Nationalists.
- Currently, over 35,000 people and 6,000 trucks cross the border between the Republic of Ireland and Northern Ireland.
- **Current Situation** - As Britain is set to leave the EU, it will also be exiting the single market and customs union.
- Hence, the future relationship between Republican Ireland and Northern Ireland is currently a challenging puzzle to solve.
- The Irish question was brought up by some top politicians even before the Brexit Referendum but remains unresolved as yet.

- The political sensitivity around the Irish question could potentially lead to a resurgence of violence, if issues aren't addressed in time.

What are the challenges ahead?

- **The Irish Demand** - Ireland's case is currently being prioritised over all else in the Brexit negotiations.
- Irish PM Leo Varadkar has demanded a soft border that would facilitate unhindered trade, and EU has stood firm with him.
- **The Problem** - If Northern Ireland was to remain within the EU customs union (common market), an internal barrier between Northern Ireland and the British mainland would be required.
- But the unionist DUP (major party in Northern Ireland), has categorically opposed this.
- It has stated that it doesn't want Northern Ireland to be seen as different from the rest of the U.K. in anyway.
- UK has hence said that the entire deal needs to be clear before any equations with the Republic of Ireland are worked out.
- **Other Aspects** - The tensions over Ireland have overshadowed progress on other issues of the Brexit deal.
- Notably, many of the issues were resolved after significant compromises by UK.
- The leave side in Brexit sought to position the process as a U.K.-centric to take back sovereign control.
- This hasn't happened as concerns of other member-states have taken prominence with little room for Britain to negotiate.

8.7 Internet Neutrality at Stake

What is the issue?

- Federal Communications Commission (FCC) of the US announced the 'Restoring Internet Freedom Order'.
- This could potentially end the content neutral era of the internet.

What is Net neutrality?

- It is the concept in which all online content providers (all websites or apps) are treated equally by telecom operators.
- Notably, consumers get access to all websites equally and speed of access is not differentiated for any content.
- ISPs are mandated to not interfere with or block the content that a consumer accesses, views or posts online.
- This also specifically outlaws content specific offers/charges on consumers in order to ensure equality.

What is the current announcement?

- FCC rules issued in 2015 aimed at upholding neutrality neutrality.
- The current ruling undoes this and favours giving sweeping powers to ISPs over the content consumers can access.
- This ruling is almost certain be cleared in FCCs next open meeting.
- **Reasons** - FCC claims that the ruling is to remove what it calls "heavy-handed Internet regulations".
- These regulations, it believes is holding back investment, innovation, and job creation in the sector.
- FCC also noted that it didn't want to micromanage the Internet.
- **Criticism** – This allows ISPs could give preferential treatment to particular sites and apps, and to their own digital content.
- ISPs could also block access to sites or cap network speeds by segregating the Internet into fast and slow lanes.
- Charging consumers extra for better access to some sites and distorting fair trade is also a possibility.
- This would also lead to blocking of or slowing down of competitor's content and unfavourable political opinions.

How can these distortions be addressed?

- FCC might no longer regulate content that ISPs provide.
- Hence, the job of protecting consumers from detrimental business practices will go to the Federal Trade Commission (FTC).



- Notably, FTC neither has any telecommunications expertise nor rule-making authority in this area.

Who benefits from the order?

- Big ISPs such as AT&T Inc, Comcast Corp and Verizon Communications Inc, stand to benefit due to these changes.
- They can now design schemes to charge consumers as well as content providers.
- Notably, in recent years, ISPs have tried offers such as discounts on their service in exchange for browsing history of users.
- Some ISPs are reported to have tried to drive users to their own apps by excluding them from mobile data usage limits.
- On the contrast, Alphabet Inc, Facebook Inc, Amazon and Netflix Inc were among the big firms that are currently opposed to the ruling.

G.S PAPER III

9. ECONOMY

9.1 Paradise Papers - Offshore Companies

Why in news?

Centre reconstitutes the Multi-Agency Group formed in 2016 to investigate disclosures on Paradise Papers.

What is the Multi-Agency Group?

- The latest report comes a few months after a similar 'Panama Papers' disclosure that came in 2016.
- The Panama Papers named several prominent Indian politicians, actors, and businessmen as having offshore undisclosed bank accounts.
- Following this, a Multi-Agency Group (MAG) was constituted.
- The government has now reconstituted this MAG led by the Central Board of Direct Taxes (CBDT), to investigate cases relating to the 'Paradise Papers' data disclosure.
- This will have representatives from CBDT, Enforcement Directorate, Reserve Bank of India and the Financial Intelligence Unit.

What are the concerns?

- **Legality** - It is not necessarily illegal to set up offshore companies.
- This is because India has double-taxation avoidance agreements (DTAAs) with several countries with lower tax rates than its own.
- The companies incorporated in such countries can use their tax residency certificates (TRC) to enjoy the tax benefits available legally.
- **Concerns** - However, increasingly, companies and bank accounts are created overseas, providing nominee office-bearers and facilitating bank loans or transfer of shares in multiple secrecy jurisdictions.
- This essentially means using or incorporating overseas shell companies to take tax advantages through illegal means.
- A company is generally entitled to arrange its financial affairs in whichever way it wishes, to reduce its tax liability.
- The fact that the motive for a particular transaction is to avoid tax does not necessarily invalidate the transaction unless the law of the land specifies so.

Paradise Papers

- These are around 13 million leaked files from offshore service providers and company registries obtained by a German newspaper.
- It was made public by the International Consortium of Investigative Journalists (ICIJ) and its media partners.
- They essentially reveal the offshore interests and activities of politicians, world leaders and celebrities, and the tax engineering of more than 100 MNCs, from around 180 countries.
- It also includes details of corporate registries maintained by governments in 19 secrecy jurisdictions often referred to as "tax paradises".
- India ranks 19th in terms of the number of names that feature in the papers.

- There is a corporate army engaged in imaginative bookkeeping to discover and exploit legal loopholes to evade tax in most cases.
- The burden of justification thus is always on the financial regulators.
- **Revelations** - The recent disclosures help regulators overcome the obstacle of secrecy, enabling them to investigate instances of financial malpractices.
- The sheer size of the Paradise Papers disclosures and the corporate-centric leads they provide, mark a big step forward.
- Such insight into corporate ingenuity allows regulators to bring in better laws and global tax reforms.

9.2 Credit Rating Upgrade for India

Why in news?

International ratings agency, Moody's Investors Service, has upgraded India's sovereign bond rating for the first time in more than a decade.

What does it mean?

- Bond credit rating represents the credit worthiness of corporate or government bonds.
- In investment, the ratings are used by investment professionals to assess the likelihood of repayment of the debt.
- Moody's has upgraded Indian government's rating as a local and foreign currency issuer from Baa3 with a positive outlook to Baa2 with a stable outlook.
- Obligations rated Baa2 are subject to moderate credit risk and are considered medium grade.
- The earlier Baa3, by contrast, was the lowest investment grade rating.

How are the ratings calculated?

- Governments require ratings to borrow money, they are given ratings on their worth as investment destinations.
- This is done to position itself as a destination for foreign direct investment.
- A country requests a credit rating agency to evaluate its political risks and economic environment such as taxation, currency value and labour laws.
- Another is sovereign risk where a country's central bank can change its foreign exchange regulations.
- These risks are taken into account and ratings assigned accordingly.

What is the rating for India?

- Baa2, a term that means that they consider the economy stable.
- In simple terms, Baa2 means the cost of capital will reduce and more FDI is expected to flow in, as certain investors don't invest in countries rated below Baa3.
- The last upgrade had happened in 2004, when Moody's had upgraded India's status to Baa3, which is the lowest investment grade and just a notch above junk status.
- Other rating agencies Standard & Poor's and Fitch too have a 'stable' rating for the country BBB+ and BBB-, respectively.

Credit Rating

- A credit rating is an assessment of the creditworthiness of a borrower.
- Individuals are given 'credit scores', while corporations and governments receive 'credit ratings'.
- National governments, not countries, are assigned credit ratings by agencies like Standard & Poor's, Moody's and Fitch.

Moody's & its moods - what the ratings mean

Rating symbol	Meaning
Aaa	Highest quality, lowest credit risk
Aa	High quality, low credit risk
A	Upper medium grade, low credit risk
Baa	Medium grade, moderate credit risk, speculative characteristics
Ba	Speculative, substantial credit risk
B	Speculative, high credit risk
Caa	Poor standing, very high credit risk
Ca	Very near default, with some prospect of recovery of principal & interest
C	Typically, in default, with little prospect of recovery of principal & interest

Numbers game

Ratings from Aa to Caa are further divided into three categories, by numeric codes 1, 2 & 3

Numeric code	Meaning, for each category rating
1	Highest ranking
2	Mid range ranking
3	Lower end of ranking



What is the rationale?

- The credit upgrade comes as recognition to India's high growth potential in the years to come, following the recent economic and institutional reforms.
- These include:
 - i. the GST, demonetisation, Insolvency and Bankruptcy Code, etc
 - ii. steps taken to enlarge the formal economy by mainstreaming more and more businesses from the informal sector
 - iii. steps taken to broaden the tax base
 - iv. measures aimed at improving spending efficiency through better targeting of welfare measures
- Besides, they are prospective of improving business climate, enhancing productivity, stimulating investment, and fostering sustainable growth.

What is the macroeconomic implication?

- Notably, some recent reforms have 'undermined' growth in the near term as reflected by the slower GDP growth of 5.7%.
- However, it is believed that the disruption effect of these reforms will fade with small course corrections.
- These include helping the small and medium enterprises and exporters with compliance issues under the new indirect tax regime.
- Besides, the credit upgrade is a boost for bettering the confidence of local businesses and overseas in the economy.
- Thus, resultantly, India's real GDP growth is expected to moderate to 6.7% in this fiscal year and subsequently to 7.5% in 2018-19, and remain robust thereafter.

What lies ahead?

- For the government, the upgrade comes as an acknowledgment for India's improved macroeconomic situation.
- However, the government has a range of issues to address to capitalise on this upgrade. These include:
 1. GST's implementation challenges
 2. weak private sector investment
 3. slow resolution of banks' bad loans
 4. land and labour market reforms
- It must also be cautious of fiscal deficit target, given the immediate effect of farm loan waivers by states, the implementation of the pay commission's award, etc.

9.3 Ease of Doing Business in India

Why in news?

India recently ranked at 100 out of 190 countries in World Bank Group's Doing Business 2018 report.

What are the findings of the report?

- The recent ranking is an improvement of 30 positions over last year's ranking.
- After improving by a mere 1 spot in last year's report, the Niti Aayog was tasked with ensuring a better ranking this year and the Niti Aayog delivered.
- This improvement made India to enter in the set of 10 "**most improved**" economies and a step ahead to breach the top 50 economies worldwide in terms of this index.
- The factors most responsible for the jump in India's ranking is
 1. Greater ease in the payment of taxes online.
 2. The possibility of submitting building plans in advance of applying for a construction permit.
 3. Business incorporation that combines the permanent account number (PAN) with the tax account number (TAN).
 4. Reduction in the time required to complete provident fund and state insurance applications.
 5. Passage and implementation of the new insolvency and bankruptcy code.

- The World Bank rankings have not taken the GST into account since it was not implemented in the period being evaluated.

What are the challenges with interpreting the report?

- **Numbers concerned** -Once the report releases the governments are only focusing more on improving their ranking as opposed to fixing ground realities.
- Over time, however, these rankings became a popular tool for nudging countries towards business-friendly reforms.
- **Methodological challenges** -India's 30-point improvement in one year is not unique.
- Russia gained 30 spots in the Doing Business 2014 report compared to the 2013 report.
- This came after Russia's plan to improve its ranking from 118 in 2012 to 50 by 2015 and 20 by 2018.
- Russia currently sits in the 35th spot just one spot below Japan and ahead of several Western European economies.
- But this high ranking should be seen in the context of Russia's dismal 114th rank in the Heritage Foundation's Index of Economic Freedom (India ranks 143rd) and 131st rank in Transparency International's Corruption Perceptions Index (India ranks 79th).
- **Ranking mechanism** -In India's case, the business environment in only Delhi and Mumbai are used to compile the national ranking. This has always been the case, even though there will be more cities included in future rankings.
- These rankings also focus a lot more on the laws and rules that are on the books and do not necessarily capture the daily experiences of businesses.

9.4 Demonetization - Impact after an year

Why in news?

November 8th marks one year anniversary since the Demonetisation.

What were the objectives?

- 86% of the currency in circulation was withdrawn in one fell stroke.
- This was done to achieve -
 - a lower cash-to-GDP ratio
 - subsequent reduction of black money
 - cutting fake currencies
 - curbing terror funding
 - pushing digital transactions
 - Increasing the tax net.

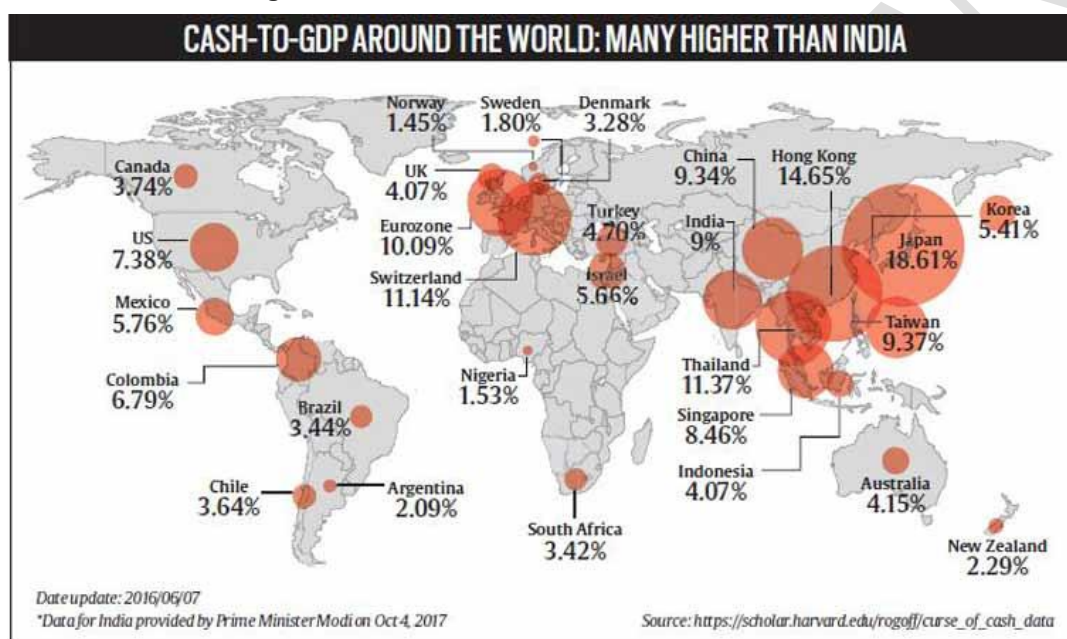
What are the positive effects?

- DeMo has rung in a climate of tax compliance, even if through coercive means.
- Deposits worth nearly Rs. 3 lakh crore are under the scanner.
- According to the Finance Minister, an additional 9 million people have come under the tax net.
- Over 200,000 shell companies have been deregistered.
- Real estate shenanigans have been reined in.

What are the negative effects?

- **Growth** - Growth has been slowed down since DeMo.
- GDP growth in Q1 of 2017-18 was at 5.7%, against 7.9% in 2016.
- Rural sector was affected the most with 2.3% growth in Q1 2017-18, against despite record food grain output in 2016-17.
- Earlier a rapid recovery from the slowdown was predicted. But the narrative has now been changed into 'short-term pain for long-term gain'.
- **Price** - Prices have crashed in major markets for kharif crops such as maize, green gram, groundnut, soyabean and sunflower despite their output being either flat or marginally lower than last year.
- It is primarily because of the disruptive impact of the withdrawal of cash on supply chains and inventories.

- **Unemployment** - The rate of loss of jobs registered in the trade sector and industries was “almost” 55% in the two months after the note ban.
- The job loss is significant in the middle-age group (40 to 50), among people with limited options.
- Job creation was zero in November-December 2016.
- It improved to a growth rate of 10%-15% in January-March 2017, and to 20%-25% in April and June, but again, between July and October, fell to 5%-10%.
- **Return of cash** - Though cashless transactions prevailed initially, cash has returned.
- The major reasons for this are connectivity issues with POS, the transaction charge and security concerns.
- **Logical flaw** - To say that a 12% cash-to-GDP ratio for India is too high, when compared with other countries, is incorrect.
- This comparison is not valid as India has a large informal sector.
- So its cash needs are also higher.



- A lower cash-to-GDP ratio could mean that the informal sector has shrunk due to demonetisation thereby needing lower cash.
- This indicates rise in unemployment.
- **Ignoring Other Factors** – Government projects that it achieved a lower cash-to-GDP ratio of 9% after demonetisation, from over 12% earlier.
- This might be due to a combination of factors apart from a shift towards digital transactions.
- It might be due to lower currency supply, shrinkage in cash-dependent enterprises due to the note ban, and shortage of cash in pockets of the economy.
- **Terror Funding** - Since demonetisation, the number of infiltration attempts in the Valley has reached a high
- The number of civilians killed has trebled.
- In the theatres of Left Wing Extremism, more security personnel have been killed in Naxal attacks but in fewer incidents, which have dropped 21%.

What should have been done?

- Cash plays a significant role even in developed economies such as Japan.
- So the criminalisation of the entire cash economy seems unfair.
- Hence the debate on DeMo is about ends and means.
- The same outcomes could have been achieved with less pain.
- DeMo could have been implemented in a gentler way – with ‘nudging’ rather than bureaucratic diktat.



9.5 Rising Crude Oil Prices

Why in news?

Oil prices hit their highest levels since July 2015 recently.

What are the causes?

- Drawdown in inventories, especially in the US
- **OPEC** - The Organization of the Petroleum Exporting Countries specified restrictions in production a few years back.
- This seems to have had the desired effect of pushing prices back up from the dip in oil prices in recent years.
- **Saudi Arabia** - Saudi heir's recent anti-corruption crackdown led to many high-profile arrests of powerful princes and officials.
- The uncertainty about what it could mean for the stability of Saudi Arabia, the world's largest oil producer, is pushing prices up.
- **Demand** - With global growth looking better than before, the demand outlook is relatively stronger.

What are the possible implications?

- The price rise is witnessed at a time when India is facing a slowdown in the economic growth.
- The recent trend in oil prices is expected to reflect in many sectors of the economy.
- **Oil marketing** - The first ones to get impacted would be the oil marketing companies (OMCs) and airlines.
- These have limited power to pass on the cost of higher crude oil prices.
- However, government may ask the public sector oil-major to shoulder some burden of higher oil prices, despite the dismantling of administered pricing mechanism.
- **Industries** - Input costs are likely to rise as a follow up to rising oil prices.
- Additionally, fuel and transportation costs are bound to increase across industries with rise in fuel prices.
- Companies for whom crude or its derivatives are major inputs/costs are expected to see pressure on the demand as well as on profit margins.
- These include sectors such as refining, airline, paints, tyres, footwear, lubricants, cement, logistics, construction materials and chemicals.
- Thus, the ability of companies to sustain profitability will depend on their capacity to take viable price hikes.
- **Fiscal** - A rising import bill of the government due to high oil prices could put downward pressure on the rupee.
- While a weak rupee would benefit export-oriented players and the IT industry, it will hurt ones who import a major part of their raw materials.
- Persistent rise in prices can also lead to rise in current account deficit (CAD).
- These shifts in fiscal positions could weigh on inflation and rupee, and hence on interest rates, further impacting the private sector investment.
- **Besides**, the high probability for further price rise could probably lead to money moving out of equities into safer havens like gold and US dollar.
- Also, Indian equity market needs to digest the far-reaching implications of the grave geopolitical developments unfolding in West Asia.

What are the challenges for India?

- **The fall years** - India witnessed significant positives when oil prices fell by over 50% between 2014 and 2015
- The windfall for the government was to the tune of 0.9% of the GDP in terms of lower subsidy outgo and higher tax collection.
- This benefited firms, households and also boosted public investments.
- **Currently** – As oil prices have increased, this could reverse the above and impede economic recovery in the near future.
- It could have implications for growth, inflation, currency, current account deficit and fiscal deficit.

- Every \$10 increase in oil price has been noted to increase CPI inflation by 0.6-0.7% points and also worsen the 'Current Account Balance' by 0.4% of the GDP.

What are the actions taken?

- Since the government raised excise duty when prices were falling, it could come under pressure to reverse the hike now.
- The Union government reduced excise duty by Rs. 2 per litre on petrol and diesel last month.
- This was followed by a reduction in VAT rates by states such as Gujarat and Maharashtra.
- More such moves could strain government finances, lower revenues and would result in lower public investments.
- Notably, reduction in excise duty on petrol and diesel by Rs. 1 per litre lowers collection to the tune of 0.08% of the GDP.

9.6 OPEC Meeting

Why in news?

OPEC meeting for November was held in Austria.

What are the Challenges OPEC is facing?

- Saudi Arabia and Iran have been arch-rivals for a long time, while Iraq and Iran fought a multi-year war in the 1980s.
- The Saudis and the Qataris are not on talking terms now, and Venezuela is in financial dire straits.
- Technological advancements horizontal drilling and fracturing (fracking) enabled shale oil exploration and production on an industrial scale in the US.
- This upended the dynamics of the oil industry and precipitated the rout of oil since mid-2014.
- Mega producers such as Russia that are also not part of OPEC, too now command significant influence in the oil market.

What are the significances?

- OPEC initially tried to out-price US shale oil producers and wrest market share by maintaining output, this exacerbated the price rout.
- But US shale producers held on with lower prices and it eventually teamed with major non-OPEC producers such as Russia late last year to cut production by 1.8 million barrels of oil a day.
- The cuts helped halt oil's rout and aided its 40 per cent rally since June to about \$64 a barrel now.
- OPEC meeting is expected to approve extension the production cuts by another 9 months until December 2018 with Russia also on board.
- The meeting is crucial as OPEC will decide whether to continue with output cuts in force since January this year beyond March next year.

What are the implications for India?

- India imports more than 80 per cent of its oil requirement.
- Oil prices halving since 2014 has been a fiscal boon for the government and oil companies.
- But higher oil prices will invariably mean costlier petrol and diesel and higher inflation in India.
- If OPEC gets aggressive on output cut programme, it could mean trouble for India.
- As US shale oil would come back to the market a big way to take advantage of higher prices, resulting in a cap on prices.
- There is hope that oil prices will not go up too much from current levels.

Organisation of Petroleum Exporting Countries (OPEC)

- OPEC, cartel of oil exporting nations had four major West Asian producers Saudi Arabia, Iran, Iraq and Kuwait, Venezuela as its founding members.
- As of now OPEC has 14 members besides the founding members, the group comprises UAE, Qatar, Nigeria, Libya, Gabon, Ecuador, Angola, Algeria and the latest entrant Guinea.
- They account for more than 40% of the world's oil supply, of which Saudi Arabia accounts for more than 30%.
- OPEC aims to coordinate and unify the petroleum policies of its member countries to stabilise oil markets.
- Member countries together increase or decrease oil production to try to achieve desired supply levels and prices, based on a unanimous vote.



9.7 Global Financial Development Report

Why in news?

World Bank's has released its annual "Global Financial Development Report 2017/18: Bankers without Borders".

What is the global financial development report?

- Global Financial Development Report 2017/2018 is the fourth in a World Bank series.
- It provides a unique contribution to financial sector policy debates, building on novel data, research, and wide-ranging country experience, with emphasis on emerging markets and developing economies.
- The report's findings and policy recommendations are relevant for policy makers, staff of central banks, ministries of finance, and financial regulation agencies.
- The report tracks financial systems in more than 200 economies before and during the global financial crisis.

What are the findings of the report?

- Restrictions imposed on foreign banks in developing countries are hampering prospects of growth by limiting the flow of much needed finance to firms and households.
- International banking does create risks of exporting instability especially for countries with poor regulations and institutions, and those risks need to be mitigated.
- But without a competitive banking sector, the poor will not be able to access basic financial services.
- Many businesses will be locked out of markets, and growth in developing countries will stall.

What are the implications for India?

- Indian banking has become more competitive over the last couple of decades have largely to do with the opening up of this sector to local private banks in 1993-94.
- The larger policy goal that the government and the central bank had in mind could not perhaps be achieved immediately because of the public ownership and governance structure of state-owned banks.
- Besides public and private banks, Non-Banking Financial Companies (NBFCs) and Microfinance Institutions (MFIs) too have rapidly enlarged their footprint over the past decade.

What measures India had taken so far?

- India adopted a guiding principle of consolidating public and private banks before opening up to foreign banks in a synchronised manner.
- The approach has been to have foreign banks form fully owned subsidiaries, or to convert existing branches into a subsidiary.
- Foreign banks at various growth cycles have shrunk their businesses in a downturn or when there is turmoil, and the need for credit is acute.
- India has sought to limit the share of foreign banks in the total assets of banks in the country to less than a fourth.

9.8 GST Council Meet - Highlights

Why in news?

GST Council recently held its 23rd meeting and announced a range of changes with regard to the GST.

What are the highlights?

- **Rates** - The council has placed around 200 items in lower tax bracket than they were originally.
- This has left only 50 products under the highest 28% slab.
- **Small business** - The GST Council has come out with a string of deadline relaxations and lowering of penalty for delayed filing of returns.
- Companies with turnover up to Rs 1.5 crore have been allowed quarterly filing of returns.
- **Composition scheme** - The immediate increase in the composition limit for small businesses will be Rs 1.5 crore from the earlier Rs 1 Crore, benefitting a wider group.
- However the maximum composition upto Rs 2 Crore will be made through an amendment in the law.
- Tax under the composition scheme will now be 1% irrespective of whether they are traders or manufacturers.



- The scheme has also been opened up for the services sector, but it can be availed of only by those who provide services up to Rs 5 lakh.
- **E-commerce** - Traders supplying goods from ecommerce platforms will now not be required to register if their turnover is below Rs 20 lakh.
- This move will ensure a level playing field and bring in parity with their offline peers.
- **Restaurants** - Earlier there were different tax rates based on whether restaurants were air-conditioned or not.
- Now, all standalone restaurants will be taxed at 5 %.
- With this change in the tax rate, restaurants have now been denied the benefit of input tax credit (ITC).
- Earlier, restaurants were found to be not passing on the benefit of input tax credit to consumers.

What are the continuing flaws?

- The recent changes have certainly tackled some debated, controversial provisions.
- **Structural** - However, they have done little to address the basic design flaws with the GST regime.
- The rate reductions for a range items will hardly do anything to simplify the complex and complicated structure of taxation in GST.
- E.g. the non-inclusion of petroleum, real estate and alcohol, as well as the large number of items taxed at 0 percent continues.
- **High rates** - The above is also one of the reasons why the rates are needed to be kept high.
- As, it is a well-accepted principle that more items in the tax net allow for lower rates and vice versa.
- **Items** - Even with the latest changes in tax rates, there seems to be a lack of logic in decision to tax certain items lower than the other.
- E.g. Marble and certain sanitary fittings that are optional are taxed lower than cement which is a basic requirement for any proper construction.
- Also, taxing of the same kind of products under different slabs without any proper reasoning continues.
- **Administrative** - Frequent and piecemeal changes with rates create procedural cost and business uncertainty, and also create scope for lobbying.
- State finance ministers have little incentive to address the structural problems of GST.
- This is because the blame for any poor implementation or in other words the whole responsibility lies with the central government.
- Also, the states don't suffer because even if the flaws lead to revenue loss, they are going to be compensated for the first five years.
- The complicated rate structure persists also due to the fact that every state has its own pet products/service that it wants either exempted or taxed at a lower rate.

What lies ahead?

- The economy may get an overall boost from the likely consumption boost and possibly witness a better tax compliance.
- But for a sustainable transformation, India needs to move towards a two-slab structure and the reductions if any in future will have to be a step in that direction.
- The Council must institute a transparent system with an explicit rationale for any rate changes in the future.
- It is also suggested to have an annual review of GST rates instead of the ongoing frequent changes.
- This is provided that any decision so taken will have to be a well thought out and logical one.
- Also, the political dominance should be reduced, and outside experts should be involved in any attempt to fix the fundamental/structural flaws in the GST.

9.9 National Anti-Profitteering Authority

What is the issue?

- National Anti-profitteering Authority (NAA), as part of the GST Act was approved by the Cabinet recently.



- Subsequently, the fear of NAA becoming a tool of harassment looms large among businesses.

What are the powers of NAA?

- It is empowered to crack down on firms that fail to pass on the 'benefits' of the tax regime to consumers.
- The authority can order businesses to reduce product prices or refund the undue benefits earned back to customer.
- In extreme cases it can even impose a penalty on errant firms and cancel their registration with GST.
- If the consumers are difficult to trace, then the money attained from undue benefits will be deposited in a consumer welfare fund.
- The authority will have its own bureaucracy and a screening committee in each State that consumers can lodge complains with.
- It will also have an investigating wing and a standing committee to take up profiteering allegations with a pan-Indian impact.

What are the challenges?

- **Establishing Guilt** - Clarity on how the difference between undue profit and fair play will be ascertained is missing.
- This discretionary space available to the NAA could be misused or wrongly used by the authority.
- **Irrationality** - Companies have been urged to ensure that new MRPs are inscribed even on products that have already reached markets.
- While wholesalers can still implement this, reaching every last retailer is a challenge.
- But firms have been warned that the entire retail chain must reflect revised prices in order to avoid anti-profiteering action.
- The expectation is that there will be some exemplary action soon to make industry fall in line.

What is the way forward?

- While protecting consumer interest is important, the prospect of the government monitoring prices is not desirable.
- Asking businesses to justify pricing decisions instead of letting market forces play out is uncomfortable.
- The NAA could rather partner with the Competition Commission of India and focus on select firms raising prices indiscriminately.
- This usually happens only in markets where some businesses enjoy a dominant position, or where pricing cartels are formed.
- Hence, the authority's should use its powers transparently and only where there is genuine consumer/public interest at stake.

9.10 Amendments to Insolvency and Bankruptcy Code

Why in news?

Union Cabinet approved the proposal for an Ordinance to amend the Insolvency and Bankruptcy Code (IBC).

What is the intent of the amendment?

- IBC was enacted to ensure time bound corporate debt resolution through proceeding initiated by either the creditor or debtor with the 'National Company Law Tribunal – NCLT'.
- In the original IBC, there was a possibility for defaulters to apply as bidders in the liquidation (auctioning assets) process.
- This would have helped them regain control of their own companies with a reduced loan burden than before.
- This was seen as a clever way to gain loan reductions that could possibly impact the credibility of the insolvency resolutions.

IBC

- The IBC 2016 was intended to expedite insolvency proceeding (loan recovery) against both individuals & firms.
- It provides for a legal framework for time-bound resolution to release assets locked up in NPA.
- Under IBC, either maximising the value of assets or liquidation (sale) of under-utilised resources to settle loans is done.



- It has hence been considered necessary to prohibit unscrupulous defaulters from submitting resolution plans under IBC.
- The current ordinance specifies the categories of persons who are deemed ineligible henceforth to ensure credible debt resolution.

What are the highlights of the proposed amendments?

- The amendment seeks to explicitly ban certain persons from unfairly gaining control of defaulting companies in the pretext of a resolution applicant.
- This includes wilful defaulters, disqualified directors, those who have indulged in fraudulent transactions.
- Promoters whose account is classified as non-performing assets (NPA) beyond a prescribed duration will also be banned.
- While the President's nod for the ordinance is expected shortly, it is also likely to be tabled in the winter session of the parliament.

What is the problem with the amendment?

- **Purpose of IBC** - IBC is not merely an instrument for liquidation.
- Instead, it is also envisioned as an enabling legal framework for the "reorganisation and insolvency resolution of corporate entities".
- It fact, it even prescribes a time bound procedure for "maximising the asset value of such entities and to promote entrepreneurship".
- **Amendment** - Wilful defaulters have put creditors to substantial financial hardships and barring them from bidding is a good move.
- But the category of people barred under the current ordinance is too broad and risks defeating the very objectives of IBC.
- The ordinance's scope & wording is such that all loans that have become NPAs can be branded as wilful default.
- Even, the promoters and members of the management board of companies whose loan accounts are classified as non-performing for just 1 year (or more) have also been barred from bidding.
- Notably, the amendments have been made with retrospective effect to also cover the more than 600 cases already referred to NCLT.
- **The Business** – Also, the complete barring of all original owners from bidding for assets might not make economic sense.
- This is because they would have a better knowledge of the market dynamics and might have nurtured a clientele that might be difficult to emulate for other bidders.
- Barring them could potentially prolong debt servicing as the new management might take time to set in.

9.11 GST & Cash less economy

Why in news?

Union government is now proposing to offer a 2% point GST rebate for consumers who make digital payments instead of cash.

What does this move signifies?

- GST Council has taken several decisions that are expected to make the taxation simpler.
- The recent move means that the effective tax rate for items the 18 per cent GST slab will come down to 16 per cent for those paying through the digital mode.
- The recent proposal of rebate is expected to be taken up in January when the GST Council meets next.
- The reason for the proposed incentive is to encourage Indians to move towards a cashless economy.
- By this GST council have taken steps to sort out the problems in the technological architecture and filing of returns. In that sense, the GST is a work in progress.

What are the issues with this new plan?

- Regardless of the noble intentions, this proposed intervention is likely to create another round of confusion for all concerned.



- The tricky part here, implementing this will result in customers being offered two prices one with the normal GST rate and the other with a 2% lower rate.
- The move will require altering both the tax computation process as well as return-filing templates.
- This will only complicate the ground-level implementation of the GST as sellers will need to segregate digital and cash transactions from the beginning.
- What further complicates matters is that this concession will be limited to Rs100 per transaction and will not apply to retailers who have registered in the composition scheme, wherein they only face a single tax rate instead of the normal GST structure.

What are the expected challenges?

- Providing a 2 per cent rebate is going to further reduce collections from GST which could impact the coffers of the Centre and the States.
- In turn, this would force the Government to tap into the Compensation Cess for monetary comfort.
- The taxpayers with turnover of less than Rs. 1.5 crore are most likely to conduct some transactions in cash.
- The condition not to extend the scheme to taxpayers registered under the composition scheme could actually turn out to be counter-productive.

9.12 Reviewing Income Tax Act

Why in news?

Union government has decided to set up a panel to review the Income Tax Act, 1961.

What is Income Tax Act 1961?

- The Income-tax Act, 1961 is the charging Statute of Income Tax in India.
- It provides for levy, administration, collection and recovery of Income Tax.
- The Government of India brought a draft statute called the "Direct Taxes Code" intended to replace the Income Tax Act, 1961 and the Wealth Tax Act, 1957.
- However, the bill was later scrapped because of wealth tax act being repealed.

What is a need for review of the act?

- There is a controversial section in the Income Tax Act in India which states the Special provision relating to incomes of political parties.
- It states that any income of a political party which is chargeable under "Income from house property" or "Income from other sources" or any income by way of voluntary contributions received by a political party from any person shall not be included in the total income of the previous year of such political party.
- Recently, there has been lot of uproar by the civil society against this act, as Political parties have deposited huge cash after demonetization.
- The current law is unwieldy, and multiple court rulings over the past five decades have made Indian tax law confusing and opaque.

What are practical difficulties with review panel?

- The recommendations of panel will go through close scrutiny by all stakeholders. It is unlikely that the new Direct Tax Code Bill can take final shape before 2019, which is an election year.
- This means the next government will have to take a call on piloting the Bill, leading many to question the timing of the constitution of the committee.
- Previous governments diluted several of recommendations by earlier panels, notably in terms of ignoring the proposals to reduce exemptions, and the added complication of multiple cesses.
- There is a critical demand from trade and industry is for a sea change in the nature of the tax administration, from being enforcement-oriented to focusing on simplicity and clarity.

10. INFRASTRUCTURE

10.1 Privatisation Grounded

Why in news?

The partial privatisation tenders for the Ahmedabad and Jaipur airports recently closed without a single bid.

What is the situation of Indian Airports?

- India's key regional airports are overflowing, at the same time scheme to partially privatise them has received a tepid response.
- The overcrowding in airports is reaching a crisis point. Pune is operating at almost triple its original capacity, and hubs such as Goa, Calicut, Jaipur and Trivandrum are reaching doubling levels.
- Recent report says that 40 largest airports will exceed their capacities in 10 years, thus it is no small task and cannot be achieved without private participation.
- Even though the Airports Authority of India (AAI) had relaxed many guidelines for Jaipur and Ahmedabad airports, AAI could not make all the capital investment.

What are the complexities in partial privatisation?

- Under this scheme, revenue generation for a private participant is restricted only to terminal operations.
- This paradoxical situation is the result of a poorly designed tender process and limited scope of privatisation.
- Private players are looking into income from other avenues to bridge the gap principally from real estate development and will prefer to have a say in the capital investment too.
- Private players prefer to go in for the kind of contracts that aim at full privatisation through an operation, management, development agreement of the kind that is in place for airports in major cities.
- Questions about private players reaping the benefits of heavy public investment and charging passengers high user development charges are bound to arise.

What is the way forward?

- Since profits from such operations will necessarily accrue with a significant time lag, the private sector is unlikely to take the temptation.
- Robust private participation in augmenting and expanding regional airport capacity will provide the much-needed infrastructural ballast.
- A successful privatisation model will do much to restore confidence in the viability of the public-private partnership investment model for infrastructure.

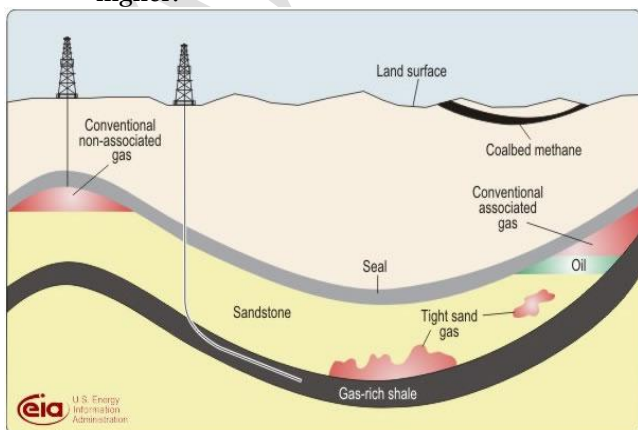
10.2 Shale Gas Import

Why in news?

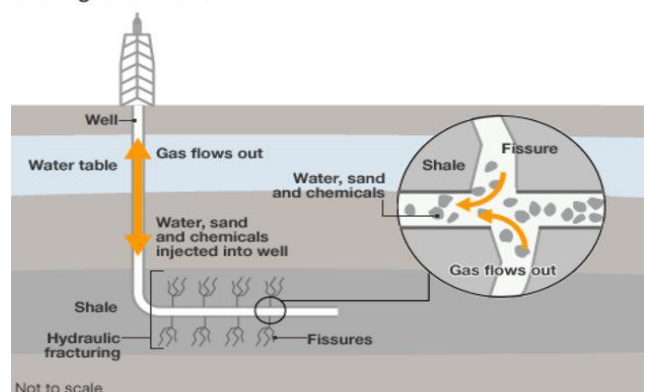
India will receive its first cargo of shale oil from the US, to be processed at an Indian Oil Corporation (IOC) refinery.

What is shale gas?

- Shales are fine-grained sedimentary rocks that can be rich sources of petroleum and natural gas.
- Shale gas refers to natural gas that is trapped within these shale formations.
- Conventional gas reservoirs are created when natural gas migrates toward the Earth's surface from an organic-rich source.
- They migrate through highly permeable reservoir rock, where it is trapped by an overlying layer of impermeable rock.
- In contrast, shale gas resources form within the organic-rich shale source rock.
- The low permeability of the shale greatly inhibits the gas from migrating to more permeable reservoir rocks higher.



Shale gas extraction



How are they extracted?

- **Extraction** - Over the past decade, the combination of horizontal drilling and hydraulic fracturing has allowed access to large volumes of shale gas the potential of which was unutilised for long.
- Without these, shale gas production would have been economically unfeasible because the natural gas would not flow from the formation at high enough rates to justify the cost of drilling as in the case of conventional oil.
- **Refining** - The shale oil is used as fuel oil or upgraded to meet refinery feedstock specifications by adding hydrogen and removing sulfur and nitrogen impurities.
- Shale oil and conventional crude oil have different kinds of impurities.
- The catalytic processes adopted by the refineries should be able to handle these impurities.

What is Hydraulic fracturing?

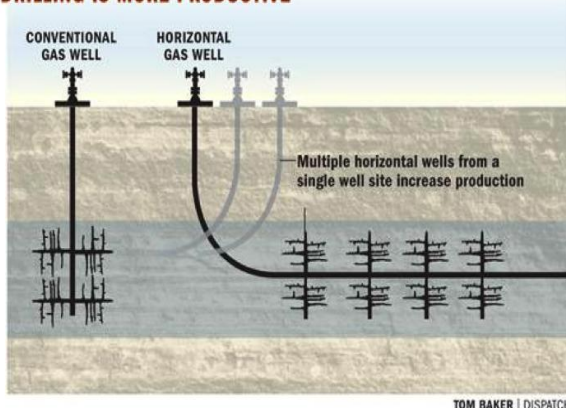
- Also known as fracking, this is a process in which more than a million gallons of fluid is injected into rock formations.
- This fractures the rock and stimulates the flow of natural gas or oil, thus increasing the volumes of gas or oil that can be recovered above ground.
- The fluid used in hydraulic fracturing commonly consists of water, proppant and chemical additives.
- A proppant is a solid material, typically sand, ceramic pellets or other small particles, designed to keep an induced hydraulic fracture open.
- The chemically induced fractures can extend several hundred feet away from the wellbore.

What is horizontal drilling?

- Vertical wells can effectively drain rock units that have a very high permeability.
- However, where permeability is very low as in shale formations, fluids move very slowly and do not travel long distances to reach a well bore.
- Horizontal drilling is a mechanism used for drilling non-vertical wells and can increase the productivity in low-permeability rocks by bringing the well bore much closer to the source of the fluid.
- Horizontal drilling is done to stimulate the productivity of wells in organic-rich shales, and hydraulic fracturing is done to produce artificial permeability that is propped open by proppants.

WHY HORIZONTAL DRILLING IS MORE PRODUCTIVE

Drilling a horizontal well can cost three to six times more than a conventional vertical well. Industry officials say one horizontal well can replace as many as six vertical wells. As many as six horizontal wells can be drilled, each sent in a different direction from the same surface site, replacing more than 30 vertical wells.



Prospective basins for phase 1 shale oil and gas exploration



What are the Concerns?

- The drilling and fracturing of wells require large amounts of water, leading to some environmental concerns.
- The process also produces large amounts of wastewater, which may contain dissolved chemicals and other contaminants that require treatment before disposal or reuse.
- If mismanaged, the potentially hazardous chemicals used in the fracturing fluid can be released by spills, leaks, or other exposure pathways.
- This may lead to contamination of surrounding areas, including sources of drinking water, and can impact natural habitats.



10.3 Land Borrowing - A Viable Solution

What is the issue?

- For development related infrastructures land acquisition is being a major challenge across the nation.
- Land borrowing by the government can be a viable solution for India.

How land borrowing can be a viable solution?

- The government can borrow land for particular project, uses it for that project and returns it to the owner after it is no longer used for the purpose for which it was borrowed.
- The state can borrow land from the owner under certain conditions such as
 1. When the assigned use by the state ends, temporarily or permanently, it is returned to the owner, who is then free to use it the way he chooses.
 2. The owner continues to use that part of the land till it is required for the purpose it is intended for, say a road or bridge or a power plant.
 3. Only that much piece of the land is lent that is required for the project and the owner continues to use the remaining part in way he wishes, including renting out.
 4. When the financial life of a project (typically 20 years) ends, the lease is renewed or re-negotiated

Has this idea ever worked in practice?

- In the State of Hyderabad historically and till date this idea is being followed.
- Being a land-locked state with one river, between 1724 and 1947 the State of Hyderabad did not have enough water for irrigation.
- Bunds or low walls were built by the then Nizam along the river and streams of the river, to save water in tanks.
- The Nizam of the State of Hyderabad “borrowed” private land for a specific purpose and under predefined conditions.
- The land continued to be owned by the land owners and they had papers to prove it.
- These are not very large-sized tanks, hence, no count is kept in the government records, but they are many and ran into over 500-plus in the metropolitan area alone in 1901.
- While the tanks lasted, this system worked to everyone’s advantage.
- However, after Hyderabad became a state capital, it urbanised rapidly. The tanks dried up or just vanished as the city grew.
- The pieces of land were reclaimed by the owners and the judiciary respected their property rights.

10.4 Concerns with Sagarmala project

Why in news?

The government has approved creating 14 coastal economic zones (CEZs) in JNPT, Maharashtra under Sagarmala Project.

What is recent announcement about?

- The Jawaharlal Nehru Port Trust in Maharashtra has approved for creating 14 CEZs.
- Reports suggest that 45 companies from the telecom, technology, and automobile industries are expected to bid for 200 hectares, or 2 S.q km.
- Since the JNPT accounts for 40 per cent of India’s trade, the zone expects to attract investment worth Rs 15,000 crore and create 150,000 jobs in the first phase.

What are the challenges with these Economic Zone Models?

- **SEZ** - It is difficult to gauge the real performance of SEZs, and they highlight the risk that creating islands of “Doing business”.
- The model’s excellence is unlikely to generate the kind of all-round economic development that India urgently needs.

Sagarmala Project

- Sagarmala project aims to modernize India's Ports so that port-led development can be augmented and coastlines can be developed to contribute in India's growth.
- It also aims for "transforming the existing Ports into modern world class Ports and integrate the development of the Ports and efficient evacuation systems.
- Development of mines, industrial corridors, rail, road and airport linkages with these water ports are also part of the project.



- Political and Social dynamics differ significantly to make Chinese developmental model the least optimum solution for India.
- The enthusiasm for SEZs waned considerably once the government imposed the minimum alternate tax and the dividend distribution tax.
- **CEZ** -Sagarmala project which is based on CEZ seems to have become a casualty of the chronic problem of Land acquisition.
- For Sagarmala Land requirement could extend 300 km to 500 km adjacent to deep-water ports.
- Reports suggest that several projects have hit roadblocks either on account of high prices or limited land availability.
- Investors much cautious about CEZs because they do not attract the provisions of “Eminent domain”.
- It excludes some 13 exceptions such as railways and coal-bearing tracts from requirement of prior consent.
- This raises the larger question about the advisability of CEZs in the first place as investor community expects Tax concessions and relaxations in labour laws.
- The dangers of encouraging investors to go “Concession Shopping” were inherent in “Backward area Schemes”, which companies promptly abandoned when the sops were withdrawn.

11. AGRICULTURE

11.1 Limitations with Organic Farming

What is the issue?

Organic farming, which is increasingly being promoted in recent days, has many limitations for it to be taken on a large scale.

What are the challenges?

- **Manure** - Huge quantities of manure would be needed to replace the chemical fertilisers.
- Notably, tribal farmers do not own plots large enough to keep cattle.
- It is also not possible to free the landscape for enough quantities of the dung of free-range cattle to supply crops the nutrients they need.
- **Impact of green revolution** - The practices employed as a result of Green Revolution have delved deeper into the agricultural system.
- Certainly, it has now become harder for true traditional farming because the country’s agricultural system is engulfed in high-input agriculture.
- However, it is felt that traditional farming would thrive, if subsidies offered for high-input agriculture is graded down.
- This can probably help the small scale farmers to be self-contained with the traditional, non-chemical agriculture.
- **Consumers** - Organic produce in the markets along with the non-organic produce make their prices highly unaffordable for many.
- E.g. Organic produce with higher prices from Sikkim, certainly faces competition with low priced non-organic produce from nearby West Bengal.
- It is thus still uncertain if customers are willing to spend more, for organic farming to be taken on a large scale.

What lies before the policy makers?

- The varied efforts and campaigns for organic farming may not all sustain it, unless it is consistently remunerative for the farmers.
- The whole discussion on organic farming should take into consideration, apart from agriculture, the business and livelihood aspects as well.

11.2 Concerns with Agri Import policies

What is the issue?

- Union government is at risk in tackling the problem of low agri commodity prices and high imports.



- Indian market lacks intelligence to take informed decisions on international tariff changes.

What are the concerns with Indian agri Imports?

- Major imports include vegetable oils, pulses, fresh fruits and vegetables, raw cashew as also wheat and sugar from time to time.
- Over the last three years these products were worth Rs. 17-19 lakh crore (about \$ 30 billion).
- The import of essentials such as edible oil and pulses is inevitable for Indian population.
- The Indian oilseeds and oils market is well integrated with the global market through the trade route, any change in world market prices will get reflected here.

What are the issues with government policies?

- Export-Import policy ignores India's role in the global marketplace.
- Exim policy for oilseeds and oils is being counter-productive because India is import-dependent for edible oil.
- This makes frequent tariff changes seem like a logical alternative.
- On the pulses front, the Government is planning trade and tariff changes to lift the price of domestic pulses, but this is not a viable solution.
- A hike in customs duty on imported oils has had no effect on oilseed rates in India.
- A long credit period 90 to 150 days encourages over-trading and many importers are delayed due to 'import debt trap'.

What needs to be done?

- Trade policy must be fixed by considering international sensitivities and trade relations.
- A progressive foreign trade policy is one where export and import windows both are open.
- In the case of vegetable oil, it is possible to restrict trade without imposing trade or tariff barriers.
- Excessive import can be curbed by reducing the credit period for payment against imports.
- Imposing a maximum credit period of 30 days will remove the incentive to indulge in over-trading.
- Affirmative action in the form of strong procurement and distribution of pulses (after milling) through the PDS is a best available option before the government.
- Holistic approach covering production, processing, consumption and trade will address the issues.

11.3 Falling Agri Prices

What is the issue?

- Despite bumper harvests the agrarian prices are falling, this is aggravating agrarian distress.
- It is a pointer to institutional failure in addressing farmers' issues.

What are the reasons behind falling prices?

- The impact of demonetisation has disrupted the supply chains and contributed to traders not holding stocks at their normal levels.
- The surge in imports of pulses and oilseeds, which only added to a bumper crop last year, aggravated the supply glut.
- Sluggish global prices of soyabean and maize contributed to domestic prices falling well below MSP.
- Export curbs on pulses, lifted recently (besides stocking limits) made matters worse.
- Due to absence of higher public investment in the rural economy Support prices, price deficiency payments and higher credit are not working.

Why higher outputs are not favourable to farmers?

- It is significant that higher output has generally had no role to play in the case of Kharif crops this season.
- Kharif food grain output in 2016 was 138 million tonnes, it is estimated at 134 million tonnes this time.
- Kharif oilseeds output is estimated at 20.6 million tonnes this year, against 22.4 million tonnes in 2016.

- The effects of export curbs and higher imports to control consumer inflation in pulses in early and mid-2016, are being felt by farmers now.

What can be done?

- **Storage** - Modern cold storages, as being set up by companies like 'Allround India' can bring down wastage within the 10-15% range.
- Hence, promoting modern cold storages and developing a system akin to that of the warehouse receipt system for farmers is needed.
- While encouraging the private sector to take the lead, the state can do some stocking under a 'Price Stabilisation Fund – PSF'.
- **Trade Policy** - An effective trade policy that is responsive to production realities is necessary for price stabilisation.
- Promoting exports in case of a bumper crop and encouraging imports in case of deficits should be primary to any trade policy.
- This has to be done well in advance — as soon as one comes to know the advance estimates of production.
- **Processing** - Encourage the setting up of onion dehydrating units and promote demand for dehydrated onions can be considered.
- Currently, Gujarat has already emerged as the main centre for dehydration units with 85 out of 100 units located there.
- Dehydrated onions are being exported to Japan, Europe, Russia, US and some African countries.
- Ministry of Food Processing and state governments should encourage entrepreneurs to setting up onion processing units.
- While a subsidy of up to 35% with a cap of Rs 5 crore is currently being provided, the budget of the scheme is just Rs 95 crore.
- This needs to go up manifold if we are serious about encouraging food processing and stabilising prices.

11.4 Assessing Farm Policies

What is the issue?

- India is witnessing continued farmer agitations in different states and the country's capital.
- It is vital at this juncture to assess the structural and policy concerns that plague India's agricultural sector.

What are the policy shortfalls and possible solutions?

- **PMFBY** - The Pradhan Mantri Fasal Bima Yojna (PMFBY) was designed to provide crop insurance.
- The Central government shares part of the premium subject to certain conditions.
- The states have to wait for the Central government's share, irrespective of the cropping density in the region and irrespective of whether the region is rain-fed or irrigated.
- Allowing states to design their own crop insurance schemes and yet providing the Central government share of the premium would yield better results.
- **E-NAM** - An incentive of Rs 75 lakh/mandi is given by the Centre to the states for linking each market with E-NAM.
- However, some states log in all FCI purchases as E-NAM transactions and so, much of the recorded turnover is made up and not real.
- Incentivising each state to have the electronic platform which meets the basic criteria of interoperability with other states would be better.
- **Trade negotiations** - As per the Constitutional provisions, trade negotiations are under the purview of the Centre.
- However, the anomaly is that agriculture is in the domain of the states.
- The Central government should try bringing the states into the decision making forum if international trade treaties involve agricultural aspects.
- **Trade policies** - Every time food prices rise, the Centre intervenes to rein in inflation.

- It responds by facilitating the unhindered import of agricultural commodities.
- However, increased imports work against the profitability of the farmers.
- The Centre should instead set a floor price for all such farm produce to reduce the impact of price fluctuations on farmers.
- Bringing in place the “Price Deficiency Payment” mechanism, whereby the central government makes for the shortfall between the market price and floor price can help.
- **Credits** - Scrutiny of the farm loan data, after a series of farm loan waivers, revealed that public and private sector banks have indiscriminately given loans to less credible farmers.
- Evidently, loans were provided based on their asset value rather than economic viability.
- The loans were arbitrarily given by the banks to also meet their own priority-sector lending target.
- In all, the “one-size-fits-all” policy is becoming irrelevant for the farm sector and necessitates a more decentralised system for decision making, implementation and performance appraisal.

11.5 Initiatives for Vidarbha Farmers

What is the issue?

- Cotton and soybean farmers of Vidarbha and marathwada region are in debt trap.
- Diversifying to dairy is giving way to the farmers a way out of their problems.

What is the situation of the farmers in these regions?

- The two regions Vidarbha and marathwada have more than half of cotton area of the state, which itself accounts for a third of the country’s share.
- But only 2.7% of Maharashtra’s cotton is irrigated compared to nearly 60% of Gujarat’s.
- There is a wide gap in average per hectare cotton yield 289 kg and 606 kg, respectively, in 2015-16.
- The farmers of these regions used to grow jowar and bajra but with food habits changing, their cultivation has declined.
- A greater portion of this region’s agriculture will have to be climate resilient as both these are regions are rain deficient.
- Farmers in the regions are going for long-duration hybrids, for better quality cotton.
- To meet the operation costs farmers are getting into debt traps which in much cases leads to self-engineered deaths.



What measures has been taken by the government?

- **Dairy initiatives** - In October 2016, the National Dairy Development Board commenced operations.
- The National dairy development board does not intend to stay for the long-haul.
- It will exit once farmer producer companies it will help set up gain the capacity to take over the operations and marketing.
- It now has a footprint in five of 11 districts of Vidarbha and two of Marathwada eight districts.
- Milk collection averages 1.25 lakh litres per day which is processed at a refurbished dairy in Nagpur, given by the state government.
- Money is credited to the seller bank accounts. So far they have earned Rs.68 cr.
- This is a steady source of income which takes care of their daily needs.
- **Bamboo Initiatives** - The farmers of these regions can also supplement their income by growing bamboo.
- Bamboo is a versatile crop and can be put to 23 uses, including paper and engineered timber.
- The Maharashtra Bamboo Development Board was set up last year to promote cultivated bamboo, using tissue cultured seedlings.

What are the issues with dairy initiative?

- **Use of technology** - With the help of an Android-based app, farmers can know whether they are giving their animals the right diet, overdosing them with some nutrients and under-providing others.
- For this, they have to tag their animals and feed data regarding weight, lactation stage and current milk yield.
- The usage of modern technologies for monitoring animals has not been widely understood by the farmers.
- **Ideological clashes** - The growth of the dairy industry is tied to the meat industry, unless non- and post-lactating animals are culled, farmers will not be able to give proper care to the productive ones. This is where ideology clashes with economics.

11.6 Managing Pulses Prices

What is the issue?

The ironical condition of increasing pulses production and decreasing prices is calling for governmental intervention to make farming remunerative.

What is the concern?

- Amidst fall in pulses production in last few years, a number of market support measures were taken to enhance productivity.
- Coupled with these, a good monsoon in 2016-17 in much of the country led to a good harvest.
- Resultantly, there was an increased production in pulses.
- However, the increased output led to the fall in pulse prices.
- This ultimately resulted in the steep fall in nominal income of the farming sector.

What is the cause?

- Policies have attempted to address the challenge of achieving the twin goals of raising food production and ensuring a minimum price impact.
- This is done through a variety of price support, procurement and public distribution policies.
- But, weak price support mechanisms are failing to balance between the production output and the resulting prices.
- Large scale procurements at times reduce supplies in the market and impact market prices for all the farmers.

What could possibly be done?

- **Procurement** - The procurement policy could be fine-tuned to the market conditions so as to stop procurements if market prices touch the MSP.
- A procurement system for absorbing 'excess production' from the market, departing from the 'open-ended' procurement approach has to be designed.
- The objective should be to stabilise prices when prices fall below a certain level, on account of increased production.
- It is essential to complement the system by a good marketing infrastructure for making it accessible to all farmers.
- Also, the procurement system has to be supplemented by an efficient distribution system for it to be effective.
- **Alternative scheme** - An alternative Price Deficiency Support Scheme is where farmers are paid the difference between market price and the MSP.
- This does not envisage procurement by the government but only payment in cash to the farmers.
- Thus, procurement-effected price fluctuations in the market can significantly be reduced.

12 SCIENCE & TECHNOLOGY

12.1 Addressing Security Issues in e-money

What is the issue?

- Reserve bank of India is planning to issue digital rupee.
- In this context, RBI needs to address privacy and transparency concerns involved in digital currency.



What is Digital India rupee?

- Digital Indian rupee is a sovereign digital fiat currency with a government determined value, which is about to be issued by RBI.
- It is a bearer instrument just like paper notes and coins.
- It is protected with layered hardware, software, protocol security and currency laws.
- Digital payments conducted with the digital India rupee are settled and finalised by cash at the point of exchange.
- This will address the issues of monetary supply, digital counterfeit, convertibility and acceptability.
- A digital legal tender gives the authority the visibility of the pattern and behaviour of the digital currency in circulation.
- The persons transacting or the contents of the transaction are not disclosed unless there is adequate suspicion in the transaction.

What are the challenges with e-money?

- The present forms of e-money are liabilities issued by the service providers.
- With private e-money service providers fielding methods, the questions of regulation, accountability and a universal approach become a large issue.
- Convertibility of these private e-moneys to legal tender rupee is subject to the financial management and operational soundness of the service providers.
- Acceptability of e-money between different schemes is not a given, and is subject to the mutual agreements between the service providers.
- Disruptions, such as fraud and errors, can lead to the loss of funds that either the consumers or providers have to compensate.
- There is a lot of talk around personal information and privacy protection in our digital lives these days.
- Governments are extremely concerned with digital means being exploited for illicit activities like money laundering and terrorists' funding.

What are the advantages of digital India rupee?

- With the use of digital India rupee through existing e-money services, it will not require any expensive infrastructure or transformative technologies to enable its use.
- There is no need for subsequent settlements between the ledgers of the e-money service providers, and other intermediaries.
- The value of the currency is backed by the credit worthiness, assets and productivity of the nation.
- It will accelerate the shift from an informal to formal economy, eliminating 'negative elements' from the financial system.
- This will also remove the labour intensive factors and financial risk costs associated with reconciliations and settlements.

12.2 Bettering our GI Act

What is the issue?

- The existing law for Geographical Indications in India leans too heavily on documentary proof.
- This is a major huddle for many traditional products from getting the GI Tag.

What are the shortcomings in the Indian GI Act?

- India executed a law on GI in 1999 as per the WTO's "Trade Related Aspects of Intellectual Property Rights - TRIPS" guidelines.
- TRIPS only prescribe a minimum standard and there is no insistence on a particular framework for the grant of a GI Tag.
- Against this backdrop, proof of origin is a mandatory criterion for registering GIs in India – a provision borrowed from the EU's act.

- While a historic proof in itself is a good safeguard, the Indian Act also stresses on documentary evidence for the same.
- Documented evidence would indeed be foolproof in ensuring the link between the product and territory.
- But in India, where oral history has had far wider convention over written history, this provision will prove to be a formidable hurdle.
- **Assam Example** - Assam has been exploring its natural, agricultural and traditional products as potential GI material.
- But a stumbling block has been the difficulty in gathering documentary evidence as proof of origin.
- The recent product in focus has been “Judima”, a traditional rice wine made by the Dimasa tribe of Dima Hasao.
- For most products, especially those of tribal communities, the lack of documentary evidence is bound to be a recurrent problem.

What is the way forward?

- In a particular instance, the GI Registry considered studying its evolution to establish proof of origin.
- But as the existing law insists on documentary proof, it is difficult to make authorities adopt similar stands for other products.
- Hence, India should consider amending the current law to enable easier GI registration and enhance the marketability of our rich tradition.

13. ENVIRONMENT

13.1 Conference of Parties (COP23) – Bonn

What is the issue?

- The 23rd Conference of Parties to the United Nations Framework Convention on Climate Change concluded recently.
- While minor advances have been made, there are still some concerns with financing and the review mechanism.

What are the key outcomes?

- The Conference seems to have left some room for satisfaction with the following:
 - i. alliances were formed for phasing out coal
 - ii. decision to putting up green buildings and accelerating eco-mobility
 - iii. recognising gender in dealing with the issue, in a Gender Action Plan
 - iv. decision to get indigenous people (adivasis) have a say in climate talks
 - v. decision to look into the greenhouse gas emissions from agriculture
- Above all, the developing countries stood as a solid bloc demanding a balanced deal.
- The key demands centred on getting agreed upon and including in the official agenda the ‘pre-2020 actions’.
- This is mainly in reference to the obligations of the developed countries under the 1997 Kyoto Protocol that still has three years to run.
- There was also a demand for fixing a deadline for the ratification of 2012 Doha amendments to the Kyoto Protocol to give a legal shape to the ‘pre-2020’ commitments.
- An important outcome of CoP 23 is the 'Talanoa Dialogue'.

Talanoa Dialogue

- It is facilitative dialogue among member of Conference of Parties of Paris Agreement to be taken in 2018.
- It is a year-long process to take stock of the collective efforts of Parties in relation to progress towards the long-term goal of economy-wide absolute emission reduction and to inform the preparation of nationally determined contributions.
- Talanoa is a traditional word used in Fiji and the Pacific to reflect a process of inclusive, participatory and transparent dialogue.

What are the continuing contentions?

- **Loss and Damage** - In Warsaw, Poland, COP-19, 2013 established the Warsaw International Mechanism for Loss and Damage.
- This was in relation with the key obligations to be fulfilled by big emitters for the economic and non-economic losses of climate change.
- It intended at addressing the destruction likely from climate change, including extreme events (such as severe storms) and slow-onset events (such as sea-level rise).
- The Paris Agreement also recognises loss and damage and calls for enhanced action and support from the parties.
- However, in CoP 23, loss and damage was not included in the agenda for the Paris rule book.
- The rule book intends to provide operational guidance for fulfilling the ambition of the Paris Agreement and providing clarity on countries' efforts to reach the global goal.
- It has to be finalised by 2018, according to the Paris Agreement's timeline.
- There are no funds yet on loss and damage and the discussion on this has been postponed to 2018.
- This was rightly a big bone of contention with poor and developing economies.
- **Finance and Technology** - Another aspect of support from rich countries is about providing finance, technology, and building capacity for poorer countries.
- This is intended both to protect themselves from the effects of climate change and to help them move along a low-carbon pathway.
- Without these support means for implementation, the targets set by each country in Paris are hard to achieve.
- The earlier promise of \$100 billion each year by 2020 into the Green Climate Fund has also not seen much inflow to meet the goal.
- Sadly, COP-23 did not result in any substantial agreements on financial support.
- Important decisions on the key issue of finance were moved forward to be discussed at the next meeting to be held in Katowice, Poland in 2018.
- **Emissions** - The science on climate change has not been given focus in CoP 23.
- Greenhouse gas emissions appeared to have stabilised for the past few years, probably due to some economic reasons.
- However, emissions rose by 2 % in 2017 perhaps due to additional electricity drawn from coal power plants in China.
- The key question of when coal will be phased out globally has gone unaddressed in the meeting.
- Clearly, greater focus on bringing down fossil fuels use is needed, for the Paris Agreement to be successful.

13.2 Delhi's Pollution Crisis

Why in news?

The deteriorating air quality and suffocating smog have led to closure of primary schools in Delhi.

What are the causes?

- **Smog** - Smog refers to a smoky fog (smoke+fog) and is a kind of air pollution.
- Fog is a hazy condition which is a result of suspension of water droplets close to the ground.
- Smog, on the other hand, is a mixture of pollutants in the atmosphere which consists of fine particles and ground level ozone.

Particulate Matter (PM)

- PM or particle pollution is a mixture of small particles including black carbon, mineral dust, sulphate, nitrates, ammonia, sodium chloride, and liquid droplets in the air.
- WHO classifies particulate matter into two broad types - PM₁₀ and PM_{2.5}, indicating the diameter of the particles in microns.
- Chronic exposure to both PM₁₀ and PM_{2.5} can lead to cardiovascular and respiratory diseases, as well as lung cancer.
- PM_{2.5} can cause skin diseases and reduction in life expectancy. It can cross into the blood, causing damage in many organ systems, .
- In Delhi, the ground-level ozone and PM_{2.5} play a significant role in formation of smog.



- When pollution is high, nitrogen oxides and dust particles interact with sunlight to form ground-level ozone, leading to hazy smog.
- This condition is a result of a range of factors including:
 - i. geography of the place.
 - ii. sunlight
 - iii. calmness of winds.
 - iv. post-harvest crop burning.
 - v. firing of brick kilns.
 - vi. dust from construction sites and unpaved roads.
 - vii. vehicular pollution.
 - viii. domestic and industrial emissions.
- **Wind** - Smog occurs in a location that is far away from the actual source of pollution after the hazardous pollutants have drifted away in the wind.
- Delhi experiences two kinds of winds in winter which are:
 - i. wind carrying pollutants from stubble burning in Punjab.
 - ii. wind bringing in moisture from Uttar Pradesh.
- These two winds collide in the upper atmosphere above region.
- However, Delhi and its neighbouring areas have nearly still wind conditions near the ground, which is due to prevailing anti-cyclone conditions around the region during winter.
- The two winds, combined with the near still wind conditions, effectively trap the pollutants leading to persistent smog.
- **Crop burning** - The smog that envelops the region is exacerbated by the burning of biomass in nearby Punjab and Haryana.
- The post-monsoon burning of rice and wheat residue releases maximum aerosols.
- And this contributes to the volume of PM_{2.5} in the air.

What should be done?

- The Delhi government has taken various measures in the past including:
 - i. The ban on Deepavali crackers.
 - ii. Shift to compressed natural gas for commercial vehicles.
 - iii. Restricting car use to odd and even number plates on alternate days.
- However, air quality index has touched extremely hazardous levels in some parts of Delhi, turning into a public health emergency.
- The burden of such chronic problems has outweighed the benefits conferred by the above measures.
- Therefore, besides these minor corrections, the Centre and States must urgently address farm residue burning in north India.
- A workable solution demands a coordinated effort from the governments of Delhi, Punjab, Haryana and Uttar Pradesh, assisted by the Centre.
- Delhi's unique weather conditions require a comprehensive, well informed solution to the pollution crisis.

13.3 NGT's Order on Odd-Even Rule

Why in news?

National Green Tribunal (NGT) directed the Delhi government to implement the odd-even car rationing scheme.

What is odd-Even Scheme?

- Odd- even vehicle rule was implemented in 2015 in order to control pollution.
- It means that cars running with number plates ending in even numbers will be allowed to run on even days.
- The odd-even rule earlier exempted certain cars and vehicles which include all ambulances, hybrid and electric vehicles, VVIP and embassy vehicles, cars driven by women drivers, and two wheelers.



- Vehicles running on CNG will also be exempt from the odd-even rules.
- Vehicles not complying with the odd-even scheme will be heavily fined.

What are NGT's decisions on odd-even scheme?

- Earlier the NGT questioned Delhi government to give justifications on implementation of the scheme, as the pollution level started to fall.
- Now the NGT directed the Delhi government to implement the scheme, but on a condition that there would be "no exemption to any person, officer or individual, including two-wheelers from the odd even scheme".
- Delhi government has also announced that this time it will not be exempting women drivers from following the odd-even plan as the Green Court questioned the logic behind the same.
- The emergency services vehicles like ambulances and fire brigades were exempted from the scheme.

Why two wheelers are not exempted this time?

- Two-wheelers contributing 20% of vehicular pollution, the NGT observed.
- The two-wheelers are much more in number than other class of vehicles.
- They emit serious pollutants like carbon monoxide and hydrocarbon which are not emitted or negligibly emitted by the petrol vehicles.

13.4 BS-VI Fuel Norms

Why in news?

Union government announced that BS-VI fuel will be available in Delhi by April 2018.

What is BS-VI emission norm?

- By moving to BS-VI, the country will be using the highest specifications of fuel standard available in the world right now.
- Bharat stage emission standards (BSES) are emission standards instituted by the Government of India.
- India first notified its auto emission norms in 1991 and then revised these in 1996 and later in 1999 when the BS norms were announced.
- It is to regulate the output of air pollutants from internal combustion engines and Spark-ignition engines equipment, including motor vehicles.
- The standards and the timeline for implementation are set by the Central Pollution Control Board under the Ministry of Environment & Forests and climate change.
- All new vehicles manufactured after the implementation of BS norms have to be compliant with the regulations.
- In 2016, the Indian government announced that the country would skip the BS-V norms altogether and adopt BS-VI norms by 2020.

BS – IV Vs BS – VI

- The main difference between BS-IV and BS-VI (which is comparable to Euro 6) is in the **amount of sulphur in the fuel**.
- BS-VI fuel is estimated to bring around an 80% reduction in sulphur content – from 50 parts per million (ppm) to 10 ppm.
- Another major difference is NOx. BS-VI is expected to cut NOx emissions from diesel cars by nearly 70% and from cars with petrol engines by 25%.

What are the implications of this move?

- Taking into account the serious pollution levels in Delhi and adjoining areas, Petroleum Ministry decided for preponed BS-VI grade auto fuels in NCT of Delhi.
- Bharat Stage VI (BS-VI) fuel will now be available with effect from 1 April 2018 in Delhi.
- Union government is also examining the possibility of introducing BS-VI fuel across the national capital region by 1 April 2019.
- This measure is expected to help mitigate the problem of air pollution in NCT of Delhi and surrounding areas.
- The move is also in line with India's commitment under the Paris Climate Change Agreement to reduce its vehicular emission as part of the effort to cut emission intensity of the gross domestic product.
- The government statement does not mention any plans on seeking automakers to sell only BS-VI vehicles in the city.



Why this move is significant?

- This new fuel norms is expected to reduce the PM 2.5, which are tiny particles in the air that reduce visibility and cause the air to appear hazy when levels are elevated.
- The levels of poisonous, highly reactive gases that form when fuel is burned at high temperatures such as NOx, or oxides of nitrogen, are also expected to reduce.
- The early introduction of BS-VI fuel gives confidence to the auto industry in migrating to manufacturing only BS-VI compliant vehicles on a pan-India basis.

What are the practical challenges with BS-VI fuels?

- The BS-IV norms were announced in April 2010 but it took nearly six years from then for the entire country to make the switch to these standards.
- If the BS-VI fuel had to be available across the country by April 2020, as was already targeted, then oil companies had better increase supplies gradually because an overnight ramp-up might not be feasible.
- Different automobile companies will have to source BS-VI fuel for testing new vehicles, from different refineries which are ready to produce higher-grade oil.

13.5 Ban on Petcoke

Why in news?

Union government had banned the use of petcoke and furnace oil in Uttar Pradesh, Haryana and Rajasthan.

What is Petcoke and Furnace oil?

- **Petroleum coke** or petcoke is a carbonaceous solid delivered from oil refinery coke units or other cracking processes.
- It is a bottom-of-the-barrel residue while refining crude oil, which is high-calorific value petroleum residue, helps to conserve natural resources.
- It is over 90 percent carbon and emits 5 to 10 percent more carbon dioxide (CO₂) than coal on a per-unit-of-energy basis when it is burned.
- It can contain vanadium, a toxic metal which is toxic in tiny quantities, 0.8 micrograms per cubic meter of air.
- It is a key input material for cement producers and a highly polluting fuel.
- It is sometimes a source of fine dust, which can get through the air passage and lodge in the lungs, causing serious health problems.
- **Furnace oil** - It is a dark viscous residual product used as a fuel in different types of combustion equipment.
- It is obtained by blending residual products from various refining processes with suitable diluents to obtain the required fuel oil grades.
- It is used in special applications such as
 - In marine engines and slow speed engines for power generation
 - For drying tea leaves
 - In gas turbines for power generation
 - As a feed stock for fertilizer manufacturing
 - In thermic fluid heaters and hot air generators.

What is the need for this move?

- When it comes to sulphur content, petcoke with 75,000 ppm (parts per million) is clearly one of the dirtiest fuels on earth.
- Even coal, the biggest contributor to greenhouse gas emissions, has just 4,000 ppm of sulphur.
- The demand for it shot up when global prices fell sharply after many developed countries chose to export the fuel rather than consume it.
- India's consumption of petcoke in 2016-17 stood at 23.25 million tonnes with imports accounting for a significant share of it.
- This move is taken as a part of the efforts to curb the suffocating level of air pollution in the NCR region.



What are the practical challenges with this move?

- Indian petcoke typically has high sulphur content as the refineries are tuned to refine the cheaper crude which is typically heavier and dirtier.
- The refineries have been improving the quality of petrol and diesel to meet the automotive emission norms over the years.
- For instance, Bharat Stage VI fuel will have just 10 ppm of sulphur as against 10,000 ppm in mid-1990s.
- Better quality petrol and diesel means higher sulphur content in residues such as petcoke.
- Making alternate products such as bitumen or value-adding petcoke by installing hydrogenation systems will involve large investments.
- Many public-sector companies have just created petcoke capacity at significant cost on seeing rising demand for the fuel.
- Refiners are investing lot of money to upgrade their processes to produce the cleaner BS-VI fuel.

What is the alternative way to address the issue?

- There is a clear need to find a way to dispose it in an environmentally friendly manner and cement kilns offer the best option.
- In cement kilns limestone is burnt at over 1500 degrees to produce clinker which is then crushed to produce cement.
- When petcoke is used as a fuel, the lime in the clinker absorbs the sulphur and the sulphur that is eventually let out of the stack is way below the permissible norms.
- As petcoke has zero ash content, cement firms can use low grade limestone.
- This is a big advantage as almost 60 per cent of India's limestone reserves is low grade in nature and cannot be used if coal (which has significant ash content) is used as fuel.

13.6 Understanding Air Quality Index

Why in news?

- National capital region smog pollution reaches hazardous levels.

What the Air Quality Index (AQI)?

- AQI is a number used to communicate to the public how polluted the air currently is or how polluted it is forecasted to become.
- As AQI increases, an increasingly large percentage of the population is likely to experience increasingly adverse health effects.
- Different countries have their own air quality indexes, corresponding to different national air quality standards.
- The AQI is most commonly used by Central Pollution Control Board (CPCB) to describe ground-level ozone levels.
- The classifications of air quality are part of a 6 grade, colour coded taking into account 8 pollutant levels.
- These pollutants are:
 1. Ground-level Ozone or O₃
 2. Particulate Matter (soot and dust) - PM 2.5 and PM 10
 3. Carbon Monoxide or CO
 4. Sulphur Dioxide or SO₂ and
 5. Nitrogen Dioxide or NO₂
 6. Ammonia or NH₃

How it is calculated?

- The pollutants in the affected air are given a weight based on a formula.
- That weight depends on the kind of impact it has on human health, each of the pollutants is given a weight.
- The worst of these weights is given as a composite air quality.

- So instead of giving six different numbers, six different colours, it throws up one single colour, one single number.
- The index will throw up one number which will be given to the public.
- People will know the health of their air quality based on this number and one associated colour code.

Colour	Level of Health Concern	AQI Values
Green	Good	0 to 50
Yellow	Moderate	51 to 100
Orange	Unhealthy for sensitive groups	101 to 150
Red	Unhealthy	151 to 200
Purple	Very Unhealthy	201 to 300
Maroon	Hazardous	301 to 500

13.7 Rising Light Pollution

Why in news?

Earth's artificially lit outdoor surface at night grew by about 2%, resulting in increasing light pollution.

What is light pollution?

- Light pollution, also known as photo pollution, is the presence of anthropogenic light in the night environment.
- It is exacerbated by excessive, misdirected or obtrusive uses of light, but even carefully used light fundamentally alters natural conditions.
- As a major side-effect of urbanization, it is blamed for compromising health, disrupting ecosystems and spoiling aesthetic environments.

What are the consequences of Light pollution?

- Light pollution has ecological consequences, with natural light cycles disrupted by artificial light introduced into the night time environment.
- Increased sky glow can affect human sleep
- In addition to threatening 30 percent of vertebrates that are nocturnal and over 60 percent of invertebrates that are nocturnal, artificial light also affects plants and microorganisms.
- It threatens biodiversity through changed night habits, such as reproduction or migration patterns, of many different species: insects, amphibians, fish, birds, bats and other animals."

What does recent data imply?

- Every year earth is getting brighter than earlier years, it underscores the concerns about the ecological effects of light pollution on people and animals.
- The rate of growth observed in developing countries was much faster than in already brightly lit rich countries.
- With few exceptions, growth in night time light was observed throughout South America, Africa and Asia.
- Light remained stable in only a few countries, although the researchers said the satellite sensor's blindness to some LED light may mask an actual increase.
- Eg. Australia's lit area decreased due to wildfires. Night time light declined in War-hit Syrian and Yemen.

What are the reasons of increasing light pollution?

- US National Oceanic and Atmospheric Administration weather satellite data may understate the situation because its sensor cannot detect some of the LED lighting that is becoming more widespread, specifically blue light.
- Experts had hoped the growing use of highly efficient LED lighting might lessen energy usage worldwide.
- The new findings indicate use of artificial lighting instead is growing, increasing energy demand.
- City transitions of its street lighting from sodium lamps to LED, indicates that savings in energy are being offset by either new or brighter lights in other places.



13.8 The Controversial Case of Trophy Hunting

What is the issue?

- Trump administration recently proposed the lifting of import bans for elephants
- This is expected to ease the entry of trophy imports from countries such as Zimbabwe and Zambia.
- This has brought trophy hunting into the international limelight and the conservationists are divided in their opinions.

What are the conflicting opinions on Trophy hunting?

- Trophy hunting is the legal practice of selectively hunting wild game animals.
- The taxidermies parts of such animal such as the head or carcass are usually taken back home for display as a "trophy,"
- **Negative opinion** – Some fear that trophy hunting can endanger lion populations.
- Animal activists also advocate the ethical angle, where killing as a sport is argued as reprehensive.
- **Positive Opinion** - Countries like Namibia have shown that well-managed hunting programs can help conservation.
- Usually, in these hunts, select individuals, often old & infirm, are sacrificed, but the species wins due increased funds for its upkeep.

How effective has hunting bans been?

- **Hunting Bans** –Simply banning hunting hasn't lead to an automatic increase in populations of endangered species.
- In Kenya and India hunting bans exist since the 1970s.
- But the wildlife populations do not seem better than in territories where hunting isn't banned.
- **Commercialising wildlife** - South Africa and Namibia, where wildlife has been commoditised are doing better in conservation.
- Commoditisation of wildlife means "trophy hunting, wildlife tourism, commercial meat production and local consumption".
- This has also benefited the local communities by emerging as a employment and business opportunity.

What makes the case for Trophy hunting?

- Trophy hunting has in the past, helped recover species such as the black rhino and the straight-horned markhor (wild goat).
- While it could risk some populations, there is limited evidence to show that it has substantial negative implications at a bigger level.
- **Conservation Funds** - Financial incentives that trophy hunting provides for maintenance of lion habitats is significant.
- If not for this, there is a risk of wildlife parks getting taken over for other uses due to the ever increasing need for land and resources.
- **Challenges in Eco-tourism** - Ecotourism is usually favoured to generate revenue for conservation.
- But it might not always be viable due to the difficulties of terrain.
- Moreover, some experts claim that compared to ecotourism, high-value trophy hunting has a lower ecological footprint.

What are the challenges ahead?

- **Improper Implementation** - Lack of proper hunting regulations & corruption can derail the conservation initiative.
- Trophy hunting also has the inherent risk of promoting illegal hunting that may have serious negative consequences.
- **Subsistence Angle** - The existing confusion about subsistence hunting with sport hunting also distorts the debate.



- While the former is the preserve of the poor who take to hunting for survival, the later is a hobby for rich well off tourists.
- These are embedded in different cultural contexts, and need to be evaluated through separate socio-political and economic frames.
- **Sensationalism** – The debate on trophy hunting is taking away the focus from more serious issues such as man-animal conflict and widespread habitat loss & degradation.
- **Elitist Politics** - The real impact of policy debates in the urban spaces of rich countries is felt in rural Africa where animals and people live in close proximity.
- Significantly, those directly affected by outcomes have literally no say, which is more or less reminiscent of the colonial era.
- Hence, local voices need to be recognised and accommodated.

14. INTERNAL SECURITY

14.1 Army for Civilian Duties

What is the issue?

- Following the tragic incident at Elphinstone Bridge, it was announced that army engineers would be used to construct three railway footbridges in Mumbai.
- The practice of diversion of the armed forces for routine civilian tasks has some long-term costs for the government.

What is the deviation from the usual norm?

- This is not the first time the army has been used for civilian tasks.
- The army engineers had made temporary structures (pontoon bridges) during the Kumbhmela and other such large public gatherings.
- They had been employed to restore communication in inaccessible areas after natural disasters.
- However, the case with Mumbai at present is different.
- Notably, it is not a remote area where civilian agencies are unavailable.
- Considerably, the Railways in Mumbai have enough engineering resources, technical expertise, funds and experience in constructing such a bridge.
- Even private infrastructure creation agencies are available in Mumbai.
- Also, unlike the temporary bridges made during public gatherings, the proposed ones are permanent infrastructures.
- Given the significant deviations from the norm, a democratic government still considers it right to employ soldiers in the manner it deems fit.

Why is it not advisable?

- The practice essentially violates a fundamental principle of a modern military that during peace-time, it must be left free to prepare for war.
- **Civilian Institutions** - The government must realise the institutional dangers inherent in employing soldiers in non-emergency civilian duties.
- Such employment is an acknowledgement of the civilian institutional failure to the larger public.
- Relying on this alternative, consequently, prevents considering the ultimate need for the assessment of shortfalls in civilian institutions.
- **Substitute** - It holds potential negative consequences for the delicate balance of civil-military relations, if extended to other spheres of governance.
- It reinforces the belief that the army can provide an effective substitute.
- A recent survey shows that 53% of Indians believe that military rule would be a good thing; with more younger people supporting this idea.
- This attitude among the civilian population has long-term costs for the stability of the country.
- **E.g.** In 1953, following the riots against Ahmadiyyas, martial law was imposed in Lahore.



- After bringing the law and order situation under control, the Pakistan army proceeded to launch the "Cleaner Lahore Campaign".
- This initiative created a trust on army's efficiency among the public and this ultimately reinforced army's ability to restore a situation caused by the failure of civil administration.

14.2 Overreach of the Army Chief

What is the issue?

- Army General Bipin Rawat has been speaking out of turn on many critical issues.
- This has potential consequences for the Army's institutional autonomy and its perceived political neutrality.

What are some of his excessive statements?

- **Awarding Cariappa** - General Rawat had publicly recommended Field Marshal Cariappa for a Bharat Ratna.
- Such remarks are not in good taste as an army chief isn't expected to make such personal recommendations in public forums.
- Even if it was a collective army demand, it should've been made through a personal letter to the Rastrapathi Bhavan.
- **Sensitive Statements** - He compared stone-pelters in Kashmir to terrorists in an interview.
- Such statements also could potentially sabotage the tag of political neutrality that the forces enjoy.

Why is institutional autonomy critical?

- Excessive political interference in public institutions has decayed their autonomy considerably.
- Over the years, at both Central and state levels, many government departments have become mere extensions of the party in power.
- Election Commission, RBI, the Supreme Court and the Armed Forces are among the few institutions that have survived intact.
- But here too, their functional autonomy is on display only if headed by people of principle and courage.
- Lack of moral courage or the lure of a post-retirement job have sometimes led people to uphold the agenda of their political masters.

14.3 Hopes in Naga Peace Talks

Why in news?

The interlocutor for Naga peace talks recently held talks with all the stake holders, notably inside Nagaland for the first time.

What is the Nagaland issue?

- There is a sense among a few sections of the Naga people to form a separate new country, the **Greater Nagalim**.
- It incorporates the entire Nagaland along with Naga-inhabited parts of Manipur, Assam, Arunachal Pradesh and Myanmar.
- **Peace talks** with the then most lethal insurgent group Nationalist Socialist Council of Nagaland (Isak-Muivah), NSCN(I-M) started in **1997** when their leaders agreed to a ceasefire.
- As a culmination of over 80 rounds of negotiations over the years, a **Framework Agreement was signed in 2015**.
- The agreement was signed by the **Centre's interlocutor** for Naga peace talks, RN Ravi and leader of the NSCN (I-M).
- It aimed at facilitating stronger ties among Nagas across the region, without substantially changing the jurisdictional and administrative authority of neighbouring states.

What is the reason for the delay in resolution?

- The Naga people are a proud race and have held fast to their cultures, traditions and language.
- There are 16 major tribes, each with a sense of nationality of its own.
- And every tribe has its village republics which is a crucial part of their culture.



- These diversities lead to many divergent narratives on the concept of ‘nationality’ and thus Naga nationalism is both a movement and a sentiment.
- Besides, there is the issue of holding on to the Indian nation state.
- For the Nagas, the dilemma is thus between nostalgia for its unique history and the promise of a better future without disturbing this past.
- Given these, tribal loyalty often comes in the way of a collective discourse for the future of Nagaland.
- The problem now is with the use of words in agreements which lend themselves to several interpretations depending on who the stakeholders are.

What are the recent developments?

- The Centre’s Interlocutor for the Naga Peace talks is handling the issue with a more unconventional approach.
- No other interlocutor has interacted with and met so many Naga National Political Groups (NNPGs) and civil society groups.
- For the first time, the interlocutor was able to create that integral space where all voices are heard with equal respect.
- However, this is sometimes done at the risk of the NSCN (I-M) calling off the talks.
- As, NSCN (I-M) feel that being signatories to the Framework Agreement they alone have the right to make major decisions.

How does the future look?

- The ongoing peace talks may have been initiated by the NSCN (I-M) but it has now become more inclusive.
- This perceivable political consensus and faith in the process as far as the Framework Agreement is concerned offers hope.
- For the Naga people at this juncture, the most pragmatic step is to take a balanced view of the past.

14.4 Prevention of Lone Wolf Attacks - Social Integration

What is the issue?

- There has been series of terror attacks in western countries by “lone wolves” including the recent attack in New York.
- To tackle this, countries like Canada have been focusing on assimilating migrants into their cultural mainstream.

How are lone-wolfs different?

- The common thread among all such attacks was that all these people acted on their own without any command from elsewhere.
- Most lone-wolfs get indoctrinated online out of own choice without any direct contact with radical propagators.
- Notably, objects of common use - like trucks, axes, knives are innovatively used as deadly weapons.
- These features of lone-wolf attacks help in effectively skipping the conventional surveillance radars.
- This strand of terrorism is not akin to conventional war that can have definitive beginning and end.
- It is rather closer to crime, which can best understood through, and handled by, the tools of law enforcement.
- Therefore, the security challenge is to be more efficient when it comes to preventing indoctrination than the actual act.

What are the ways to prevent it?

- **Canada’s Social Integration** - Understanding the plight of migrants, their worldview and their aspirations is the key to any integrationist effort.
- Enhanced social & personal relationships contribute greatly to the development of a ‘sense of belonging’ and needs to be encouraged.
- For people to forge a new beginning in the host society - being granted some form of a legal status, getting a job, Ensuring free access to rental services, financial systems, education and healthcare opportunities is crucial.



- **Cultural Integration** - Canadian Multiculturalism Act - 1988 formalized a policy to encourage cultural diversity.
- Developing a sense of tolerance through recognition and understanding became an aspect of public policy.
- Accommodating the language of the migrants and funding multi-cultural initiatives can all help.
- Explaining Canadian customs and legal systems to the refugees was also given importance.
- **Australian Perspective** - Australia had constituted many 'Fixed Threat Assessment Centers' in 2006 to find people with obsessive, stalker-like fixations (not terrorists) on public figures and celebrities.
- Such people were overwhelmingly found to suffer from some form of mental illness, particularly psychosis.
- These centers have partnership with the health department to counsel these people and enhance their social cognition.
- Perpetrators of lone-wolf terrorism have also been found to exhibit a higher level of psychological disturbance and depression.
- The mental illness angle would also redefine remedial programs and rehabilitation for lone-wolfers.
- **Israel's tactics** - Transforming a motor vehicle into a simple but deadly weapon has long been a favoured terror tactic by Palestinians in Israel.
- In the wake of these attacks, Israeli officials began using concrete blocks or metal barriers to seal off areas for given periods of time.
- Another tactic taken by the Israelis is to proactively arrest alleged terrorists based on their profiles and their social media postings.
- While the tactic has raised questions about the impingement on people's personal freedoms, it is seen as an effective way to combat lone wolves.

How can radicalism be prevented?

- Efforts for preventing polarisation along religious or ethnic lines through effective social integration are needed.
- Enhancing the "sense of belonging" among different groups rather than looking for reasons to detain or expel them could help.
- Investigators need to examine all of the concrete details of the perpetrators' lives rather than just the act of violence.
- The root causes of radicalism should be identified and be dealt with the active support of community leaders.
- While enhancing surveillance and safety structures might help to an extent, they are only temporary measures.
- Building a broader acceptance for other cultures is the key to liberal democratic ethos.

14.5 Revised Proposal for Civilian Drones

Why in news?

- The Directorate General of Civil Aviation (DGCA) has released a revised draft of proposed rules for operating civilian drones.
- Public comments have been invited and a final draft after incorporating suggestions is expected by the year end.

What are the highlights?

- An earlier draft faced criticism for proposing a very complicated and restrictive set of rules that was also difficult to enforce.
- The new draft has relaxed many of these and is more in line with the ground realities.
- According to the weight, drones have been divided into five categories, with different specifications for each.
- **Lightweights** - The lightest two categories - Nano (up to 250 grams) and Micro (up to 2 kgs of takeoff weight), may be operated without the operator possessing an 'Unmanned Aircraft Operator Permit' – UAOP.
- Also, these smaller UAVs don't require a unique identification number (UIN), provided they are operated within 200 metres.
- **Larger vehicles** – These will have to possess UIN and their operators will need a permit.



- Flight plans will have to be filed and import licences for larger drones will be granted on merit, depending on the purpose.

What are the relaxations?

- Commercial use of drones for photography, doorstep delivery and even passenger transport (large UAVs) could be allowed too.
- The need to get home ministry's clearance for flight routes 80 days in advance has been done away with.
- Restrictions placed on areas where 'UAVs may not be operated' have also been relaxed.

What are the drawbacks?

- Flights are not going to be permitted within 500 metres of designated sensitive installations, within 50 km of borders or more than 500 metres offshore.
- As many installations are classified as sensitive, this is still very restrictive and it will make commercial operations difficult.
- Civilian use of drones for hobby and commercial purposes is already common and multiple types are available.
- The cheapest ones cost Rs 1,200-1,500 and a smart middle-school student can assemble and programme it.
- As permissions are still a little tedious, they run the risk of being ignored.

How does the future look?

- The civilian use of drones is expected to proliferate and the years with increased commerciality and better regulations.
- UAV ambulances have been successfully deployed in several countries and its advantages are obvious.
- UAVs are also used in disaster management, for surveys and mapping, monitoring of power lines, ports and pipelines.
- Commercial photography, crop spraying and gathering of weather data are also aspects that have potential.
- **Concerns** - There are indeed multiple associated safety, security and privacy concerns.
- These must be addressed in a pragmatic and rational fashion by flexible regulations that can adapt to new technologies.
- The new draft is an improvement but it does not go far enough.

PRELIM BITS CONSOLIDATION

HISTORY

Birsa Munda

- Birsa Munda Jayanthi was recently celebrated across the country.
- He was a tribal leader in chotanagpur region who fought against the land acquisition by British.
- He started the faith of "Birsait" to challenge the British conversion activities and thereby attracted the members of Munda and Oraon tribal communities.
- He is popularly known as 'Dharti Abba' or the Earth Father, a folk hero inspiring other Adivasis in their struggle for forest rights in modern times.
- He started a movement called 'Ulgulan', or 'The Great Tumult', organising the Adivasis against the land settlement system imposed by the British.
- He fought against superstition, animal sacrifice and alcoholism and demanded tribal farmers to boycott 'beth begari system' (forced labour).
- He had forced the colonial officials to introduce "The Chotanagpur Tenancy Act, 1908", which restricted the passing on of land from the tribal people to non-tribals.

ART AND CULTURE

Tholpava Koothu

- Tholpava Koothu is a unique shadow puppet theatre form of Kerala, believed to have originated in the 9th century AD.



- It is dedicated to Bhagavati, worshiped by the people of Kerala as the Mother Goddess.
- It is performed using leather puppets at the specially constructed theatre called Koothu Madam in front of the Bhagavati temple.
- It uses Tamil epic, **Kamba Ramayana**, as its basic text.
- The language used is a dialect of Tamil with an admixture of Sanskrit and Malayalam words.
- It is a fine example of the integration of Aryan and Dravidian cultures and is preserved as a family tradition by the Pulavars.

Kathak

- The birth anniversary of **Sitara Devi**, Kathak queen and often hailed as the 'Empress of dance (NrityaSamragini)' was observed recently.
- Kathak is an ancient Indian classical dance and started as oral tradition by kathakars or storytellers based on episodes from epics, myths and legends.
- Later it evolved in to a simple form of expressional dance through rhythmic foot movements, hand gestures, facial expressions and eye work.
- Bhakti movement contributed to a whole new range of lyrics and musical form with Radha-Krishna theme and works of Mirabai, Surdas.
- Three specific forms of kathak are three gharanas (schools) namely, the Jaipur gharana, the Benaras gharana and the Lucknow gharana.
- The gharanas mostly differ in emphasis given to footwork versus acting.
- The 19th century saw the golden age of Kathak under the patronage of Wajid Ali Shah, the last Nawab of Oudh.
- Being the only classical dance of India having links with Muslim culture, it represents a unique synthesis of Hindu and Muslim genius in art.
- It is the only form of classical dance wedded to Hindustani music.

Kambala

- It is an annual buffalo race conducted in Coastal belt of Karnataka.
- It is a traditional bull sport similar to Jallikattu in Tamil Nadu.
- The 'track' used for Kambala is a slushy paddy field.
- It is conducted in both competitive and non-competitive manner.
- The Kambala season generally starts in November and lasts till March in the following year.
- Supreme Court in 2014 had banned it based on a petition filed by various animal rights organizations.
- Following the massive protest against the ban, Karnataka government passed "The Prevention of Cruelty to Animals (Karnataka Amendment) Ordinance 2017" to legalize the bull sport.
- Recently, People for the Ethical Treatment of Animals (PETA) have challenged the ordinance but SC refused to stay ordinance.

Kakatiya-era temple

- The archaeological department has excavated the parts of the The 800 year old Sri Kasi Visweswara Temple that remained buried.
- It belongs to the kakatiya period and is located in Medak district in Telangana.

Geographical Indication (GI) tag

- A geographical indication is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- It is managed by Cell for IPR promotion and Management (CIPAM) under the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry.
- **West Bengal** state has recently won the **GI tag for Rasgulla**.
- West Bengal and Odisha have been engaged in a legal battle over the origin of the syrupy Rasgulla since June 2015.
- Tamil Nadu is first among the states in India with regard to the number of GI tags for its products, while Uttar Pradesh comes second.
- Darjeeling Tea was the first Indian product to get a GI.

- The capital of kakatiya dynasty is Warangal.
- Eastern Chalukyas preceded kakatiyas and Bahmani sultanate succeeded it which was subsequently conquered by Vijayanagar Empire and Delhi Sultanate in the later period.
- Rudrama Devi of this dynasty reigned around 1262–1289 CE.

Mamallapuram Stone Sculptures

- The hand-crafted stone sculptures of Mamallapuram have been recently granted the Geographical Indications (GI) tag.
- The exquisite rock-sculpting techniques exhibited in Mamallapuram date back to early 7th century CE.
- The Pallava dynasty, which ruled the area between 6 and 9th centuries A.D., is responsible for the development of port town as a centre of art and architecture.
- Mahendravarman (AD 580-630), his son Narasimhavarman I Mamalla (AD 630-668), Paramesvaravarman (A.D. 672-700) and Narasimhavarman II Rajasimha (A.D. 700-728) had contributed the most of sculptures.
- Mamallapuram was named after the king Narasimhavarman Pallava, who was also known as Mamallan (great wrestler).
- Sculptors use blue metal for stone sculptors instead of granite which has high density and very costly.

Creative Cities Network

- The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation among cities that have identified creativity as a strategic factor for sustainable urban development.
- The 180 cities in 72 countries currently make up this network.
- All the cities work together in placing creativity and cultural industries at the heart of their development plans at the local level.
- Gastronomy, music, crafts and folk art, media arts, design, film and literature are the seven fields of creativity highlighted by the network.
- **Chennai** has been recently **included in the list of UCCN** for its rich musical tradition.
- Some of the other cities included along with Chennai are Alba (Italy) for gastronomy, Almaty (Kazakhstan) for music and Auckland (New Zealand) for music.
- Jaipur (crafts and folk art) and Varanasi (Music) are the other Indian cities that feature on the list.

UNESCO Asia Pacific Award for Cultural Heritage Conservation

- Sri Ranganathaswamy Temple in Srirangam, has won the UNESCO Asia Pacific Award of Merit 2017 for cultural heritage conservation.
- It has become the first temple in Tamil Nadu to be given the prestigious award from the UN body.
- The massive renovation and restoration effort executed through the public-private partnership model since 2014 was the main reason to win this award.
- Mumbai's Christ Church and Royal Bombay Opera House were the other monuments in India that received the Award of Merit this year.
- The Sri Ranganathaswamy Temple is dedicated to Hindu deity Vishnu.
- The temple is situated on an islet between Cauvery and Kollidam rivers. Kollidam is the northern distributary of Cauvery River.
- It is considered as the foremost among the 108 Divya Desams, which are 108 Vishnu temples that are mentioned in the works of the Alvars called "Nalayira Divya Prabandham".

GEOGRAPHY

Pacific Shadow zone

- The shadow zone is an area of almost stagnant water sitting between rising currents caused by the rough topography and geothermal heat sources.
- It is located at around **2km below the surface** of the Indian and Pacific Oceans with barely any vertical movement that suspends ocean water in an area, leaving the region directly above isolated for centuries.
- The oldest water in the ocean in the North Pacific has remained trapped in it.

- It traps millennia old ocean water, nutrients and carbon which have a direct impact on the capacity of the ocean to modify climate over centennial time scales.

Mount Agung Volcano

- The volcano is located in Bali, Indonesia.
- It was erupted last time in 1963.
- Indonesian government has issued a warning of the “imminent” risk of a larger eruption and residents were warned to immediately evacuate a danger zone that circles Agung in a radius of 8-10 km.

Uluru

- Uluru, the world’s largest monolith, is a sandstone rock formation in the central Australia..
- It is also known as Ayers Rock and is considered as sacred to “Anangu”, the aboriginal people of the region.
- Uluru Kata Tjuta National Park is listed as a UNESCO World Heritage Site.
- It is notable for appearing to change colour at different times of the day and year, most notably when it glows red at dawn and sunset.
- At a meeting of the Uluru Kata Tjuta National Park board, a unanimous decision was made to restrict the climbing of rock, which will come into effect from October 2019.
- It was a proposal by the aboriginal tribes for whom the site is sacred.

World’s Highest Motorable Road

- Border Roads Organisation (BRO) has constructed world’s highest motorable road in Ladakh.
- It is being constructed under the **Project Himank**.
- It is passing through Umlingla Top at a height of over 19,300 feet and 230 km from Leh.
- It is considered as a response to Chinese aggression in LAC in Ladakh.
- The Project Himank has already constructed roads like Khardung La (17,900 ft) and Chang La Pass (17,695 ft) in Leh by connecting Nubra valley and Durbuk valley in the cold desert.

Bhandhan Express

- It is a cross border passenger train runs between India (Kolkata) and Bangladesh (Khulna), covering a distance of 172 km.
- This will be the second train to run between the two countries after Maitree Express, which connects Kolkata and Dhaka in Bangladesh, covering 375 km.
- It was flagged off in 2008 after the gap of 43 years it was stopped during 1965 war between India and erstwhile East Pakistan.
- India and Bangladesh share a 4096km long international border, the 5th longest land border in the world.

Namami Barak Festival

- It is a 3-day river fest, held recently in the State of Assam, to showcase the potential and possibilities of Barak valley.
- It is organized in three districts of Barak valley with the main function organized in Silchar.
- The polo game was organized as part of this festival.
- The first polo club in the world was formed at Assam’s Silchar in 1834.
- But the sport is no more played in the Assam state.
- Players from Manipur, which is known as the home of polo, were invited for the festival.
- The oldest polo ground in the world is the Imphal Polo Ground in Manipur.

Cherry Blossom Festival

- Shillong in Meghalaya is known for cherry which belongs to Prunus Cerasoides.



- It is also known as Wild Himalayan Cherry.
- It blossoms in autumn, usually in the month of November.
- Meghalaya is the first in the world to celebrate autumn Cherry Blossom Festival based on local cherry trees which bloom uniquely in the state.
- The 2nd India International Cherry Blossom festival was recently organized in the state to boost the tourism.
- However, cherry blossoms fail to appear due to erratic rainfall pattern in the state. Huge difference in the day and night temperature have delayed the blossoming.

Valley of Honey

- **Araku Valley** is a hill station in the Eastern Ghats, known for its coffee.
- In the winter season, it turns into valley of Honey with the bloom of Niger flowers and increase in bee keeping.
- The valley is located close to A.P - Odisha border, surrounded by various mountains which are endowed with bauxite ores.
- One of the important mountains is Galikonda which is one of the highest in A.P.
- The nearest cave to Araku Valley is Borra cave.

India's Biggest Oil Refinery

- India's biggest oil refinery is proposed on the western coastline in the Ratnagiri district in Maharashtra.
- The refinery will stand next to world's biggest nuclear power project, the proposed 9900 MW Jaitapur Nuclear Power Project (JNPP).
- The government has recently begun the joint measurement of land. The land has been notified as an industrial area under Maharashtra Industrial Development Corporation (MIDC) Act, instead of Land Acquisition Act, 2013.
- MIDC law is draconian and gives no voice to the people. So farmers from in Maharashtra have been protesting against it.
- The villagers are also concerned at the pollution caused by the refinery once it is operational.

Alappuzha – A Leading Urban Centre in Waste Management

- Alappuzha in Kerala is among the five cities recognized by the United Nations Environment Programme (UNEP) as global success stories in solving the problem of solid waste.
- The other four cities are Osaka (Japan), Ljubljana (Slovenia), Penang (Malaysia) and Cajicá (Colombia).
- Alappuzha adopted decentralized waste management system.
- The biodegradable waste was segregated at the ward level, and treated in small composting plants which provide biogas for residents.
- Alappuzha has also received the Clean City Award from the Centre for Science and Environment (CSE) in 2016.

POLITY

National Judicial Pay Commission

- National Judicial Pay Commission was formed to evolve the principles which would govern pay structure and other emoluments of Judicial Officers belonging to the Subordinate Judiciary.
- It will give its recommendation to State governments within the period of 18 months after its constitution.
- It aims at making the pay scales and conditions of service of Judicial Officers uniform throughout the country.
- Cabinet has recently approved the appointment of second national judicial pay commission headed by former Supreme Court judge.

Job quota for poor among forward communities

- The Kerala government has decided to provide job quota for the economically backward among the Forward Communities (FCs) in the State.
- 10% reservation will be rolled out in appointments to the boards of five public-run bodies or Devaswom boards, which administer about 3,000 Hindu temples.

- It would not require a constitutional amendment.
- The government has increased the quota for members of Other Backward Castes (OBC) from 14% to 17% and Scheduled Caste-Scheduled Tribe (SC-ST) communities from 10% to 12%.
- The State has held that it would exert pressure on the Centre for a constitutional amendment to implement the quota in other sectors.

SOCIAL JUSTICE

Hausala 2017

- Hausla 2017 is Child Rights Week.
- It is being celebrated every year by the Ministry of Women and Child Development along with **UNICEF support**, from 16th to 20th November, 2017.
- It is the period between Children's Day (14th November) and the International Child Rights Day (20th November)
- The main objective of the programme was to promote child participation and showcase their talents in other creative activities.
- **Baal Utsav** – It is organized by the National Commission for Protection of Child Rights (NCPCR) as part of Hausla – 2017.

SHe-box Portal

- SHe-box (Sexual Harassment electronic box) is an online platform launched by the Ministry of Women and Child Development.
- The platform is to enable women employees to file complaints related to sexual harassment at the workplace.
- It enables both public and private sector employees to lodge their complaints.
- It ensures the effective implementation of the Sexual Harassment of Women at Workplace Act, 2013.

GOVERNMENT INITIATIVES

National Testing Agency

- Union Cabinet has recently approved creation of National Testing Agency (NTA) to conduct entrance examinations for higher educational institutions.
- It will be registered as a society under the Indian Societies Registration Act.
- It will act an autonomous and self-sustained premier testing organization chaired by eminent educationist appointed by Ministry of HRD.
- It would initially conduct those entrance examinations which are currently being conducted by the CBSE (NEET, JEE etc).
- The entrance examinations will be conducted in online mode at least twice a year, giving adequate opportunity to candidates.
- It will relieve CBSE, AICTE and other agencies from responsibility of conducting the entrance examinations.

Shaala Sarathi

- It is a portal launched by the Ministry of HRD.
- It is a State-NGO-CSR Portal to aid the collaboration among the stakeholders in sharing innovative practices in various schools.
- **Shaala Siddhi** is a comprehensive **school evaluation system** focused on well-defined quality based parameters that facilitates Schools to make professional judgments for improvement.

Shilpotsav -2017

- Shilpostav- 2017 is the **annual fair of artisans** from across the country, belonging to the weaker sections of the society.
- It is being organized by the **Ministry of Social Justice and Empowerment**.
- Its objective is to empower marginalized and disadvantaged artisans by providing financial independence.



Rashtriya Ekta Shivir

- Rashtriya Ekta Shivir (National Integration Camp) was organized recently as part of Ek Bharat Shreshth Bharat by Kendriya Vidyalaya Sangathan (KVS).
- The most unique feature of this camp is that the students from one state of the country represent the cultural diversity of another state of the country.
- It represents the socio-economic aspects along with the art and culture of various states.

Agriculture Hackathon

- **Vishakhapatnam** will host the first-ever agriculture hackathon.
- It is being organized here by the State government (Andhra Pradesh) in association with the Confederation of Indian Industry (CII).
- It will be major international hackathon with delegates from all over the world participating to showcase the latest agriculture technologies and products of companies.

UMANG App

- Unified Mobile Application for New-age Governance (UMANG) mobile app allows citizens to access government services on a single platform.
- The services live on the app include Aadhaar, DigiLocker, Bharat Bill Payment System (BBPS) among others.
- Using the app, citizens will be able to access Employees Provident Fund Organisation (EPFO) services, apply for a new PAN, and can register under the Pradhan Mantri Kaushal Vikas Yojana.

Higher Education Financing Agency

- It is a non-banking financial company (NBFC) formed to give a major push for creation of high quality infrastructure in premier educational institutions.
- It is registered as a Section – 8 Company under the Companies Act.
- It will be a joint venture between the HRD ministry and Canara bank.
- It will raise funds from the market and also mobilize CSR funds from PSUs/Corporates and lend to government-run higher educational institutions for promoting research and innovation.
- It would finance research and infrastructure projects through a 10-year loan.

World Immunization Day

- World Immunization Day is celebrated every year by WHO on November 10.
- It is to make people aware of the importance of getting timely vaccinations against preventable diseases.
- India has one of the largest Universal Immunization Programs (UIP) in the world in terms of the quantities of vaccines used, number of beneficiaries covered, geographical spread and human resources involved.
- GoI is providing vaccination free of cost against vaccine preventable diseases under Mission Indradhanush.
- It includes Diphtheria, Pertussis, Tetanus, Measles, severe form of Childhood Tuberculosis, Hepatitis B and Meningitis & Pneumonia (across the country), Inactivated polio vaccine (IPV), Japanese Encephalitis in JE endemic districts and Rotavirus diarrhoea in selected states.
- Measles-Rubella vaccine, Pneumococcal Conjugate Vaccine (PCV) is being introduced in phased manner.

GOVERNMENT SCHEMES

RKVY-RAFTAAR

- The Cabinet Committee on Economic Affairs has approved the continuation of Rashtriya Krishi Vikas Yojana (RKVY) as RKVY- Remunerative Approaches for Agriculture and Allied sector Rejuvenation (RKVY-RAFTAAR) for three years i.e. 2017-18 to 2019-20.
- RKVY is a continuing scheme under implementation from XI Five Year Plan.
- RKVY – RAFTAAR scheme will incentivize States in enhancing more allocation to Agriculture and Allied Sectors.
- It will provide considerable flexibility and autonomy to states in planning and executing programmes for investment in agriculture and allied sectors.



- The funds would be provided to the States as 60:40 grants between Centre and States (90:10 for North Eastern States and Himalayan States).
- It will also strengthen farmer's efforts through creation of agriculture infrastructure that help in supply of quality inputs, market facilities etc.
- It will further promote agri-entrepreneurship and support business models that maximize returns to farmers.

Pradhan Mantri Mahila Shakti Kendra

- The objective of this new scheme is to **empower rural women through community participation.**
- Improving the child sex ratio, survival of new born girl child, girl education and empower them through several initiatives are the main motives.
- Under the scheme, community engagement through student volunteers is envisioned in the backward districts at block level.
- Student volunteers will help in awareness generation regarding various important government programmes as well as social issues.
- It will be implemented by the Ministry of Women and Child Development under umbrella mission for "Protection and Empowerment for Women" for the duration of 2017-18 to 2019-20.

Deen Dayal SPARSH Yojana

- Ministry of Communication recently launched Deen Dayal SPARSH Yojana scheme.
- SPARSH - Scholarship for Promotion of Aptitude & Research in Stamps as a Hobby.
- It is a pan India Scholarship programme to children of Standard VI to IX having good academic record and also pursuing Philately as a hobby.
- The selection would be based on the evaluation of Project work on Philately & performance in Philately Quiz conducted by the Circles.

Beti Bachao Beti Padhao

- The Union Cabinet has recently given its approval for expansion of Beti Bachao Beti Padhao for a Pan India reach covering all the 640 districts of the country as per census 2011.
- The scheme was launched in 2015 to address the issue of decline in Child Sex Ratio (CSR) in gender critical districts.
- The objectives of the Scheme are-
 1. Prevent gender biased sex selective elimination
 2. Ensure survival & protection of the girl child
 3. Ensure education of the girl child
- The initiative has two major components such as mass communication campaign and multi-sectoral action covering all States and UTs.
- It is being implemented in a coordinated effort by Ministry of WCD, Ministry of Health and Family Welfare and Ministry of HRD.
- **CSR** - Number of girls per 1000 boys in the age group of 0-6 years. It declined sharply from 976 in 1961 to 918 in Census 2011.

National Rural Drinking Water Programme

- It was started in 2009 as a Centrally Sponsored Scheme with 50-50 fund sharing between the Centre and the States.
- Ministry of Drinking water and sanitation is the nodal ministry with an emphasis on ensuring sustainability of water availability.
- Recently, the cabinet has approved the continuation and restructuring of the programme to make it more flexible and result oriented.
- The programme will cover all the rural population across the country to reach the goal of increasing coverage of sustainable piped water supply.
- NRDWP will be continued co-terminus with the 14th Finance Commission cycle till March 2020.

- There will be 2% earmarking of funds for Japanese Encephalitis (JE) /Acute Encephalitis Syndrome (AES) affected areas.
- A new sub-programme “**National Water Quality Sub-Mission (NWQSM)**” to cover all rural population in Arsenic/Fluoride affected habitations with clean drinking water on a sustainable basis by March 2021.

North East Rural Livelihood Project

- It is a unique scheme proposed by the Ministry of Development of North-Eastern Region (DoNER) and is being supported by the World Bank.
- It will primarily benefit the tribals and the lower socioeconomic groups, especially women, in the North-Eastern Region (NER).
- Four states, - Mizoram, Nagaland, Sikkim and Tripura, will be taken up for helping the tribal and even the non-tribal lower groups living in remote areas.
- It is also aimed at assisting over 10,000 Self Help Groups (SHGs) and benefit about three lakh poor households.
- The more vulnerable tribal groups like Reang in Tripura and Lepsha and Bhutias in Sikkim will also benefit from it.

NATIONAL INSTITUTES IN NEWS

Competition Commission of India

- It is a statutory body of the Government of India responsible for enforcing the Competition Act, 2002.
- The act prohibits anti-competitive agreements.
- It is the duty of the Commission to eliminate practices having adverse effect on competition, to promote and sustain competition, protect the interests of consumers and ensure freedom of trade in the markets of India.
- CCI has recently found All India Film Employees Confederation (AIFEC) and three other producer associations to be in contravention of provisions of Section 3 of the Competition Act, 2002.
- It has rejected the plea of the trade unions’ that they are being governed only the provision of Trade Union Act, 1926.
- It noted in its order that trade unions enjoy no immunity or exemption for their conduct which contravenes the provisions of the Competition Act.

Island Development Agency

- IDA was setup this year to bring holistic development in 9 islands.
- It includes four in A&N Islands i.e. Smith, Ross, Long, Avis and five in Lakshadweep i.e. Minicoy, Bangaram, Thinnakara, Cheriya, Suheli.
- The agency is headed by Union Home Minister and the projects are being directed by NITI Aayog.
- It aims at promoting and implementing development based on sustainable approach to building a thriving maritime economy of the project islands.
- Its second meeting was recently held and it was decided to develop PPP package for the development of Airport in Minicoy Island and promoting of **Tuna fishing Industry** for improving livelihoods in Lakshadweep.

Indian Institute of Corporate Affairs

- The Union Cabinet has given its approval for continuation of the scheme on Indian Institute of Corporate Affairs (IICA) for another three financial years (FYs 2017-18 to 2019-20) to make the Institute self-sustainable.
- IICA is a think-tank and repository of data and knowledge to support rational decision-making for the policy makers, regulators related to the corporate sector.
- It helps first-generation entrepreneurs and small business for imparting multi-disciplinary skills.
- The National Foundation for Corporate Social Responsibility (NFCSR) at IICA is responsible for CSR initiatives.



Airport Authority of India (AAI)

- AAI, under the Ministry of Civil Aviation is responsible for creating, upgrading, maintaining and managing civil aviation infrastructure.
- It is India's state-owned airport agency with "Miniratna" status.
- It is likely to issue bonds to finance airport projects.
- The revenue earned from the bonds will primarily be meant to build seven Greenfield airports and step up the capacity of terminals and runways at existing airports.
- It is implementing the GAGAN project in technological collaboration with the Indian Space Research Organisation (ISRO).
- Under GAGAN, the satellite based system will be used for navigation.
- The navigation signals thus received from the GPS will be augmented to achieve the navigational requirement of aircraft.

INTERNATIONAL ISSUES AND EVENTS

International Maritime Organisation

- It is the global standard-setting authority for the safety, security and environmental performance of international shipping by creating a regulatory framework for the shipping industry.
- It is the only UN **special agency** to have its headquarters in the United Kingdom.
- The IMO council consists of 40 members in which category A consists of 10 members, category B – 10 members and category C – 20 members
 1. Category-A has countries which have interest in providing international shipping services.
 2. Category-B has large nations with interest in international seaborne trade.
 3. Category-C has special interests in maritime transport or navigation.
- India has had the privilege of being elected to and serving the council of the IMO, ever since it started functioning, except for two years during 1983-1984.
- In its 30th session of IMO held in London, **India has been re-elected to the council of IMO under "Category B"**.

Veto in the UNSC

- Russia has recently cast its veto in the United Nations Security Council to block the renewal of a probe to identify the perpetrators of chemical weapons attacks in Syria.
- A draft resolution put forward by Japan would have extended the UN-led Joint Investigative Mechanism (JIM) on chemical weapons attack.
- The UN Security Council is composed of 15 Members.
- The five permanent members are China, France, Russian Federation, the United Kingdom, and the United States.
- Non-permanent members are elected for two-year terms by the General Assembly.
- Present ten non-permanent members (with end of term date) are Egypt (2017), Italy (2017), Japan (2017), Senegal (2017), Ukraine (2017), Uruguay (2017) Bolivia (2018), Ethiopia (2018), Kazakhstan (2018), Sweden (2018).

European Bank for Reconstruction & Development (EBRD)

- The Union Cabinet has approved India's membership for EBRD.
- EBRD is an international financial institution founded in 1991 and headquartered in London.
- It is owned by 65 countries and two EU institutions, and US is the biggest shareholder.
- Besides Europe, member countries of the EBRD are also from other continents - North America (Canada and US), Africa (Morocco), Asia (Japan, China, South Korea) and Australia.
- EBRD's core operations pertain to **private sector development** in their countries of operation.
- The minimum initial investment towards the membership of EBRD will be approximately one million Euros.

- The International Solar Alliance (ISA) and the European Bank for Reconstruction and Development (EBRD) has recently signed a pact for cooperation on energy projects.
- The EBRD is not to be confused with the European Investment Bank (EIB) which is owned by EU member states and used to support EU policy.

Asia Pacific Economic Co-operation (APEC) 2017 Summit

- It was recently held in the city of Danang, Vietnam.
- At the summit, Ministers from 11 Asia-Pacific countries have decided to go ahead with the trade deal “Trans-pacific partnership” without the US.
- APEC is a forum for 21 Pacific Rim member economies that promotes free trade throughout the Asia Pacific region and is headquartered at Singapore.
- It was established due to growing inter dependence among Asia Pacific regions, increasing regional trade blocs, to diffuse growing power of Japan.
- The criterion for membership is that the member is a separate economy, rather than a state and the result of it is the inclusion of Taiwan.
- APEC also includes three official observers: ASEAN, the Pacific Islands Forum and the Pacific Economic Cooperation Council
- India is not in the grouping.

Asian Ministerial Energy Roundtable

- International Energy Forum is promoting the Asian Ministerial Energy Roundtable (AMER) which is a biennial event bringing together Energy Ministers and experts from Asian countries.
- The seventh AMER is going to be held in Bangkok.
- India is the current Chair of IEF.
- It will host the 16th Ministerial Conference of the IEF in April 2018.

IEA Ministerial Conference

- IEA is a Paris-based autonomous intergovernmental organization established in the framework of the OECD in 1974 in the wake of the 1973 oil crisis.
- It acts as a policy adviser to its member states, but also works with non-member countries, especially China, India, and Russia.
- India recently declared its “**Association**” status with the International Energy Agency (IEA).
- This year IEA Ministerial conference is being held in Paris.
- At the Conference, India signed joint work programmes with IEA and other key members of the IEA Family i.e. Brazil, Chile, India, Indonesia and Thailand.
- The event focuses on energy security, clean energy technology.

IEA-OES meeting

- 33rd executive committee meeting of International Energy Agency-Ocean Energy Systems Collaboration Programme (IEA-OES) held recently.
- Ocean Energy Systems Technology Collaboration Programme is an intergovernmental collaboration between countries.
- It operates under the framework established by the International Energy Agency.
- India became a member of the forum in April 2017, by this India would have access to advanced research and development teams, technologies and data in the area of ocean energy across the world.

International Energy Forum

- It consists of 72 member countries, aiming to foster greater mutual understanding and awareness of **common energy interests** among its members.
- Its member countries are accounting for around 90% of global supply and demand for oil and gas.
- It is unique because it comprises not only countries of the IEA and OPEC, but also other major players outside of IEA and OPEC, including Argentina, China, India, Mexico, Russia and South Africa.
- The Forum's biennial Ministerial Meetings are the world's largest gathering of Energy Ministers.

World Congress on Information Technology

- The World Congress on Information Technology (WCIT) is a premier global forum that is to be held for the first time in India, at **Hyderabad**.
- The congress's objective is to create awareness of the shift in technology and serve as a forum for people to experience the change.
- The 22nd edition of WCIT focus on technology led disruption in IT field and it also showcases latest trends, technologies, strategic discussions on building the digital future.
- It is being organized by the Nasscom's India Leadership forum.

Warsaw Convention

- It refers to an international agreement that defines the rules and regulations that govern civil aviation.
- It defines the potential liability that an international carrier faces with regards to the air transport of people and luggage of various kinds.
- It helps provide a common framework for dispute resolution between parties belonging to different countries.
- **Montreal Convention** is a multilateral treaty adopted by member states of International Civil Aviation Organisation (ICAO).
- It amended important provisions of the Warsaw Convention's regime concerning compensation for the victims of air disasters.

ECONOMY

15th Finance Commission

- The Union Cabinet has approved the setting up of the 15th Finance Commission, headed by N.K.Singh.
- It will decide on the distribution of tax proceeds among centre, states and local bodies in the post-goods and services tax (GST) era.
- The setting up of the finance commission for every 5 years is a Constitutional obligation under **Article 280 (1)** of the Constitution.
- The recommendations of the 14th Finance Commission are valid from 2015 to 2020.
- The recommendations of the 15th Finance Commission will be implemented in the period 2020 to 2025.
- The 14th Finance Commission had raised the untied share of states in net central taxes to 42% from 32% after ending discretionary resource transfers from the centre to the states.

Bilateral Transfer Pricing Agreements

- Mutual agreement procedures (MAPs) and advance pricing agreements (APAs) are the bilateral transfer pricing agreements to solve the income tax dispute between IT department and foreign corporate.
- APAs are meant to settle potential disputes in advance, while MAPs to settle a dispute once it has happened.
- Both these agreements are applicable to a country only when the DTAA with a particular country contains a 'corresponding adjustment' clause.
- The clause would allow the tax disputes through bilateral arbitration instead of domestic litigation.
- Now, IT department has issued a notification which allows MAP and APA with all countries irrespective of 'corresponding adjustment' clause in the treaty.
- It helps important trade partners such as France, Germany, Italy, Singapore and South Korea which did not get the benefit of MAP and APA in the previously held stance.

Finance Commission

- It is a quasi judicial body, constituted by the president of India every fifth year or at such earlier time as he considers necessary.
- It consists of a Chairman and four other members.
- They hold office for such period as specified by the president in his order.
- They are eligible for reappointment.
- As per Article 280 of the Constitution, the commission is required to make recommendations on the distribution of the net proceeds of taxes between the centre and the states.
- It also suggests the principles which should govern the grants in aid of the revenues of the states out of the consolidated fund of India.

Infrastructure Status for Logistics sector

- The union Finance Ministry has recently granted the “Infrastructure” status to the Logistics sector.
- It is being given at the time when the integrated logistics sector development is needed and logistics cost is very high compared to developed countries.
- The implications of getting infrastructure status include
 - i. It will get longer maturity loans compared to typical manufacturing sector
 - ii. It will be eligible for slightly higher equity ratios while applying for loans
 - iii. It will have certain advantages and flexibility while applying external commercial borrowing
 - iv. It will allow doing refinancing with specialized lenders like IDFC, IIFCL etc
- It is expected that it will improve efficiency and reduce the cost of capital in transportation and warehousing, thereby reducing the cost of logistics.

Bharat 22

- The government has recently launched a second exchange-traded fund (ETF) known as the Bharat-22.
- It will comprise stocks of 22 blue-chip public sector units, State-owned banks and Specified Undertakings of the Unit Trust of India (SUUTI).
- It will help the government to sell equity stakes in state-run firms in order to meet its objective to raise Rs 72,500 cr through disinvestment in the current financial year 2017-18.
- Earlier the government has launched Central Public Sector Undertakings (CPSE) ETF, which had stocks of many energy companies.
- Bharat 22 is a well diversified ETF spanning six sectors such as basic materials, energy, finance, FMCG, industrials and utilities.
- While CPSE ETF has only state-run companies as its constituents, Bharat-22 will give the government a shot at selling stakes in some of the private sector blue-chip companies as well.

ENVIRONMENT

SPECIES IN NEWS

Autumn Leaf

- The Autumn Leaf is a rare butterfly species normally found in Karnataka and Kerala.
- It resembles a leaf found in the autumn with an orangish tinge.
- It is spotted for the first time after few years, in the Grizzled Squirrel Wildlife Sanctuary (GSWS), Tamil Nadu.
- GSWS, also known as Srivilliputhur Wildlife Sanctuary, home to the endangered grizzled squirrel, is bordered by Periyar Tiger Reserve and Palaghat gap.
- It is considered as one of the Butterfly hotspots.



New Species in Andaman

- Edible wild banana species has been discovered in Andaman Island, the second such species on the island in two years.
- In 2014, *Musa indandamanensis*, wild banana species was discovered in a remote tropical rain forest on the Little Andaman Island.
- The latest discovery, *Musa paramjitiana* found in North Andaman Island.
- The plant grows to a height of nine metres and bears an edible, sweet-and-sour tasting fruit with numerous bulb-shaped seeds.
- Its conservation status has been declared as ‘**Critically Endangered**’.

New Species in Western Ghats

- A new species of ant was found in the Periyar Tiger Reserve in the Western Ghats region.
- It belongs to *Tyranomyrmex*, a rare tropical genus of ants that is distributed in the Indomalayan bio-region.
- Its Bio region extends from southern India and Sri Lanka to Southeast Asia.
- It is named as *Tyranomyrmex alii* as a tribute to country’s “Ant Man” eminent myrmecologist Musthak Ali.



Bonnet Macaques

- The bonnet macaque, an old world monkey, diurnal animal is endemic to southern India.
- They are found only in peninsular India with close proximity to humans.
- It exists as commensals to human, meaning it maintains commensalism with human beings.
- In Commensalism, one organism benefits from the other without affecting it.
- A study suggested that rhesus macaques were invading the bonnet’s habitats in south India.
- Rhesus macaques are usually found in northern part of India.
- Decrease in tree cover, loss of contiguous canopies, rapid urbanization causes bonnet’s disappearance from temples and tourist spots.

Clouded Leopard

- A Bornean Clouded Leopard (*Neofelis diardi*), found only on Borneo and Indonesia's Sumatra were recently captured during daytime as a rare sighting.
- It is a wild cat belongs to genus *Neofelis*. The other genus belongs to same family is Sunda Clouded Leopard (*Neofelis diardi*).
- It is listed as Vulnerable on the IUCN Red List and listed in CITES Appendix I.
- The range of the clouded leopard extends from Nepal on the Indian subcontinent to southern China and throughout South-East Asia.
- Clouded Leopard National Park is located in the Sipahijola Wildlife Sanctuary in Tripura.
- It is the state animal of the Indian state of Meghalaya.

Gleadovia Konyakianorum

- Scientists have discovered a new species of **parasitic flowering plant** belongs to the species “**Gleadovia konyakianorum**” in the Nagaland State.
- The species is named in honour of the Konyak tribe of Nagas.
- It is a holoparasite [complete parasite] that derives its entire nutritional requirement from the host plant, which is a *Strobilanthes* species.
- The plant was found in the semi-evergreen forest at an altitude of 1,500-1,600 metres,
- This is only the fourth species from the genus *Gleadovia* to be found in the world.
- The other three are *Gleadovia banerjiana* (discovered in Manipur), *Gleadovia mupinense* (found in China) and *Gleadovia ruborum* (discovered in Uttarakhand and also reported from China).

Parasitic plants

- Parasitic plant obtains all or part of its nutrition from another plant (the host) without contributing to the benefit of the host and, in some cases, causing extreme damage to the host.
- The structural feature of a parasitic plant is the haustorium, a specialized organ that penetrates the host and forms a vascular union between the plants.
- They lack chlorophyll and photosynthetic capacity.
- It differ from plants such as climbing vines, lianas, epiphytes, and aerophytes, which use other plants simply as a structure to grow rather than as a source of water or nutrients.
- All parasitic plant species are angiosperms (flowering plants).

Indian Emerald Dragonfly

- It is a rare variety of dragonfly known to exist only in the Travancore hills of Kerala.
- It made a dramatic reappearance 83 years, as it was sighted in the Periyar Tiger Reserve (PTR) during an odonata survey.
- Odonata is an order of carnivorous insects that includes dragonflies and damselflies.
- It lives around forest streams and micro habitat near high altitude areas.
- It is easy to spot because it flies irregularly over the water body for nearly an hour
- Thus it acts as an indicator of the health of water bodies inside sanctuaries and reserves.
- If a particular habitat is disturbed by pollution, the species won’t be able to survive.

Mahendragiri Gecko

- A new species of gecko (lizards) belonging to the genus Hemidactylus was recently discovered from Mahendragiri hills in Andhra-Odisha border.
- It is the second gecko to be found endemic to the Eastern Ghats area.
- The first one “House Lizard” was discovered from Kanger Ghati National Park in Chattisgarh.
- Scientists discovered that Mahendragiri geckos were not a population of geckos found in Western Ghats in Maharashtra and it is the latest addition to the species list of the Eastern Ghats.
- The lizard is the 32nd species of Hemidactylus gecko found in India.
- The discovery highlights the biodiversity importance of the region.
- For the last 70 years, it did not get its rightful place in the classification scheme.

Most Threatened Ape - Tapanuli orangutan

- Scientists have so far recognized six living species of great ape aside from humans.
- They are Sumatran and Bornean orangutans, eastern and western gorillas, chimpanzees, and bonobos.
- But researchers have now made the list into seven, based on a collection of evidence showing that an isolated population of orangutans living in Sumatra is actually its own unique species.
- They've named the new species the Tapanuli orangutan.
- But there are only about 800 Tapanuli orangutans left.
- This makes this newly discovered species among the most threatened great ape species in the world.



CONSERVATION RESERVES IN NEWS

Neelakurinji Reserve

- The reserve is located in Munnar in Idukki district of Kerala.
- The government has decided to redraw the boundaries of the Neelakurinji reserve.
- The government had issued a preliminary notification in 2006 reserving a 3,200-hectare area for Neelakurinji bloom.
- Neelakurinji blooms once in 12 years and it is expected to bloom in July, 2018.
- The notification had triggered an outcry from the local community citing the presence of habitations, institutions, and places of worship within the notified area.

Nelapattu bird sanctuary

- Nelapattu Bird Sanctuary is a bird sanctuary in Nellore district, Andhra Pradesh,
- It is an important breeding site for spot-billed pelicans.
- Spot-billed pelicans are a bird of large inland and coastal waters, especially large lakes.
- It breeds only in peninsular India, Sri Lanka and in Cambodia.
- They are not migratory but are known to make local movements.
- They are colonial breeder, often breeding in the company of other waterbirds.
- It is categorized as “Near Threatened” in IUCN red list.
- Copious rain from the south west and north east monsoon led to the return of pelicans in Nelapattu sanctuary.





Nilgiris

- The rare, pale-skinned 'white' tiger was recently spotted for the first time in the Nilgiris.
- Nilgiris Biosphere Reserve was constituted by UNESCO in September 1986 under Man and Biosphere Programme.
- It is an International Biosphere Reserve in the Western Ghats and Nilgiri Hills ranges of South India.
- The Nilgiri Sub-Cluster is a part of the Western Ghats, which was declared a World Heritage Site by UNESCO in 2012.
- It includes the Mudumalai, Mukurthi, Nagarhole, and Bandipur national parks, as well as the Wayanad and Sathyamangalam wildlife sanctuaries.

Black Buck Reserve

- A wildlife conservation reserve dedicated exclusively to the blackbuck is coming up in the Trans-Yamuna region of Allahabad near the MP and UP border.
- The reserve in Allahabad is the first ever conservation reserve of its kind in UP.
- Blackbuck or Antilope cervicapra, also known as Indian Antelope is found in India, Nepal and Pakistan.
- It is the sole living member of the genus Antelope and is classified under the family Bovidae.
- It is known for its majestic spiral horns (in males) and coat colour contrasts.
- They are found in the open Savannas of north and central India, but are now restricted to just a few patches and habitats.
- It is inhabited in Velavadar Wildlife Sanctuary in Gujarat, Ranibennur Blackbuck Sanctuary in Karnataka, Great Indian Bustard Sanctuary in Maharashtra, Kaimur Wildlife Sanctuary in Bihar
- It is protected under Schedule 1 of the Wildlife Protection Act and Appendix III of CITES (Convention on International Trade in Endangered Species).

POLLUTION

Meisenheimer Complex

- It is a chemical compound which has been found to be highly effective in removing fluoride and metal ions from drinking water.
- The metal ions include lead, mercury, cadmium, copper, and iron.
- It is formed through the single step synthesis through mixing of two chemicals at room temperature.
- It repels water by nature. Thus a polystyrene sponge becomes a water repelling material when coated with this compound.
- It enables the sponge to absorb a wide variety of oils and organic solvents from water.
- It has negative and positive charged parts and this helps it absorb metal ion pollutants and fluoride from water.

Ozone Hole

- NOAA and NASA collaborate to monitor the growth and recovery of the ozone hole every year.
- Measurements from satellites this year showed the hole in Earth's ozone layer that forms over Antarctica was the smallest observed since 1988.
- The polar stratospheric cloud formation and persistence of these clouds are important first steps leading to the chlorine- and bromine-catalyzed reactions that destroy ozone.
- The smaller ozone hole in 2017 was strongly influenced by an unstable and warmer Antarctic vortex -- the stratospheric low pressure system that rotates clockwise in the atmosphere above Antarctica.
- This helped minimize polar stratospheric cloud formation in the lower stratosphere.

ENVIRONMENT CONVENTIONS AND MEETINGS

UN Environment Assembly

- The UN Environment Assembly is the world's highest-level decision-making body on the environment.
- The third UN Environment Assembly will gather in Nairobi, Kenya in December 2017 under the overarching theme of “pollution”.
- The Assembly has the universal membership of all 193 UN Member States.
- It is prepared throughout the year by a Committee of Permanent Representatives which is based in Nairobi.
- It aims to deliver a number of tangible commitments to end the pollution of air, land, waterways, and oceans, and to safely manage chemicals and waste.

First CoP of Minamata Convention

- The Minamata Convention is a global treaty established to protect human health and the environment from the adverse effects of mercury.
- The Minamata Convention on Mercury entered into force in August 2017 with ratification by over 50 countries.
- The first meeting of the Conference of the Parties to the Minamata Convention on Mercury (Mercury COP1) was held at Geneva, Switzerland.
- The report, ‘Towards a pollution-free planet’, was launched during the COP1.
- Global Environment Facility (GEF) is the financial mechanism for Minamata Convention.

GOVERNMENT INTERVENTIONS

M-STRiPES

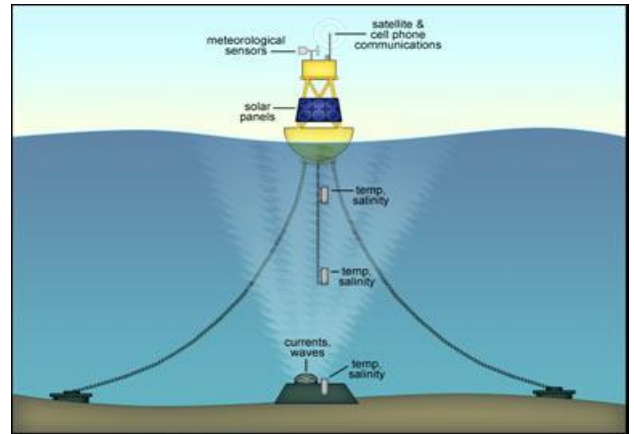
- M-STRiPES (Monitoring System For Tigers-Intensive Protection and Ecological Status) is an app developed by Wildlife Institute of India.
- The app will be used for the first time in All India Tiger estimation.
- It is already in place in some national parks but it has been made mandatory for the fourth All-India Tiger estimation.
- It is expected that the app would ensure more robust estimate by eliminating human errors in the survey.

Indian Forest (Amendment) Ordinance, 2017

- Bamboo is taxonomically a grass.
- Yet it was legally defined as a tree under the Indian Forest Act, 1927.
- This was a major impediment for bamboo cultivation on non-forest land as the act mandates requirement of felling/transit permit for its economic use.
- Though India has 19% share of world's area under bamboo cultivation, its market share in the sector is only 6%.
- So the Union Government has recently promulgated the Indian Forest (Amendment) Ordinance, 2017.
- It exempts bamboo grown in non-forest areas from the definition of tree.
- So there is no more a requirement of felling/transit permit.
- Hence this will promote cultivation of bamboo in non-forest areas to achieve twin objectives of increasing the farmer incomes and also increasing the green cover.
- It will greatly aid the success of recently constituted National Bamboo Mission.
- Bamboo grown in the forest areas will continue to be governed by the provisions of IFA, 1927.

India's first wave-powered Navigational Buoy

- A buoy is an anchored float serving as a navigation mark, to show reefs or other hazards, or for anchorage.
- A wave-powered navigational buoy, developed by the National Institute of Ocean Technology (NIOT).
- This buoy for guiding ships, is powered by wave energy while conventional ones use solar power, it stores energy generated by waves in a battery.
- It will guide ships in and out of ports, navigate through a designated channel.
- The buoy would be able to record data on wind speed and direction various other aspects, which would be relayed to port authorities,
- It was launched by Ministry of Earth Sciences on the eve of executive committee meeting of IEA-OES.



SCIENCE AND TECHNOLOGY

SPACE

Cartosat-2 Satellite

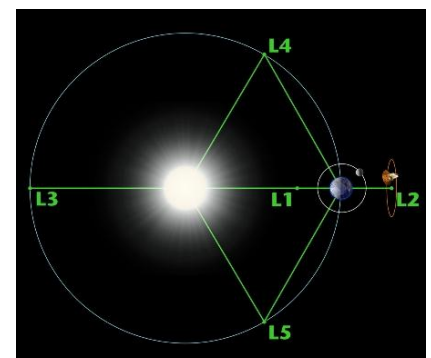
- ISRO is set to launch 28 commercial satellites along with CartoSat-2 in the upcoming month.
- Cartosat is a series of **Earth Observation Satellites** placed in Polar Sun Synchronous Orbit (PSSO).
- The objective is to provide high-resolution scene specific spot imagery.
- The imageries from Cartosat-2 series satellite will be useful for cartographic applications, urban and rural applications, coastal land use and regulation, utility management like road network monitoring, water distribution, creation of land use maps.
- It will also be useful in various other Land Information System (LIS) and Geographical Information System (GIS) applications.

Aditya-L1 Mission

- It is the first Indian mission to study the Sun.
- It is expected to be launched in 2019 by the launch vehicle PSLV-XL with six payloads from Sriharikota.
- The main aim of the solar mission is to do coronal and near UV studies.
- It will be launched into the halo orbit around the Lagrangian point 1 (L1) of the Sun-Earth system.
- This orbit has the advantage of allowing continuous monitoring of the sun.

Lagrange Points

- A Lagrange point is a location in space where the combined gravitational forces of two large bodies, such as Earth and the sun or Earth and the moon, equal the centrifugal force felt by a much smaller third body.
- The interaction of the forces creates a point of equilibrium where a spacecraft may be "parked" to make observations.
- The first point, L1, lies between Earth and the sun and gets an uninterrupted view of the sun and free from the occurrence of eclipses.
- L2 with the Earth, moon and sun behind it, a spacecraft can get a clear view of deep space and it has a protection for radiation field from sun.
- The James Webb Space Telescope will move into L2 point in 2018.
- The third Lagrange point, L3, lies behind the sun, opposite Earth's orbit. For now, science has not found a use for this spot.
- Points L4 and L5 are stable and lie along Earth's orbit at 60 degrees ahead of and behind Earth and dust and asteroids tend to accumulate in these regions due to its stability.
- Asteroids that surround the L4 and L5 points are called Trojans and Earth's only known Trojan asteroid, 2010 TK7 is found in the region.





ASTROSAT

- It is India's first dedicated multi wavelength space observatory.
- Most other scientific satellites are capable of observing only a narrow range of wavelength band.
- But ASTROSAT enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite i.e it observes universe in the optical, Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum.
- Multi-wavelength observations of ASTROSAT can be further extended with co-ordinated observations using other spacecraft and ground based observations.
- The Cadmium-Zinc-Telluride Imager (CZTI) is an instrument to observe and image hard X-rays in AstroSat.
- It has consistently been making important.
- The latest discovery of it is a polarization analysis of the Crab nebula pulsar.

EcAMSat Mission

- EcAMSat – E.coli Anti-Microbial Satellite Mission was scheduled to be launched to International space station.
- E.Coli is a common bacterial pathogen linked to urinary tract infections and foodborne illnesses.
- The mission is intended to investigate spaceflight effects on bacterial antibiotic resistance and its genetic basis.
- It aims to determine the lowest dose of antibiotic needed to inhibit the growth of E.coli.
- It will help to determine the appropriate dosages of antibiotics to protect astronaut health during long-duration human space flight and how antibiotic effectiveness may change as a function of stress on Earth.
- The launch was later postponed.

Advanced Weather Satellite

- NASA has recently launched a next-generation satellite **Joint Polar Satellite System-1 (JPSS-1)**, designed to monitor weather around the world and help improve forecasts.
- It is a joint venture between the US space agency and the National Oceanic and Atmospheric Administration (NOAA), US scientific agency.
- It will orbit the Earth 14 times each day from one pole to the other at 512 miles above the planet.
- It is the first in NOAA's series of four, next-generation operational environmental satellites used for severe weather prediction and environmental monitoring.
- Four smaller satellites called CubeSats, part of NASA's educational nano-satellite program, are to be released on the same mission.

Proxima Centauri

- Proxima Centauri is the closest star to Sun.
- It is a faint red dwarf lying four light years away in the southern constellation of Centaurus.
- It is orbited by the Earth-sized Proxima b which is the closest exoplanet to the solar system.
- Scientists have recently detected dust belts around Proxima Centauri, by the Atacama Large Millimeter Array (ALMA) Observatory in Chile.
- The presence of dust belts indicates the presence of an elaborate planetary system hosted by it.

DEFENCE

Brahmos Missile

- It is the supersonic cruise missile that can be launched from land, sea, sub-sea and air based platforms.
- IAF has successfully test fired the air-launched version of the brahmos for the first time from Sukhoi-30MKI fighter jet.
- With this launch, India has completed the cruise missile triad for land, sea and air variants.
- The air launched BrahMos missile is a 2.5 ton supersonic air to surface cruise missile with ranges of more than 400 kms.



- It marks a history as IAF is the first air force in the world to have successfully fired an air launched 2.8 Mach surface attack missile.
- It is developed by a joint venture between DRDO of India and NPOM of Russia.
- It is a two-stage missile with a solid propellant booster engine in its first stage and the liquid ramjet engine in the second stage.
- It can carry a conventional warhead weighing 200 to 300kgs.
- It uses Transport Launch Canister (TLC) for transportation, storage and launch.
- It is also the world's fastest anti-ship cruise missile in operation.
- The original range was 290 km which was further extended to 450 km after joining MTCR and expected to be extended even up to 600 km.

Nirbhay Missile

- DRDO has successfully tested Nirbhay Cruise Missile recently from the Integrated Test Range at Chandipur, Odisha.
- Nirbhay cruise missile is the India's first long range sub-sonic cruise missile.
- It has an operational range of 1000 km (long range).
- It is capable of carrying warheads of up to 300kg at a speed of 0.6 to 0.7 Mach (sub-sonic).
- It is a two-stage missile powered by Solid rocket motor booster.
- It is guided by a highly advanced indigenously developed inertial navigation system.
- **Sub-sonic** – Any speed lower than the speed of sound. Mach number greater than 1 is called as super-sonic.
- **Cruise Missile** – It is a guided missile that flies major portion of its flight within atmosphere at approx. constant speed.
- **Ballistic Missile** – It is a missile that follows a ballistic trajectory and guided only relatively during brief periods and spends most of their flight out of the atmosphere.

Smart Anti Airfield Weapon

- The Defence Research and Development Organisation (DRDO) have successfully tested Smart Anti Airfield Weapon (SAAW).
- It is an indigenously developed light weight glide bomb, capable of targeting large enemy infrastructure, like airfields.
- It is a long range precision-guided anti-airfield weapon.
- It is guided through precision navigation system.
- It can reach the targets at greater than 70 km range with high accuracies.

Exercise Blue Flag

- Blue Flag is a bi-annual multilateral exercise which aims to strengthen military cooperation amongst participating nations.
- This year **Indian Air Force** will be a part of this exercise which is going to be conducted in Israel.
- This is the first time the Indian Air Force is operating with **Israeli Air Force** in a multilateral exercise setting.
- The exercise would provide a platform for sharing of knowledge, combat experience and in improving operational capability of the participating nations.

Prabal Dostyk

- It is a joint training exercise between the **Indian Army and the Kazakhstan Army**.
- It is aimed at enhancing the military ties between the two countries.
- The 2017 version is going to be conducted in Bakloh, Himachal Pradesh.



SAMPRTI

- It is **Indo-Bangladesh Training** Exercise aimed to strengthen and broaden the aspects of interoperability and cooperation between the Indian and Bangladesh Armies.
- It is the seventh such exercise in the SAMPRITI series and being organized in Mizoram this year.

OTHERS

Groundnut crop free of toxin

- Researchers at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in Hyderabad have recently used the gene silencing technique to keep groundnuts free of **aflatoxin** contamination.
- Aflatoxin is a toxin produced by the fungi *Aspergillus flavus* and *Aspergillus parasiticus*.
- Researchers deployed two strategies to prevent groundnuts being infected by the fungus.
- One is inserting two alfalfa (flowering plant of pea family) genes to enhance immunity against fungal infection and growth.
- Another is preventing aflatoxin production even in case of any infection through a plant-induced **gene silencing technique**.

Gene Silencing Technique

- Gene silencing is a technique that aims to reduce or eliminate the production of a protein from its corresponding gene.
- It generally describe the “switching off” of a gene by a mechanism other than genetic modification
- It occurs when RNA is unable to make a protein during translation (gene expression).
- In the groundnut case, the researchers designed two small RNA molecules that silence the fungal genes which produce aflatoxin.
- When the fungus and plant come in contact with each other the small RNA molecules from the plant enter the fungus and prevent it from producing aflatoxin (protein) by its corresponding gene.

Biomarker

- Researchers have recently identified a peptide (biomarker) that could lead to the early detection of Alzheimer’s disease.
- Biomarkers are indicators that help in determining the presence or severity of a disease.
- The idea is to establish molecular signatures for complicated cases.
- It is used to have a sound knowledge of the disease progression in different individuals suffering from the disease.
- Alzheimer's is the most common form of dementia, a general term for memory loss.
- It is a progressive disease, where dementia symptoms gradually worsen over a number of years.

Hunter’s Syndrome

- Researchers have recently successfully attempted gene editing inside the human body to correct a defect in the DNA that causes Hunter’s syndrome.
- It is a disorder where the body can’t break down sugar that builds bones, skin, tendons and other tissue.
- These sugars can build up and damage the body.
- It appears in children as young as 18 months. It mainly occurs in boys, although very rarely it has been observed in girls.
- There's no cure for Hunter syndrome.

REPORTS AND INDICES

Gender Vulnerability Index

- The first ever Gender Vulnerability Index is computed by Plan India, a non-governmental organisation.
- It provides state-wise ranking by analyzing four parameters, namely health, education, poverty and protection/safety from violence.
- The index is topped by Goa followed by Kerala and Mizoram.
- Bihar ranked the lowest in the index particularly women safety and security.



- The composite index has been developed within research for the NGO's "Plan for Every Child campaign".
- It is aimed at comprehensively understanding the dimensions of various problems affecting children, particularly girls, in difficult circumstances.

State wise "Ease of Doing Business" ranking

- Commerce and Industry Ministry is the nodal body at the Centre for the state wise ease of doing business ranking.
- It is based on the assessment of implementation of the Business Reforms Action Plan' (BRAP).
- Telangana is currently in the top followed by Haryana, Odisha, Chhattisgarh, and West Bengal.
- The final ranking is likely to be released in January, 2018.
- Telangana was the joint topper with Andhra Pradesh, in the ranking last year.
- However, Andhra Pradesh is currently ranked 14th.
- Gujarat, ranked third last year, is now number eight with a score of 41.94%.

World Economic Outlook

- The report "World Economic Outlook" is being published by International Monetary Fund (IMF).
- It ranks over 200 countries in terms of per capita GDP based on Purchasing Power Parity (PPP).
- In this year ranking, India has moved up one position to 126 in terms of GDP per capita.
- It is still ranked lower than all its BRICS peers.
- Qatar remains the world's richest as per the IMF data.
- **PPP** – It is the rate at which the currency of one country needs to be converted into that of a second country.
- It is used worldwide to compare the income levels in different countries.
- It is to ensure that the expenditure on a similar commodity must be same in both currencies when accounted for exchange rate.

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