

# CURRENT AFFAIRS MAGAZINE

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# AUGUST 2018 G.S PAPER II

#### 1. POLITY

# 1.1 Restoration of SC/ST (PoA) Act Provisions

#### Why in news?

Centre has decided to restore the original provisions of Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989 as a response to an earlier verdict of Supreme Court on the Act.

#### What was the court's verdict?

- The Supreme Court in a recent verdict had struck down some original provisions of the Act. Click here to know more
- It issued some guidelines to protect people against arbitrary arrests under the Act.
- It directed that public servants could be arrested only with the written permission of their appointing authority.
- In the case of private employees, the Senior Superintendent of Police concerned should allow it.
- A preliminary inquiry should be conducted before the First Information Report (FIR) was registered.
- . This was to check if the case fell within the ambit of the Act, and whether it was frivolous or motivated.

# What was the response?

- The verdict faced sharp criticism from Dalit leaders across the country and political parties.
- Dalit groups claimed that the court's order diluted the true spirit of the law.
- Despite widespread opposition, the court refused to stay its ruling.
- So dalit groups demanded an ordinance or an Amendment Bill to restore the provisions.
- Following widespread protest, the Union Cabinet had given its nod to the Amendment Bill.

# What does the Bill aim for?

- The Amendment Bill seeks to insert three new clauses after Section 18 of the original Act.
  - 1. preliminary enquiry shall not be required for registration of an FIR against any person
  - 2. arrest of a person accused of having committed an offence under the Act would not require any approval
  - 3. provisions of Code of Criminal Procedure on anticipatory bail shall not apply to a case under this Act, "notwithstanding any judgment or order of any Court"
- The Centre's decision to amend the provisions of the Act appears both reasonable and unavoidable at this juncture.

# 1.2 SC/ST Quota in Promotions

#### Why in news?

- The Centre has recently told the Supreme Court that all SC/ST employees must get reservation in promotions.
- The case is in relation to a Supreme Court verdict in M Nagaraj vs Union of India case in 2006.

# What was the 2006 judgement?

- In the 2006 judgment, the SC had ruled that reservation in promotion of government servants was not mandatory for the state.
- However, if the state wanted to exercise its discretion, they were free to do so.
- The government can introduce a quota in promotion for its SC/ST employees only if they prove
  - i. that the particular Dalit community is backward
  - ii. it was inadequately represented
  - iii. such a reservation would not affect the overall efficiency of public administration
- The opinion of the government should also be based on quantifiable data.
- Hence, backwardness, inadequacy and administrative efficiency were "compelling reasons" for reservation.



- But despite these, the state will have to ensure that its reservation provision does not lead to excessiveness.
- This means that the state cannot breach the ceiling limit of 50% or eliminate the creamy layer or extend reservation indefinitely.
- The judgement excluded the 'creamy layer' in SC/ST reservation during promotion.
- The judgment said the three qualifiers were meant to prevent "reverse discrimination" by State.
- However, the judgement was contested by the Centre and the constitution bench is now hearing it.

#### What were the concerns?

- The Centre said the provision has led to a deprivation of the Dalit communities.
- The government also objected to the creamy layer concept among the SC/ST as it was becoming a hindrance.
- Besides, getting quantifiable data for "inadequate representation" had many procedural limitations.
- Also, the elaborate exercise is leading to a large number of posts lying vacant.
- The SC/ST communities have already faced centuries of deprivation at the hands of society.
- They have been deprived of access to temples, schools and the basic facilities of life as they are "presumed backward".

#### What is the Centre's demand?

- The Centre highlights the need to show "affirmative action" by giving SC/STs equality of opportunity.
- It pushes for providing "accelerated promotion with consequential seniority" for SC/ST members in public employment.
- "Consequential seniority" is when an SC/ST employee is promoted purely on reservation basis despite another person waiting for promotion is actually senior to him/her.
- The Centre wanted a total of 22.5% (15% for SC+7.5% for ST) posts reserved for promotion for SC/ST in public employment.

#### 1.3 Striking Down of Beggary Act

#### Why in news?

• Delhi High Court has struck down as unconstitutional, certain sections of Bombay Prevention of Beggary Act, 1959, as extended to Delhi.

#### What is the Act about?

- There is no any central Act in India on beggary.
- Hence many states and Union Territories have used the Bombay Prevention of Beggary Act, 1959 as the basis for their own laws.
- The objective was to keep the streets of then Bombay clear of the destitute, leprosy patients or the mentally ill.
- It was formulated with the hope that they could be sent into institutions.

#### What are the contentious provisions?

- The Act, essentially, criminalises begging.
- It gives police the power to arrest individuals without a warrant.
- It gives magistrates the power to commit them to a "certified institution" (a detention centre).
- Detention could be up to 3 years on the commission of the first "offence", and up to 10 years upon the second "offence".
- Their privacy and dignity is ignored by compelling them to allow themselves to be fingerprinted.
- It authorises the detention of people "dependant" upon the "beggar" (read as family) and separation of children over the age of 5.
- Certified institutions have absolute power over detainees.
- This includes the power of punishment, and the power to exact "manual work".
- Disobeying the rules of the institution can land an individual in jail.
- There were concerns that the Act was violating the fundamental rights of the citizen.
- The Delhi HC order is the first in the country to strike down provisions of the 1959 Act.



#### What is the Court's order and observations?

- It essentially decriminalised beggary.
- Among the 25 provisions struck down are those:
  - i. permitting the arrest, without a warrant, any person found begging
  - ii. taking the person to court
  - iii. conducting a summary inquiry
  - iv. detaining the person for up to 10 years
- The court has not struck down provisions that do not treat beggary per se as an offence.
- It has also not struck down a Section that deals with penalty for employing or causing persons to beg.
- This addresses forced begging or "begging rackets", which are used to justify retaining the Act.
- Activists advocating repeal of the Act, however, say that these can be dealt with existing provisions in the Indian Penal Code.
- Observations The Bench held that the Begging Act violated Article 14 and Article 21 of the Constitution.
- The government argued that it did not intend to criminalise "involuntary" begging.
- Court, however, noted that the definition of begging under the Act made no such distinction and therefore entirely
  arbitrary.
- It also held that under Art 21, it was the State's responsibility to provide the basic necessities for survival to all its citizens.
- It stressed that poverty was the result of the state's inability or unwillingness to discharge these obligations.
- Therefore, the state could not criminalise the most visible and public manifestation of its own failures.

#### What are the alternatives?

- **Bill** The Centre made an attempt at repealing the Act through the Persons in Destitution (Protection, Care and Rehabilitation) Model Bill, 2016.
- It had provisions including doing away with the Beggary Act and some provisions also allowed detention.
- It also proposes rehabilitation centres for the destitute in each district.
- But the discussion on the Bill was halted in 2016.
- Bihar model Bihar government has the MukhyamantriBhikshavritiNivaran Yojana in place.
- Under this, instead of detaining persons under the Act, open homes were set up.
- Through this, community outreach for destitute persons was put in place.
- Now, rehabilitation centres have been set up, with facilities for treatment, family reintegration and vocational training.

# 1.4 Second Chamber in States

# Why in news?

Odisha's plan calls for a national policy on the utility of a second chamber in States.

# What is Odisha's proposal?

- Odisha now wants to join the group of States that have an Upper House.
- The State Cabinet has approved a 49-member Legislative Council.
- It has accepted the report of a committee set up in 2015.
- The committee studied the functioning of the second chamber in other States and made recommendations.

#### What is the Parliament's stance?

- The State Assembly has to pass a resolution for the creation of the Council, by a majority of its total membership.
- Thereafter, Parliament has to enact a law to create it.
- Notably, two Bills introduced in the Rajya Sabha in 2013 for establishing Legislative Councils in Assam and Rajasthan are still pending.
- It apparently indicates the lack of support for such a move.



- A parliamentary committee that went into these Bills cleared the proposals, but struck a cautionary note.
- It wanted a national policy on having an Upper House in State legislatures to be framed by the Union government.
- This is to ensure that a subsequent government in the State does not abolish it.
- It also favoured a review of the provision in the law for Councils to have seats for graduates and teachers.

#### What are the benefits of a second chamber?

- The advantages of having a bicameral legislature are well-known.
- An Upper House provides a forum for academicians and intellectuals.
- They are arguably not suited for the nature of electoral politics.
- In essence, it provides a mechanism for a more serious appraisal of legislation.

#### What are the concerns?

- If there was any real benefit, all States in the country should have a second chamber.
- The fact that there are only seven such Councils suggests the lack of any real advantage.
- Also, there is, clearly, the absence of a broad political consensus on the issue.
- Concerns The forum is likely to be used to accommodate party functionaries who fail to get elected.
- This may defeat the objective of getting intellectuals into the legislature.
- There is also a question of giving graduates the privilege of being people's representatives in a democracy.
- Today, legislatures draw their talent both from the grassroots level and the higher echelons of learning.
- There are enough numbers of doctors, teachers and other professionals in most political parties today.
- Besides, the second chamber is also an unnecessary drain on the exchequer of the state.
- It is also a restraining force against the dominance of elected majorities in legislative matters.
- Given these, Odisha's proposal may give the country an opportunity to evolve a national consensus on Legislative Councils.

#### 1.5 Significance of Art 35A and Art 370

#### What is the issue?

- The Supreme Court is hearing petitions challenging the validity of Art 35A.
- The provisions need an understanding in the context of the solemn promises at the heart of the Indian federation.

#### What is the case on?

- The petition considers this immunity granted to J&K's laws as discriminatory.
- It also claims that Art 35A could not have been introduced outside the ordinary amending procedure prescribed under Article 368.
- It thus calls for declaring Art 35A unconstitutional.
- A three-judge Bench of the court intends to consider if Article 35A infringes the Constitution's basic structure.
- Based on this, it would decide if the case has to be referred to a larger bench for further examination.

## How are Art 35A and Art 370 justified?

- The law on the subject is well settled as previous Benches have already shown approval for the 1954 presidential order.
- Even otherwise, Art 35A is not amenable to a conventional basic structure challenge.
- This is because India's Constitution establishes a form of asymmetric federalism.
- Clearly, some States enjoy greater autonomy over governance than others.

# Art 35A

- Art 35A was inserted as part of the amendments made through a 1954 presidential order, imposed under Article 370.
- It empowers J&K to define a class of persons as constituting "permanent residents" of the State.
- Also, it allows the government to confer on these persons, special rights and privileges.
- These relate to matters of public employment, acquisition of immovable property in the State, settlement in different parts of the State, access to scholarships and other such aids that the State government might provide.
- It exempts such legislation from being annulled on the ground that they infringe on any of the fundamental rights.



- This asymmetry is typified by Article 370.
- In its original form, Article 370 accorded to J&K a set of special privileges.
- This includes an exemption from constitutional provisions governing other States.
- Also, under J&K's Instrument of Accession, it restricted Parliament's powers to legislate over the State to three core subjects.
- These are defence, foreign affairs and communications.
- Parliament could legislate on other areas only through an express presidential order.
- This should be made with the prior concurrence of the State government.
- For subjects beyond the Instrument of Accession, the further sanction of the State's Constituent Assembly was also mandated.
- Finally, the Art 370 also granted the President the power to make orders declaring the provision inoperative.
- But this authority could be exercised only on the prior recommendation of the State's Constituent Assembly.
- Even changes made to the Constitution under Article 368 will not mechanically apply to J&K.
- For such amendments to apply to the State, specific orders must be made under Article 370.
- This is only after securing the J&K government's prior assent.
- Moreover, such amendments will also need to be ratified by the State's Constituent Assembly.
- So evidently, Art 370 represents the only way of taking the Indian Constitution into J&K.
- Also, Article 370 is as much a part of the Constitution as Article 368, thereby to justify the validity of Art 35A.

## 1.6 EC's Meeting with Political Parties

#### What is the issue?

- The Election Commission (EC) recently held its meeting with all major political parties.
- The meeting is aimed at making the electoral process more transparent, inclusive and credible.

## What are the major demands?

- Several state Assembly elections and the general election are approaching.
- In this context, there were three major demands:
  - 1. giving up on electronic voting machines (EVMs) and moving back to paper ballots
  - 2. linking voter identification cards to Aadhaar
  - 3. cap on election expenditure of political parties

# What is the tussle with EVMs?

- Most of the parties flagged the issue of malfunctioning of electronic voting machines (EVMs).
- EVMs have typically been questioned by parties after losing elections.
- However, it is claimed that EVMs are tamper-proof.
- It also eliminates booth capturing, a favourite pastime of political parties during elections.
- This is because the machines do not allow casting of more than five votes a minute.
- The provision of voter-verifiable paper audit trail (VVPAT) machines has further enhanced EVMs' credibility.
- Besides, a return to the ballot paper system would also not be advisable.
- As, it would come with huge environmental costs and logistical issues.

# What is the Aadhaar linkage demand?

- The demand for linking Aadhaar to voter ID cards is prompted by concerns about the existence of ghost voters.
- E.g. the Congress has complained about 6 million fake voters in the electoral rolls of Madhya Pradesh.
- It is true that Aadhaar would go a long way in eliminating these fake voters.
- But notably, Aadhaar itself is not a proof of citizenship.



- Moreover, there are privacy concerns related to Aadhaar.
- So mandating it as the final adjudicator for voting rights is questionable.

#### What is the current ceiling?

- The EC imposes limits on campaign expenditure incurred by a <u>candidate</u>, and not political parties.
- Expenditure by a Lok Sabha candidate is capped between Rs 50 lakh and Rs 70 lakh.
- This is depending on the state he/she is fighting from.
- In Assembly elections, the ceiling is between Rs 20 lakh and Rs 28 lakh.
- This includes money spent by a political party or a supporter towards the candidate's campaign.
- However, it does not cover expenses incurred either by a party or the leader of a party for propagating the party's programme.
- Also, candidates must mandatorily file a true account of election expenses with the EC.
- An incorrect account, or expenditure beyond the ceiling can attract disqualification for up to three years.
- This is as per Section 10A of The Representation of the People Act, 1951.

#### Are the ceiling limits effective?

- Candidates often complain that the EC's limits are too low and unrealistic.
- But as many as 176 MPs (33%) had declared election expenses that were only less than 50% of the limit.
- This is as per an analysis of expenses in 2014 Lok Sabha elections.
- This clearly indicates that candidates may not be providing true accounts of their poll expenses to the EC.
- Evidently, candidates may be spending beyond their ceilings.

#### What is the EC's view?

- The EC has asked the government to amend the Representation of the People Act.
- It also demands amendment to Rule 90 of The Conduct of Elections Rules, 1961.
- This is to introduce a ceiling on campaign expenditure by political parties in the Lok Sabha and Assembly polls.
- EC considers that the limit would ensure a level playing field for all political parties.
- It would also curb the menace of unaccounted money in elections.
- It could significantly control the money power used by political parties and their allies.

# 1.7 Decision on Appointment of SC Judge

#### Why in news?

Union government has cleared the elevation of Justice K.M. Joseph to the Supreme Court. Click here to know more on the issue

# How is a Supreme Court judge appointed?

- The Chief Justice of India and the Judges of the Supreme Court are appointed by the President under clause (2) of Article 124 of the Constitution.
- Whenever a vacancy is expected to arise in the office of a Judge of the Supreme Court, the Chief Justice of India will initiate proposal.
- The recommendation will be forwarded to the Union Minister of Law, Justice and Company Affairs to fill up the vacancy.
- The opinion of the Chief Justice of India for appointment of a Judge of the Supreme Court should be formed in consultation with a collegium of the four senior-most Judges of the Supreme Court.

# What happened in the appointment of K.M Joseph?

- K.M Joseph was the chief justice of Uttarakhand high court.
- The five member collegium earlier recommended K.M Joseph for elevation to the SC, and it was reiterated again.
- Union government has made unusual delay in first responding to the Collegium's recommendation, and later it took more time for reconsideration of the proposal.
- This had created stand-offs between judiciary and executive, and within the judiciary.



#### What were the concerns with Government's move?

- Union government explained the delay was due to invocation of the seniority or diversity norms in appointments to the higher judiciary.
- It made an issue of K.M. Joseph's relative lack of seniority among the Chief Justices of the various high courts.
- It also said that his elevation would give excessive representation to Kerala, as he belongs to the state.
- Union government has been splitting recommended lists and selectively approving proposals from the collegium, while holding back or returning some names.
- Even in its adherence to the norm that reiteration of a recommendation is binding, the government has not been consistent.

#### What is the way forward?

- The Centre had no option but to elevate the Uttarakhand High Court Chief Justice once the collegium reiterated its original recommendation after the Law Ministry returned his name.
- But it will require more outreach by the government to assuage the anxieties expressed by senior judges in letters written to the CJI.
- Given this past turbulence, the government will be watched carefully for the role it plays or doesn't play in the future in the next big transition in the Supreme Court.

#### 1.8 Dealing with Paid News

#### What is the issue?

The Election Commission of India (ECI) holds that paid news impairs the process of free and fair elections.

#### What is the observation?

- Paid news refers to the news or analysis appearing in any media for a price in cash or kind.
- It plays a significant but negative role in the context of free and fair elections.
- It also involves under-reporting of election expenses by candidates.
- EC found 42 cases of paid news in the election of BJP's Narottam Mishra in 2008 Madhya Pradesh Assembly elections.

#### How is paid news being dealt?

- There is no specific law against "paid news" in India.
- But the poll panel depend on Section 10A of the Representation of Peoples Act (RPA).
- It deals with the misreporting of funds related to election expenses.
- E.g. In 2017, the ECI ordered Mishra's disqualification and barred him from contesting elections for 3 years.
- It argued that Mishra knew of, and by implication authorised the publication of the "reports".
- This should be seen as political advertising under Section 77 of the RPA.
- So, the expenditure incurred or authorised on this head should have been listed in the submissions to the poll regulator.
- But Mishra had "failed to lodge a correct and true account of his election expenses".

#### What is the court's view?

- The Delhi High Court later set aside Mishra's disqualification.
- It said that the content of a media article or a news feature on particular candidates should not be regulated indirectly through EC's directives.
- It observed that they essentially fall within the domain of free speech.
- So, this eventually restricts the poll regulator from acting against paid news.

# What are the demands in place?

- The ECI suggested the Union government that paid news be made an electoral offence under the RPA.
- A Law Commission report from 2015 also recommends amending the RPA to this effect.
- But governments have approached the problem from a press regulation perspective rather than poll regulation.
- E.g. the earlier government brought the Registration of Newspapers and Publications Bill, 2013
- The present government proposed providing for suspension of publication permits for a period of 45 days for erring publications.



# 1.9 Final Draft of Updated NRC in Assam

# Why in news?

The final draft of the updated National Register of Citizens (NRC) in Assam was released recently.

#### What is it about?

- Assam is the only State that had prepared an NRC in 1951.
- The Register is meant to establish the credentials of a bona fide citizen as distinguished from a foreigner.
- This is to detect Bangladeshi migrants who may have illegally entered Assam after the midnight of March 24, 1971.
- This cut-off date was originally agreed to in the 1985 Assam Accord.
- Assam witnessed a range of law and order problems and political turbulence driven by the anti-foreigners movement, in the early 1980s.
- Responding to this, the Assam Accord (1985) was signed by the Centre and the All Assam Students' Union (AASU).
- Accordingly, those foreigners who had entered Assam <u>between 1951 and 1961</u> were to be given <u>full citizenship</u>, including the <u>right to vote.</u>
- The entrants <u>between 1961 and 1971</u> were to be <u>denied voting rights for ten years</u> but would enjoy all other rights of citizenship.
- Anyone who entered the state <u>without documents after March 24</u>, 1971 will be declared a <u>foreigner</u> and were to be deported.
- The NRC update though started as a pilot project in some districts was stopped after violence broke out in some parts of the State.
- The recent publication of updated NRC comes as a result of the Supreme Court order to complete the exercise by December 31, 2017.

# What are the highlights of the updated NRC?

- The updated National Register of Citizens (NRC) listed 2.89 crore citizens, out of the 3.29 crore applicants for inclusion.
- So there are nearly 40 lakh applicants who were not included in the NRC.

# What is the status of these 40 lakh?

- Since it's only a draft, it does not necessarily mean that the excluded 40 lakh are not citizens.
- No one will lose citizenship rights or be sent to a detention camp merely on the basis of the draft NRC.
- They can file claims and objections at various NRC SevaKendras during the specified period.
- The Home Ministry has announced that after these, the final NRC will be published by December 31, 2018.

#### How were they dealt before?

- Since 1964, the Foreigners Tribunals have identified an estimated 90,000 foreigners in Assam.
- But many of them are dead and many more are "untraced".
- Until recently, around 900 "declared foreigners" and "D-voters" (doubtful voters who could not establish their citizenship) were in the six detention camps.
- The NRC has put "on hold" 2.48 lakh names in four categories.
- These are "D-voters" and their descendants, and people whose cases are pending in the tribunals and their descendants.
- There have been reports about "D-voters" subsequently being declared Indian citizens by the tribunals.
- But they are being marked "D" all over again in later electoral rolls.
- To resolve such issues, plans are being made for a centralised database.
- This will link to real-time information on the status of "suspected foreigners".

# Who are eligible for further inclusion?

- The draft includes only those who could establish their linkage to March 24, 1971 or earlier (the cut-off date in the Assam Accord).
- The excluded 40 lakh would thus have submitted papers that were not enough to establish this linkage.
- They now have to back up their claims for inclusion with other eligible proofs.



- They will have to prove that they or their ancestors were citizens on or before March 24, 1971.
- Anyone who figured in electoral rolls up to March 24, 1971, or who are descendants of such citizens, are eligible for
  inclusion.
- Various other documents are admissible such as birth certificates and land records.
- But these are valid only as long as these were issued before the cutoff date.
- The claims-and-objections process will also take into account errors during the update, if any.

#### What after the final NRC?

- Appeal Once the final NRC is published, there will still be some out of the register.
- But mere omission of names from the NRC will not amount to being labelled a foreigner.
- They can approach any of the state's 100 Foreigners Tribunals (the quasi-judicial bodies established in 1964).
- They can also approach the Gauhati High Court and then the Supreme Court.
- The Assam Border Police can refer any "suspected foreigner" to these tribunals following an inquiry.
- Deportation If even these legal recourse fails for those excluded, they could be deported.
- Assam also has six detention camps for illegal migrants within existing jails, and proposes to build a seventh.
- These cannot, however, be expected to accommodate all the exclusions, which could finally run into lakhs.
- Also, Bangladesh has never officially acknowledged that any of its citizens migrated illegally to Assam.
- Stateless So if not deported or detained in a camp, they would officially remain to be non-citizens.
- But what happens to these non-citizens remains a grey area as India has no fixed policy for "stateless" persons.
- The only aspect that is more or less clear is that a "stateless" person will not have voting rights.
- The Centre may consider formulating a policy for the "stateless", after the final NRC.
- He or she may, however, be provided certain facilities on "humanitarian grounds".
- There have also been suggestions in Assam that they be given work permits.

#### What is the significance?

- Minority organisations in Assam see the NRC as a final recognition of their decades-long struggle to rid the state of foreign nationals.
- For them, this appears to be the beginning of a closure of an issue that has been a concern to the state since Independence.
- NRC has created a new hope for most of the pre-1971 immigrants of East Pakistan/ Bangladesh origin who have been living with the tag of a foreigner.

#### 1.10 SC Verdict on BCCI Reforms

#### Why in news?

Supreme Court has approved a new draft constitution for the Board of Control for Cricket in India (BCCI), making few alterations to Lodha Committee recommendations.

#### What are the highlights of the verdict?

- Representation Lodha panel's call for "one state, one vote" was to ensure representation for every state in the BCCI.
- It had also asked for only one association from each state to be considered a full member and have voting rights.
- The Supreme Court has rejected this recommendation.
- The court disagreed that cricket could prosper only if the BCCI was represented by every State and Union Territory.
- The court noted that territoriality as a basis of exclusion would be problematic.
- As, this would ignore cricketing culture in some state, the history and contributions by such associations to cricket's prosperity.
- Instead, the court restored full BCCI memberships to three associations in Gujarat and Maharashtra each.
- **Cooling-off period** Lodha panel report makes officer-bearers either at state or BCCI level not eligible to contest for a succeeding election.



- They would have to serve a three-year cooling period following each term.
- The BCCI objected to this stating office-bearers needed a form of continuity to apply the knowledge and experience.
- This is essential to strengthen the administration of the game as well as to strengthen the BCCI's role in the ICC.
- The Court has found a middle ground, balancing the two views.
- It allows all office-bearers to serve two consecutive terms (six years) before they serve a necessary cooling-off period.
- Nevertheless, it sticks to the maximum cumulative term of nine years.
- These include terms at both state and BCCI level, and/or a combination of both.
- Notably, all the present office-bearers have served 9 or more years.
- **Membership** SC agreed with BCCI's view in giving full membership status for Services Sports Control Board, Railways and Association of Universities.
- There is a concern that the ruling power has control over these institutional votes.
- So Lodha panel had recommended stripping them of full membership to end government influence on BCCI's functioning.
- BCCI however argued against this saying that the Railways had employed more cricketers than any other institution.
- Apex council The court upheld the panel's recommendation of an "apex council" to professionally manage the BCCI.
- The council would consist of a Chief Executive Officer, Chief Financial Officer and other officers.
- These must be recruited on a transparent and professional basis.
- It will, for the first time, have well-rounded representation, including players and women cricketers.
- The new structure will allow employed professionals to execute the decisions made by the Apex Council, making the BCCI functioning more professional.
- **Selectors** The court modified the number of selectors from the current three to five.
- It observed that a "broad-based selection committee" was required to tap the talent pool spread across the country.
- **Besides**, SC retained the Lodha panel suggestion of barring government ministers or servants from holding cricket office.

# 2. GOVERNMENT ACTS, POLICIES AND INTERVENTIONS

# 2.1 Representation of the People (Amendment) Bill, 2017 - Proxy Voting

# Why in news?

Lok Sabha recently passed the Representation of the People (Amendment) Bill, 2017, to allow NRIs to use proxies to cast votes on their behalf.

#### What does the Bill aim for?

- The Representation of the People (Amendment) Bill, 2017 proposes to amend the Registration of Electors Rules, 1960.
- It stipulates the physical presence of the overseas electors in the respective polling station.
- This is a limitation for overseas electors in exercising their franchise.
- Notably, India's diaspora population, being 16 million, is the largest in the world.
- But the registration of NRI voters has been relatively lower than this.
- The Bill thus aims at extending the facility of proxy voting to Indian voters living abroad.

# What is proxy voting?

- Voting in an Indian election can be done in three ways in person, by post or through a proxy.
- Under proxy voting, a registered elector can delegate his/her voting power to a representative.
- This was introduced in 2003 for Lok Sabha and Assemblies elections, but on a limited scale.
- Only a "classified service voter" is allowed to nominate a proxy to cast vote on his/her behalf.
- The definition includes members of the armed forces, BSF, CRPF, CISF, General Engineering Reserve Force and Border Road Organisation.



• A classified service voter can also vote by postal ballot.

#### How does proxy voting work?

- Once passed by both houses, Election Commission will amend the Conduct of Election Rules, 1961.
- This will lay down the procedure by which NRIs could nominate their proxies.
- Currently, the classified service voters' proxy has to be a registered voter in the same constituency.
- The proxy is appointed through Form 13F, signed by the voter and the appointed proxy.
- This is done before a first class magistrate or notary or the commanding officer of the service voter.
- The form has to be submitted to the returning officer of the seat before the nomination of candidates closes.
- The proxy will continue to represent the service voter for all polls until the service or the appointment is revoked.

## What are the practices elsewhere?

- **UK** A British citizen living abroad can either travel back to vote in person or vote by post.
- He/she can also nominate a proxy but this is subject to eligibility rules.
- This accounts the expatriate's period of stay abroad and the period for which the voter was registered in the UK.
- Those who were minors at the time of leaving the country can also vote.
- But this is only as long as their parent or guardian was registered to vote in the UK.
- US Expatriates can vote for federal office candidates in primary and general elections.
- This is, notably, irrespective of how long they have been living abroad.
- Once registered, an overseas Amercian voter will receive a ballot paper by email, fax, or download, depending on the US state.
- This has to be returned the same way as received.

# 2.2 Personal Laws (Amendment) Bill, 2018 - Leprosy

#### Why in news?

- The Personal Laws (Amendment) Bill, 2018 was recently introduced in the Lok Sabha.
- Also, Supreme Court has been hearing a petition to uphold the rights of people with leprosy and the repeal of discriminatory laws.

# What are the concerns?

- Over 110 Central and State laws discriminate against leprosy patients.
- Some of these colonial laws predate leprosy eradication programmes and medical advancements.
- These laws stigmatise and isolate leprosy patients and are coupled with age-old beliefs about leprosy.
- Now, modern medicine, especially multi-drug therapy, completely cures the disease.
- In independent India, the law has been an instrument for social change.
- Nevertheless, the process of removing the discrimination has been worryingly slow.
- Recent developments signals hope at removing discrimination in law and society against the leprosy-affected.
- One of them is the introduction of the Personal Laws (Amendment) Bill, 2018 in Parliament.

# What is the Personal Laws (Amendment) Bill, 2018?

- The Personal Laws (Amendment) Bill, 2018, seeks to make a start in amending the outdated statutes.
- It attempts to end the discrimination against leprosy persons in various central laws:
  - i. the Divorce Act, 1869
  - ii. the Dissolution of Muslim Marriages Act, 1939
  - iii. the Special Marriage Act, 1954
  - iv. the Hindu Marriage Act, 1955
  - v. the Hindu Adoptions and Maintenance Act, 1956
- The Bill eliminates leprosy as a ground for dissolution of marriage or divorce.



- The amendments omit the provisions which stigmatise and discriminate against leprosy-affected persons.
- The Bill is meant to provide for the integration of leprosy patients into the mainstream.
- It was introduced keeping in view the UN General Assembly Resolution of 2010.
- · It talks on elimination of discrimination against leprosy-affected persons and their family members.
- India has signed and ratified the Resolution.
- However, the Bill is only a small step in addressing the issues.

#### What are the other measures?

- The Lepers Act of 1898 was repealed only two years ago.
- Recently, the Supreme Court asked the Centre about bringing in a positive law.
- It relates to conferring rights and benefits on persons with leprosy.
- It also intends at deeming as repealed, all Acts and rules that perpetuate social stigma.
- An affirmative action law recognising their rights and benefits can serve a larger purpose.
- It may help remove misconceptions about the disease such as physical segregation of patients is necessary.
- Besides, the 256th Report of the Law Commission came up with a number of suggestions.
- It included the repeal of discriminatory legal provisions.
- It listed for abolition of personal laws and Acts on beggary.
- While governments may have to handle the legislative part, society has an even larger role to play.

# 2.3 Criminal Law (Amendment) Bill

#### Why in news?

Lok Sabha has passed the Criminal Law (Amendment) Bill, 2018.

#### What is Criminal Law (Amendment) bill?

- In April 2018, Union government promulgated the Criminal Law (Amendment) Ordinance providing for the death penalty for the rape of girls below age 12.
- Recently the Ordinance has been replaced by the Criminal Law (Amendment) Bill, 2018.
- It will amend relevant Sections of the IPC, CrPC and also POCSO Act.
- It enhances the minimum sentence for offence of rape against girl children of all three age categories (0-12, 12-16, 16-18).
- Under new law, if the victim is under 12 years of age, the culprit faces minimum sentence of 20 years, up from 10 years previously and the maximum punishment is death penalty.
- In the cases of Gang rape of child under 12, the minimum punishment is life sentence (earlier 20 years) while the maximum is death penalty.
- POSCO was gender-neutral while the new law pertains to girls specifically.
- Under this bill repeat offenders will be punished with life imprisonment or death.
- The Bill provides for time-bound investigation in cases of rape of girl children. The investigation into rape of a child must be completed within two months.
- The case is to be tried in a fast track court and any appeal against a sentence by the trial court must be disposed of within six months.
- Accused is not entitled to anticipatory bail, under new law, in offences of rape of child less than 16 years of age.

#### 2.4 Motor Vehicles (Amendment) Bill, 2017

# What are the key provisions?

- License The Bill seeks to take the license issuing process online.
- Tests for driving licences will be automated, and learner's licences will be issued online.
- Aadhaar will be mandatory for getting a driving licence and vehicle registration.
- The time limit for renewal of driving licence is increased from one month to one year before and after the expiry date.



- **Compensation** Government will provide a compensation of Rs 2 lakh or more to the victim's family for deaths in hit-and-run cases (currently Rs 25,000)
- The time limit would be 6 months for application of compensation to the Claims Tribunal with regard to road accidents.
- Fund A Motor Vehicle Accident Fund is proposed to be created.
- It will provide compulsory insurance cover to all road users in India for certain types of accidents.
- Violation In traffic violations by juveniles, the guardians or owner of the vehicle would be held responsible.
- It proposes three-year jail for parents of minors drivers causing fatal accidents
- However, they could prove the offence was committed without their knowledge or they tried to prevent it.
- The registration of the motor vehicle in question will be cancelled.
- The juvenile will be tried under the Juvenile Justice Act.
- Penalties The penalties for violations have been increased substantially from the present amounts.
- E.g. Drunk driving from Rs 2,000 to Rs 10,000, rash driving from Rs 1,000 to Rs 5,000, driving without a licence from Rs 500 to Rs 5,000
- Good Samaritans People coming forward to help accident victims will be protected from civil or criminal liability.
- It will also be optional for them to disclose their identity to the police or medical personnel.
- Accountability Contractors, consultants and civic agencies will be accountable for faulty design, construction or poor maintenance of roads leading to accidents.
- The government can recall vehicles whose components or engine do not meet the required standards.
- Manufacturers can be fined up to Rs 500 crore in case of sub-standard components or engine.
- It will be mandatory to alter vehicles to make them suitable for specially-abled people.
- **Aggregators** The Bill defines taxi aggregators as "a digital intermediary or market place for a passenger to connect with a driver for the purpose of transportation." E.g. Uber, Ola
- The 2016 Bill required State governments to issue licences to aggregators as per guidelines issued by the Central Government.
- The 2017 Bill made it optional for State governments to follow central guidelines.
- Aggregators, however, now have to be compliant with the Information Technology Act, 2000.
- **Insurance** The Bill removes the cap on liability for third-party insurance.
- The 2016 Bill had capped the maximum liability at Rs 10 lakh in case of death and Rs 5 lakh in case of grievous injury.
- Third-party offers coverage against claims of damages and losses incurred by a driver who is not the insured.

# 2.5 Positive Amendments to the Anti Corruption Law

## What is the issue?

- The government got the amendments to the Prevention of Corruption Act, 1988 passed in both the houses of the parliament.
- In this context, criminalizing bribe-giving and time-bound trial are among the measures that will have immense positive implications.

#### What are the positives in the bill?

- Bribe Giving While Bribe taking is a recognized crime, bribe giving isn't a crime under current law, which is a loophole.
- Introduction of this provision is in fulfillment of India's commitment under the UN Convention Against Corruption (UNCAC) ratified in 2011.
- Notably, it is currently difficult to penalize commercial organizations involved in corruption, when the supply side of corruption is not criminalized.
- If the current amendments are passed, the commercial organization shall be punished with fine, if any person associated with them bribes officials.
- **Gains** A public servant can currently be held guilty even if actions haven't resulted in any personal benefits but have caused undue loss to the government.
- This clause is the most used one by CBI in booking cases against officials.



- This had generated a fear psychosis and was slowing down policy decisions.
- The amendment bill proposes to drop this provision to facilitate confidence among officials to take honest decisions without fear of prosecution.
- Checks The new bill has diluted the power of investigating agencies to prosecute public servants, by mandating prior
  approval from higher ups.
- While this is a dilution, it has been deliberately introduced in favour of public servants in order to avoid undue harassment.
- Hence, no police officer can directly conduct any inquiry in future, against a serving or retired public servant regarding the
  official duties.
- Nonetheless, the approval-granting authority has to grant or reject the request within 3 months, and this can be challenged
  in court as well.
- Rightly, this provision has not been made applicable for cases involving arrest of the public servant caught red handed for taking a bribe.
- **Hearing Out** While now, officials face a plenty of cases filed by the public against them, the new bill proposes to safeguard them from this harassment.
- It seeks to commission a mandatory hearing from the accused official before proceeding to start an investigation into the alleged complaint.
- **Confiscations** Unfortunately, existing anti-corruption legislation does not have inherent provisions to seize properties of those guilty of corruption.
- In the new bill, a provision has been introduced for confiscation of money or property procured by illegal means, if the accused is pronounced guilty.

#### What are the challenges?

- **Specifics** Some believe that these changes would give officials a free hand to cheat the public through the strong protections that are being built into it for them.
- Further, criminalization of bribe-giving could result in undue victimization of the public despite the clauses for protecting those coerced to give bribes.
- **General** One of the hurdles connected with conviction of public servants is that trial of cases in a court of law takes many years for their conclusion.
- As there are a significant number of corruption cases pending for conclusion of trial, the new bill has sought daily hearing for anti-corruption cases.
- The bill also seeks to set a 4 year time limit for ending the hearing of the entire corruption case in order to convict/acquit a public servant in a short time.
- Further, as corruption has become systemic, wholesome systemic changes are needed to ensure that corruption is effectively curbed.

# 2.6 Significance of NCBC Bill

# Why in news?

The Lok Sabha unanimously passed the Bill for constitutional status to the National Commission for Backward Classes.

#### What is NCBC?

- NCBC is a body set up under the National Commission for Backward Classes Act, 1993.
- It has the power to examine complaints regarding inclusion or exclusion of groups within the list of backward classes, and advise the central government in this regard.
- The central and state governments will be required to consult with the NCBC on all major policy matters affecting the socially and educationally backward classes.

## What is NCBC bill?

- The Constitution (123rd Amendment) Bill, 2017 was passed in Lok Sabha, seeks to grant the National Commission on Backward Classes (NCBC) constitutional status.
- This at par with the National Commission for Scheduled Castes (NCSC) and the National Commission for Scheduled Tribes.
- Currently, under the Constitution the NCSC has the power to look into complaints and welfare measures with regard to Scheduled Castes, backward classes and Anglo-Indians.



• The Bill seeks to remove the power of the NCSC to examine matters related to backward classes.

## What is the significance of this bill?

- The Bill seeks to establish the NCBC under the Constitution, and provide it the authority to examine complaints and welfare measures regarding socially and educationally backward classes.
- The Constitution Amendment Bill states that the President may specify the socially and educationally backward classes in the various states and union territories.
- He may do this in consultation with the Governor of the concerned state, however a law of Parliament will be required if
  the list of backward classes is to be amended.
- The NCBC will comprise of five members appointed by the President, their tenure and conditions of service will also be decided by the President through rules.
- The duties of the NCBC will include:
  - Investigating and monitoring how safeguards provided to the backward classes under the Constitution and other laws are being implemented.
  - 2. Inquiring into specific complaints regarding violation of rights.
  - 3. Advising and making recommendations on socio-economic development of such classes.
- Under the Constitution Amendment Bill, the NCBC will have the powers of a civil court while investigating or inquiring
  into any complaints.
- These powers include Summoning people and examining them on oath, requiring production of any document or public record and receiving evidence.

#### 2.7 Issues with Indian Abortion Law

#### What is the issue?

India's abortion law must be amended to take into account the agency of women.

#### What is the need?

- Many women, when denied legal abortions, turn to unqualified providers or adopt unsafe methods of termination.
- Various estimates indicate that unsafe abortions account for 8% of maternal deaths in India.
- 15.6 million abortions took place in India in 2015 out of which about 11.5 million took place outside health facilities.

#### What is the Abortion law of India?

- Abortion has been legal in India under the Medical Termination of Pregnancy (MTP) Act, since 1971.
- According to the Act, abortion can be provided at the discretion of a medical provider under certain conditions.
- Currently, the Act allows abortion up to 20 weeks.
- When the Act was introduced, policymakers had two goals
  - 1. To control the population resulting from unintended pregnancies (which even today are to the tune of 48%)
  - 2. To reduce the increasing maternal mortality and morbidity due to illegal, unsafe abortions

#### What are the concerns?

- The Medical Termination of Pregnancy Act has limitations that pose barriers to women and girls seeking legal abortions.
- A woman's right to decide for herself, did not and still does not fall within the intent or ambit of the MTP Act.
- When it comes to foetal abnormalities and pregnancies resulting from rape, this limit of 20 weeks is proving to be a hurdle for both the woman and the provider.
- Women seeking an abortion after the legal gestation limit often have no option but to appeal to the courts for permission to terminate the pregnancy.

# What are the pending measures in this regard?

- In 2014, the Ministry of Health and Family Welfare recognised these barriers and proposed certain amendments to the Act.
- Consequently, the MTP (Amendment) Bill, 2014, was submitted, proposing some changes.
- They include –



- i. increasing the gestation limit from 20 to 24 weeks for rape survivors and other vulnerable women
- ii. removing the gestation limit in case of foetal abnormalities
- In 2017, these amendments were returned to the ministry with the mandate to strengthen the implementation of the MTP Act as it stands.
- The amendments are yet to be revised and returned to the PMO.

# 2.8 Punjab's Blasphemy Bill

#### What is the issue?

- Punjab Cabinet recently decided to amend the law to make acts of "sacrilege against the religious books" punishable with life imprisonment.
- This move is regressive, excessive, and fraught with undesirable consequences.

#### What is the context?

- The Punjab assembly had passed a bill in 2016 for protecting the "Guru Granth Sahib" (holy book of the Sikhs) against sacrilege acts.
- The Centre had then returned the Bills, saying that protecting the holy book of only one religion would make it discriminatory and anti-secular.
- Notably, prior permission of the Central or State government is needed to prosecute someone under such sections.
- Hence, currently, the same bill has been cleared with slight amendments to cover other religious books like the "Bible, Koran and Bhagvad Gita".
- The bill, if passed, will strengthen the existing 'blasphemy law' which criminalises acts that outrage religious feeling.

#### What are the problems with the bill?

- **Populism** The 2016 bill was piloted by the Shiromani Akali Dal government following allegations of desecration of the holy book.
- Back then, opposition to the Bill was then limited to the question whether holy books of other religions did not warrant the same protection.
- The bill was a clear case of pandering to religious sentiments for political populism, and there was little concern for the long term implications.
- Considering the tenets of the bill, it may also set off a needless flurry of legislation in the rest of India to pander to different groups.
- Notably, existing provisions under the "Indian Penal Code" itself is sufficiently strong to protect the sanctity of religious symbols and sentiments.
- **Disproportionate** Present Blasphemy Laws (to protect religious faith) already provide for a 3 year jail term for disrespecting religious symbols.
- But the current bill's proposal for enhancing the punishment to a "life term" is a little excessive and problematic.
- **Intention** Blasphemy laws are largely aimed at preserving public order that might get disturbed by actions that flare up religious sentiments.
- While the sanctity of the religion is indeed important, a secular state works not to preserve religion but to preserve law and individual freedoms.
- In this context, actions perpetrated with the deliberate and malicious intention of outraging religious feelings and stir passions is to be curtailed.
- Hence, while laws need to be a minimum safeguard and limited in scope, the current proposal seeks to appease religious groups disproportionately.

# 2.9 Foreign Assistance for Disaster Relief - UAE to Kerala

#### What is the issue?

- India has turned down the UAE's reported offer of Rs 700 crore as aid for flood relief in Kerala.
- It has cited the 2004 policy of not accepting aid from foreign governments as the reason, which needs a relook.

# What is the rationale for the 2004 policy?

• **Self-Reliance** - It was felt then that India could cope with the situation on her own and take help if needed.



- The idea was that India had become a large economy.
- Hence, accepting small aid moneys from countries was not in keeping with the times.
- The policy was also a symbolic signal to end India's dependence on concessional debt.
- Economy Since 1956, India had severe foreign exchange constraints.
- But 2003-04 was a different year, with strong macroeconomic fundamentals.
- India had already graduated to become a "less indebted country" in the IMF ranking.
- It had also registered a surplus in its current account in 2001-02.
- Its foreign exchange reserves had also topped \$75 billion by 2003.
- **Superpower** One of the contexts for the 2004 policy was the India's superpower dream.
- It was felt that India should demonstrate its strength to withstand and counter calamities.
- It should exhibit to the world that it could also help its neighbours.
- It was thought to strengthen India's case for a permanent seat in UN Security Council.
- These were believed to hasten the prospect of superpower status by 2020.
- Diplomacy It was felt that assistance would leave scope for interference in internal affairs.
- Also, accepting from any one country offers the scope for others as well.
- But it would be diplomatically difficult to refuse from some and accept from others.
- **Concern** There were doubts if the policy would be perceived as a rude gesture in diplomatic circles.
- Also, External Affairs Ministry was displeased with it as its explicit concurrence was not sought.
- The MEA thus had to deal with countries bilaterally, and manage the effect of an abrupt change in aid receiving policy.
- Over the years, the policy has also not made any noteworthy contributions for India to fulfil its ambitions.

# What is the 2016 NDMP in this regard?

- The 2016 National Disaster Management Plan (NDMP) provides for accepting foreign assistance in the wake of a disaster.
- Under this, the Government does not issue any appeal for foreign assistance.
- However, if the national government of another country voluntarily offers, it may accept.
- The Home Ministry is required to coordinate with the External Affairs Ministry (MEA) in this regard.
- As, MEA is primarily responsible for reviewing foreign offers of assistance and channelizing them.
- The 2016 NDMP guidelines also provides for multilateral assistance.
- Under this, India will accept an offer of assistance from UN agencies.
- But this is only if the government considers it necessary, based on various factors.
- If accepted, the Government of India will issue directions.
- The respective Ministry/State Government will then have to coordinate with the concerned UN agency.
- Any such financial assistance by UN financial institutions involving foreign exchange will require the Department of Economic Affairs' approval.

#### What is the current controversy?

- The 2016 guidelines have been mostly on paper.
- So the government has been following the policy on disaster aid decided in 2004.
- There is thus a clear mismatch between convention and written document.
- The recent aid for Kerala was also not accepted citing this "existing policy".

# Is the decision justified?

- Offers of aid from foreign governments must naturally be scrutinised for national security interests.
- Also, state governments forming their own bilateral aid and assistance would be like allowing them to conduct an
  independent foreign policy.
- But India should not be mixing up its 20th century security fears with 21st century realities of technological advancements.



- Irrespective of policies, democracies should be flexible enough to respond to emergencies.
- The intention and objective should only be the greater good of the victims.
- Sticking merely to the precedent or pride may not serve the citizens' cause.
- The decision may also have a negative impact on India's relations with the UAE.

# What is the way forward?

- Notions of self-reliance have to be reassessed in the larger context of a multilateral world.
- In the case of bilateral assistance, India needs to examine offers case by case.
- E.g. UAE's assistance comes as an obligation to help Kerala in distress, in accordance with the Islamic faith.
- As, Keralites have served their country well over the years.
- Similar is the case of Qatar, which has offered Rs. 35 crore.
- The need now for the central government is to use all assistance, Indian and foreign, to rebuild Kerala.
- It should also put an end to the 2004 precedent and bring into implementation the latest guidelines.
- India should also hold discussions with the UN and the Red Cross with a view to formulating plans for reconstruction.
- Using the latest technology and adopting such assistance would only benefit India.

# 2.10 WHO's Report on Swachh Bharat Mission

#### Why in news?

A recent report by the World Health Organization (WHO) has praised Indias's Swachh Bharat Mission.

#### What are the highlights?

- The WHO statement was based on the initial results of a WHO modelling study on the health impact of the Swachh Bharat Mission Gramin (SBM-G).
- WHO lauds India's commitment to accelerated coverage of safe sanitation services.
- It said India could avert 3 lakh deaths provided there is 100% implementation of Swachh Bharat Mission.
- This is in reference to deaths due to diarrhoeal disease and protein-energy malnutrition (PEM).
- The WHO analysed India's accelerated coverage of safe sanitation services by accumulative Disability Adjusted Life Years (DALYs).
- DALYs is the sum of the years of life lost due to premature mortality and years lost due to disability or ill-health.
- According to the calculations, if all sanitation services are used, the initiative could result in over 14 million more years of healthy life in the period measured.
- However, most of the WHO statement talks about the benefits of the sanitation programme in the future tense.

# What is the actual status of Swachh Bharat mission?

- According to official sources the household latrine coverage figure for 2018-19 stands at around 90% across the country.
- In Odisha it is nearly 60%, in Bihar 63%, in Goa 76%, in Tripura 77%, and in Jharkhand 85%.
- On the other hand, states like Andhra Pradesh, Chhattisgarh and Arunachal Pradesh have 100% coverage.
- Household sanitation coverage has increased from an estimated 2% per year before Swachh Bharat to more than 13% annually between 2016 and 2018.

# What are the positive health impacts?

- Swachh Bharat Mission led to additional health gains through changes
  - i. in personal hygiene (e.g., handwashing behaviour)
  - ii. in consumption of safe drinking water (e.g., reduced risk of faecal contamination of drinking water)
- There is evidence that improvements in drinking water supply, sanitation services and personal hygiene have positive health impacts.
- They include
  - i. improved nutritional status and its benefits
  - ii. reduced incidence of infectious diseases such as different neglected tropical diseases and acute respiratory infections
  - iii. reductions in diarrhoeal disease



#### 3. SOCIAL ISSUES

## 3.1 Plight of Internal Migrants

#### What is the issue?

- The plight of "inter-State migrant labourers" is not very different from that of refugees who lack citizenship rights.
- While the later is been widely debated, the former has slipped focus altogether.

#### What is the situation of internal migrants in India?

- Lack of citizenship is indeed a big blow to people's lives, as it deprives them of belongingness and some critical rights bestowed by the state.
- But, even with valid citizenship, a person uprooted from his domestic setting (district or state) might actually lose out many of his citizenry entitlements.
- Notably, India's 14 crore "rural-to-urban migrant workers" face a constant sense of anxiety with little control over their special or temporal existence.
- A large chunk of migrant labourer "shelters and workplaces" are deemed illegal within Indian cities and they are condemned to the margins.

#### Does state play in role in the lives of migrants?

- While the state largely appears to be a dormant player, in reality, state is actually a negative influence on their lives in most cases.
- It is proactive in allowing the absorption of cheap labour into cities, to serve the bulging demand of the urban middle class.
- Sometimes these labourers are exploited, required to work below subsistence levels, and reside in subhuman conditions.
- Further, while state's bureaucratic machinery consciously allows migrants to settle in certain zones, the same area is then
  perceived as encroachment.
- The onus of documenting the workers to provide them with public utilities lies on the state, but it consciously works to derecognise them.
- Further, it conveniently brackets them as "illegal", which in turn, results in them getting labelling them as "criminals" by law enforcement agencies.
- These actions are clearly to exclude them from the larger democratic stream in order to not dilute the funding and public goods for locals.

# What is the attitude of our city planners?

- "Smart Cities Mission" of 2015 proposed an investment allocation of Rs. 2,039 billion to convert 99 Indian cities into smart cities.
- While a mere 8% of the intended projects have been completed so far, forced eviction of slum dwellers have already been recorded in many cities.
- Interestingly, many smart city proposals identify slums as a "threat" to the city plan outlook, and totally fail to account for migrant labour in the schemes.
- All this is because, politically, inter-State migrants do not matter at all as their votes do not count in the destination city.
- Nonetheless, it is desirable for democratic governments to ensure equality, dignity, and provide minimum social security to all people within its territory.

#### 3.2 Making Waste-removal Caste-neutral

#### What is the issue?

With Swachh Bharat Abhiyan (SBA), there is also a need for making the waste-removal profession caste-neutral.

# What are the concerns?

- **Deaths** The campaign hardly addresses a reworking of the underground sewerage system.
- Many labourers have died recently while cleaning jammed manholes that open into the sewerage system.
- The disturbing fact is that these deaths have a caste pattern.

# SBA

- Swachh Bharat Abhiyan (SBA) was a nationwide initiative to clean public spaces.
- It aimed at inspiring the public to voluntarily clean public spaces as a service to the nation.
- The government is resolved to accomplish the vision of a clean India by 2019.
- The campaign initially highlighted images of celebrities "voluntarily" sweeping the streets.
- Concurrently, municipalities began to employ more contractual labourers.



- In 2017, over 300 cases of such deaths were reported mostly from particular caste groups.
- Role The campaign burdens the contractual labourer with an 'exclusive' right to cleaning public spaces.
- But it makes it a voluntary act for the 'public' to not defecate, urinate or litter in random spaces.
- There is a lack of punitive measures to urge public to follow healthy practices.
- Attitude In India, waste carries the stigma that is attached to pollution and caste.
- It is thus carried on to the process of removal ('scavenging') and the occupation ('scavenger').
- The waste remover in India is not a professional, like in the West.
- Collection In the past, municipalities erected bins in common places for the shops and households to dispose of waste.
- Under SBA, these bins were the first to be removed, as it offered door-to-door collection.
- Members from the households now bring unsegregated garbage which is collected by the workers.
- The workers collect them and it is then sent to the composting yard where workers segregate the waste.
- Manually segregating the waste at the landfill compromises their hygiene and health.
- **Caste** The door-to-door service has several darker undertones.
- Until they were banned in 1993, dry latrines were emptied through a similar door-to-door service.
- The workers blow whistle to indicate their arrival to the households.
- Not only this, it also announced the presence of a lower caste person.
- This was in order to warn caste Hindus from crossing their paths.
- In the colonial past and even now in some places, toilet locations are planned with caste notions.

#### What is the Western approach?

- **Approach** The Western model aims at removing waste from the public gaze.
- Stopping the spread of disease was the primary intention in the West.
- However, sanitation is now largely an extension of visual aesthetics as well.
- Sanitation now means more the absence of "filthiness all around us".
- The West introduced technologies to systematically remove waste.
- London The Londoners experienced the 'Great Stink' in 1858.
- The government then realised the need for a holistic sewerage plan that become part of the water infrastructure.
- It aimed at removing filth and treating waste from the river Thames in a sustainable way.
- Soon, the construction of toilets in households and shops became mandatory.

# 4. HEALTH

#### 4.1 Addressing the concerns of Envenoming

# Why in news?

World Health Assembly has adopted a resolution to accelerate and coordinate global efforts to control snakebite 'Envenoming'.

#### What are the concerns of Envenoming?

- Envenoming is a life threatening disease that follows the bite of a venomous snake.
- Between 1.8 million and 2.7 million people are bitten worldwide every year, between 81,000 and 1,38,000 of them die, and four or five times that number are disabled, according to the WHO.
- In India some 50,000 die every year, however the WHO fears this estimate may be just 10% of the actual burden.
- In 2017-18, 1.96 lakh cases of snakebites were recorded, with West Bengal, Maharashtra and Tamil Nadu reporting the biggest numbers.

# What are the issues in addressing envenoming problem?

Lack of Awarness - In India about 300-odd species of snakes are found, out of which 52 are venomous, but all their
poisons are different.



- India produces polyvalent ASV, which combines the venoms of India's four most common poisonous snake's cobra, common krait, Russell's viper, and saw-scaled viper.
- But more venom is wasted in the manufacture of such ASV, and more vials (quantity) are required to treat the patient.
- Manufacturing Issues ASV manufacture requires a series of forest department permissions.
- Horses are needed for the test, for which a large space is necessary, thus Private companies do not find all this financially feasible.
- Lack of guidelines Each manufacturer has its own protocol, which leads to the differing quality of ASV.
- Researchers find only locally produced ASVs are the most effective, since a snake's venom changes with terrain, diet and
  environment.
- There are various observations that the potency of ASV is reducing in the last few years, but India has lack of research to upgrade its ASVs.
- Untrained doctors A monovalent ASV, made from the venom of one species, can treat the bite of only that species, it is
  more efficient that Polyvalent drugs.
- But the purpose of monovalent drugs are lost in India since doctors fail to identify the right species.
- In most cases, doctors do not identify the bite mark as it is small, and the victim is attacked while asleep

# What measures needs to be taken?

- Recently Maharashtra approved the setting up of a National Venom Research Centre.
- The state also asked the Union government to aid the public sector ASV manufacturer Haffkine Institute in its work on snake species and poisons.
- Apart from this in 2009 and 2016, snake bite protocols were drafted by the Union government, such training must cover all doctors.
- India currently manufactures only polyvalent ASV, it should research in the area of monovalent drugs and produce such drugs.
- It needs to train doctors to identify snakes by their bites before switching to the production of monovalent ASVs.
- Proper guidelines needs to ensure the quality of ASVs and MBBS courses should have a separate chapter on snakebites.

#### 4.2 Significance of Deworming

# Why in news?

Ministry of Health and Family Welfare (MoHFW) conducts deworming drive twice a year.

#### What is Deworming?

- Deworming is a process to kill worms commonly tape, round and hook worm, that infest bodies of children below 18 years
  of age.
- As per the guidelines, children aged below two years are given 200 gm of Albendazole tablet, a drug to treat parasitic worm infestation, and school-going children are administered 400 mg tablets.
- The Albendazole tablet paralyses the muscles of these worms, the worm loses its grip of intestinal tract and is flushed out
  of the human body.
- A worm takes six months to mature and start sucking, therefore the exercise is carried out biannually.
- Deworming has no serious side effects, but it can cause nausea and vomiting if a child has worms.
- The medicine disrupts the worms which leads to uneasiness in the stomach.

#### Why is the significance of deworming?

- Parasitic worms and their larvae are generally found in contaminated food and water.
- In slums children walk bare feet and they frequently contract worms.
- The worm first enters the blood circulation system and its larvae land up in the larynx, from where it finally reaches the gastrointestinal tract.
- The hook, round and tapeworm grow by sucking blood from its host in this case the human body.
- Loss of blood leads to a drop in haemoglobin level and causes anaemia, thus deworming kills these worms and helps prevent anaemia.
- The National Family Health Survey-3 data suggests anaemia is widely prevalent in all age groups.



• Its prevalence is 56 per cent among adolescent girls (aged 15-19) and 70 per cent among children below five years.

## What are the other initiatives of government in this regard?

- Under the National Iron Plus Initiative Union Health Ministry is providing weekly dose of iron and folic acid tablets to children aged 1-18 years.
- This is to prevent iron deficiency and chances of anaemia.
- Various municipal schools in India conduct this drive by giving a weekly dose of 100 mg iron and 500 mg folic acid to adolescents (10-19 years), dosage varies for different age groups.

# 4.3 The Dilemma with e-cigarettes

#### What is the issue?

- There are conflicting claims about health effects of 3-cigarettes.
- Hence, Indian policy makers should tread cautiously in this regard.

# How does India's policy landscape on e-cigarettes look?

- Recently, the Delhi government stated in court that it was planning to ban e-cigarettes in its territory due to its likely health implications.
- Significantly, Karnataka and Maharashtra have already banned e-cigarettes and the "Union Health Ministry" has also taken a stand against it.
- But as combustible cigarettes are freely available throughout India, there are concerns on whether an outright ban against
  e-cigars is the right move.
- Notably, "e-cigar" is a new technology, and its long term health effects aren't known yet, but there are indications that they are better than conventional cigarettes.

#### What are the health implications of e-cigars?

- Instead of burning tobacco, e-cigars heat a liquid to generate a nicotine-containing aerosol that does not produce toxic tars.
- But this doesn't mean they are completely safe, as at high temperatures, e-cigarettes produce carcinogens such as formaldehyde.
- They also increase the odds of lung disease and myocardial infarction.
- Nonetheless, its carcinogenic and other health implications are believed to be lesser than for normal cigarettes, although long-term data isn't available.

# What is the dilemma about?

- **Positives** Some researchers argued that e-cigarettes must be viewed from a "harm minimisation" perspective as they are a better alternative.
- Given that combustible cigarettes are more noxious than electronic ones, switching from the former to the latter can help addicts to lead healthier lives.
- Negatives But others feel the need to adopt a precautionary approach as e-cigarettes is a young technology, whose long term effects aren't known.
- Further, some carcinogens in e-cigarettes have already been discovered to have a non-linear effect (even small quantities having big effects) on cancer.
- There is also the risk of e-cigarettes acting as a gateway drug for young people and surveys have indicated that e-cigars are likely to increase addictions.
- Further, due to its branding as a healthier alternative it may end up promoting the habit of smoking.

# What is the way ahead?

- Completely banning the technology, while selling normal cigarettes, could take away a promising smoking-cessation aid.
- A more pragmatic option would be to regulate e-cigarettes tightly, by creating standards for the aerosols and banning underage and public use.
- This would leave smokers with a therapeutic alternative, while protecting youngsters from a gateway drug.
- Either ways, conflicting evidence makes it a tough call for policymakers and India should tread cautiously.



# 4.4 World Bank Report on Stunting

#### Why in news?

World Bank recently released a report on the prevalence and effects of stunting.

#### What are the highlights?

- A child is stunted if the height-for-age ratio is not proportionate.
- Effects Children with stunted growth are more prone to enduring adverse outcomes later in life.
- They suffer from impaired brain development.
- This leads to lower cognitive and socio-emotional skills, and lower levels of educational attainment.
- India The World Bank analysed 140 countries for workers who were stunted as children.
- Of these, only Afghanistan (67%) and Bangladesh (73%) surpassed India's proportion (66%).
- Around 66% of the working population in India are earning 13% less.
- This is specifically because of lack of skills due to stunting in childhood.
- This is one of the highest proportions worldwide in such reductions in per capita income.
- Others The average reduction for South Asia was 10% and North America 2%.
- Middle East and North Africa do better, with a reduction of 4%.
- This is better compared to Europe and Central Asia with a reduction of 5%.
- The economic impact of stunting was not limited to Asia and Africa.
- Stunting has affected almost all continents in varying amounts.
- But Indians lost more income than people, on average, from Sub-Saharan African countries.
- Notably, countries poorer than India have handled stunting better.
- E.g. Senegal, with a per capita GDP of half as that of India's, was able to reduce stunting in its children by half over 19 years to 2012.
- Peru, too, demonstrated a remarkable decline in its childhood stunting characteristics.
- This was largely due to its nutrition, health and sanitation interventions.
- **Returns** The World Bank report calculated that the returns on a national nutrition package outweigh the costs.
- This is in reference to interventions focussed mainly on maternal and neonatal health.
- But given the time lag between childhood and joining workforce, the effects begin to show only 15 years after implementation.
- After the initial 15 years, the cost remains static and the benefits continue to increase as more of the workforce begins to benefit.
- The average rate of return predicted for the programme was 17%.
- But for India the returns were forecast at 23%.

# What is the current scenario?

- The percentage of childhood stunting in India's current working-age population does not reflect the percentage of children currently stunted.
- This is given the gap between childhood and joining the workforce.
- Notably, the current number of stunted under-five children in India has reduced drastically.
- Over 26 years to 2014, the percentage of stunted Indian under-five children has reduced from around 62% to 38%.

#### What are the causes for India's state?

- Stunting is affected by a variety of socio-economic determinants.
- More than the economic development state, it reflects the treatment of women and children.
- The related causes for stunting lie in social inequity with women's status and health, household wealth, access to services, etc.
- India clearly has inadequacies in women's well-being and efforts to reduce poverty.



- The two most influential deciding factors are women's BMI and women's education.
- These factors explained the difference in child stunting between highly sensitive and less sensitive districts.

#### What lies ahead?

- In India, Integrated Child Development Services, PDS and mid-day meal schemes address children's nutrition.
- The Swachh Bharat Abhiyan and the National Rural Water Drinking Programme address sanitation needs.
- Despite these, improving women's well-being remains a challenge for policy.
- A nutrition-specific national programme could significantly tackle stunting.
- The National Nutrition Mission (POSHAN Abhiyan) should thus be promoted to address nutritional gaps for women.
- There has to be a specific focus in the lower income brackets if stunting is to be truly eradicated.

# 5. GOVERNANCE

#### 5.1 TK Viswanathan Committee on Fair Market Conduct

#### What is the issue?

- The SEBI-appointed TK Viswanathan committee on fair market conduct recently released its report.
- Granting more powers to Securities and Exchange Board of India (SEBI) has given way to many concerns.

#### What was the committee on?

- The regulation of securities markets has evolved, since the setting up of the SEBI.
- However it is still a work in progress as mischievous practices continue to exist.
- The committee was aimed at addressing the illegal practices and ensuring fair conduct among investors.

#### What are the key recommendations?

- Malpractices The committee said Benami trading should also be deemed fraudulent if it leads to manipulation.
- Also, SEBI may consider any trading by players beyond their known 'financial resources' as fraud.
- The committee has suggested changes to existing regulations to better prosecute malpractices as these.
- It said the scope of regulations on fraud should not just cover intermediaries.
- It should also cover employees and agents of these intermediaries who often escape after indulging in fraudulent activity.
- It is also suggested that SEBI be given the power to grant immunity to whistle-blowers who help uncover illegal activities.
- Insider trading It is a practice wherein investment decisions are made by having access to otherwise non public information.
- · Among a number of recommendations on insider trading, is the creation of two separate codes of conduct.
- One would set minimum standards on dealing with insider information by listed companies.
- The other would set standards for market intermediaries and others who are handling price-sensitive information.
- Information Companies should maintain details of
  - i. immediate relatives of designated persons who might deal with sensitive information
  - ii. people with whom the designated person might share a material financial relationship or who share the same address for a year
- Such information may be maintained by the company in a searchable electronic format.
- It may also be shared with the SEBI when sought on a case-to-case basis.
- Calls Currently, SEBI has the power to only ask for call records including numbers and durations.
- The committee has recommended direct power for SEBI to tap telephones and other electronic communication devices.
- This is to check insider trading and other frauds.
- However, proper checks and balances over this power are to be ensured by necessary amendment in the relevant laws.
- Front entities Front entities are that which lent their names or trading accounts to others.
- The committee has recommended the inclusion of a new sub-section within the SEBI Act, 1992 in this regard.



 This would specifically prohibit devices, schemes or artifices employed for manipulating the books of accounts or financial statements of a listed company.

#### What are the benefits?

- A strong regulator serves as a good deterrent to fraudulent practices in the market.
- Greater executive powers can help the regulator take swifter action against offenders.
- They do not, instead, have to rely on government bodies such as the Ministry of Corporate Affairs.
- This could also free SEBI from various manifestations of political influence.
- As SEBI can better understand the complex nuances that financial market fraud entails, it may be better placed to enforce
  the law.

#### What are the contentions?

- Calls Powers such as tapping phone calls are already vested in the police and investigating agencies. E.g. CBI
- So it might be extreme and tyrannical if extended to financial regulators as well.
- This gains significance in the backdrop of the increasing importance for privacy in recent times.
- Frauds SEBI is set to be granted the power to act directly against "perpetrators of financial statements fraud".
- In essence, this means SEBI can act not only against listed entities under its extant powers.
- Rather, it could also act against those who aid or abet financial fraud, including the accountants and auditors.
- Too much of deterrence could possibly discourage and drive away the genuine investors.

#### 5.2 The "Aadhaar" Dare

#### What is the issue?

- In an attempt to demonstrate that the campaign against Aadhaar is hollow, TRAI chairman RS Sharma uploaded his Aadhaar online.
- Further, in what created an online sensation, he openly challenged critics to extract private information about him with it.

## What is the basic purpose of Aadhaar?

- Aadhaar helps one establish his/her identity through its online platform.
- Hence, the platform as such is empowering people to secure their deserved money (or services) from fraudsters who were siphoning them off before.
- Notably, wage, subsidy and pension disposals by the government have got more streamlined after being associated with Aadhaar.

#### What did Mr. Sharma give out an online dare?

- Mr. Sharma was closely associated with the Aadhaar project for long and strongly believes in the robustness of its design.
- But some have been portraying Aadhaar as a dangerous artefact, which is hindering people to share Aadhaar details even for legitimate services.
- As a vociferous campaign against Aadhaar has been built by fear mongering, he sought to counter it with his dare online foray.
- He stresses that Aadhaar does not contribute to increasing any of the other digital vulnerabilities that are already plaguing the society.

# How does Mr. Sharma account for the various leaks linked to Aadhaar?

- He states that Aadhaar is being blamed for vulnerabilities of other systems.
- Recently, a leak in the EPFO database was associated with Aadhaar merely because EPFO beneficiaries had their Aadhaar numbers linked to the data.
- What Mr. Sharma stresses that "demographic data" linked to an Aadhaar Number is not secretive, and that it is only the biometrics that is the secret key.
- In fact, one's personal biometric data is needed to gain access to his bank accounts and other secured details and not merely his Aadhaar Number.
- Aadhaar provides only authentication services and in doing so, the UIDAI does not know where it is linked to, in a
  federated data model.



- Twisting Critics have been portraying vulnerabilities of the data domains (to which Aadhaar provides service) as vulnerabilities of Aadhaar itself.
- Widespread adoption of Aadhaar has started affecting those who want to game the system for tax evasion, benami properties and other such activities.
- By creating a scare, their objective is to discourage people from sharing the Aadhaar number, which will help them avert scrutiny by the government.

#### How did the critics respond to Mr. Sharma's dare?

- Many online hawks uploaded details like "Pan Card, Bank account, Driving Licence" etc... of Mr. Sharma.
- But Mr. Sharma and UIDAI have iterated that these details were available online and could've been obtained even without Aadhaar.
- Some are said to have tried to hack Mr. Sharma's e-mail, which was thwarted by demands for OTPs that were send to the registered mobile numbers.
- One user even used UPI as a platform to deposit Rs. 1 into Mr. Sharma's account as proof that his account has been breached.
- Ironically, if someone can only deposit money on hacking an account, then many would want their accounts to be hacked.
- Mr. Sharma has stated that he is currently experiencing a little turbulence due to repeated attempts to gain access to his
  private accounts online.
- But nonetheless, he has reiterated that Aadhaar's framework has stood the test and has declared that he has won the challenge.

# 5.3 Repercussions of Petty Corruptions

#### What is the issue?

In India petty corruption such as acts of 'fixing' or 'facilitating' everyday transactions with government agencies continues to be a bane.

# What are the concerns with petty corruptions?

- Large scams, while imposing a cost on society as a whole, and occupying public imagination, do not actually touch the lives of ordinary people and businesses, especially SMEs.
- But the million acts of petty corruption is a reality that everyone in India lives with in their personal and professional lives.
- Petty corruption is as expensive to society as large scams and cannot be tolerated as small change used to grease the
  economic machine.
- For example, clearance and movement of goods, dealing with fines, on-site inspections or approvals, access to utilities, submission of documents to courts and other statutory bodies.

# How various stakeholders are affected by petty corruptions?

- Governance Petty corruption typically afflicts those government processes or approvals that are deemed operationally
  critical and urgent.
- It also helps create a very strong eco-system of vested interests that resists and even trumps any move to reform the system.
- Many of such 'fixing' entities exist in the guise of legitimate services providers such as lawyers, registered brokers for different activities, and consultancy services.
- Indudival It imposes personal cost as an individual, a small business owner, or even an employee of a large business having to negotiate this labyrinth.
- There is loss of self-respect and feeling of lack of empowerment that such acts imposes on one.
- Domestic Industry The cottage industry of fixers, agents, and consultants earn significant revenues out of petty corruption.
- For firms and individuals these show up as extra costs and fees, thus, there is a huge pushback from such quarters who want to retain the status quo.
- Foreign Investments Usually expansion plans of foreign investors depend on grapevine information from the ground.
- Any anecdotal experience will be shared by managers on the ground to their superiors is spread through the system.
- This means that firms from industrialised nations would be increasingly reluctant to do business in countries where petty
  corruption is rampant.



#### What measures needs to be taken?

- Government need to realise that large systemic reforms such as automation and IT enablement of taxation or customs processes, or making permit application online wont address micro-level corruption.
- Area specific mission mode taskforces need to be set up to analyse every micro-transaction in every process.
- Individual taskforces dedicated to customs, transport, industrial licenses or Shops and Establishments Act etc. need to be formed, drawing membership from industry practitioners, regulatory experts and bureaucracy.
- Such taskforces should develop an implementation plan that reduces the rent-seeking loop peculiar to petty corruptions.

#### 6. INDIA AND ITS NEIGHBOURHOOD

# 6.1 Imran's Foreign Policy Challenges

#### What is the issue?

- Pakistan Tehreek-e-Insaf (PTI) chairman Imran Khan sworn-in as the 22nd Prime Minister of Pakistan.
- It is essential at this juncture to look at the various roles and challenges before him.

## What are the opportunities and challenges ahead?

- Situation The new Pakistani PM Imran Khan is likely to be confronted by daunting challenges on assuming office.
- The country has a balance-of-payments crisis, the judiciary is in a hyper-activist mood, and water & climatic woes are being felt in some regions.
- The hard-won gains against a decade-long terrorist campaign have to be consolidated, which is threatening to resurge
  again.
- **Hope** Many Pakistanis have traditionally blamed an incompetent and corrupt political class for most of these chronic problems.
- Having built his politics on an anti-corruption platform, Imran has vowed a transparent and accountable administration for Pakistan.
- Further, for forex and investments, he intends to bank heavily on the Pakistani Diaspora which is already a major source of remittances.
- Despite Mr. Khan allegedly rose to power with military support, he had already sent out a conciliatory call on global policy.
- Challenges Improving ties with the U.S., Afghanistan and India, was a feat none of his predecessors has managed successfully.
- He spoke about improving relationships with the United States, pursuing dialogue with India and helping usher in peace in Afghanistan.
- While this is a positive start, overlooking the military to sustain goodwill with foreign powers (particularly India) will be a tough path ahead.
- If Pakistani new PM Imran Khan can persuade the military to enable him to better Pakistan's international ties, it would be a significant achievement.

# What is Imran's political stand on Afghanistan?

- **Personal** Mr. Khan takes pride in his Pashtun ethnic identity with familial roots in Waziristan, on the troubled border between Afghanistan and Pakistan.
- Pashtuns constitute the majority in Afghanistan and the Afghani Taliban's rank and file are largely Pashtuns.
- In this context, Imran has a long history of towing a soft line on the Taliban and their apparent struggle to resist outsider rule in Afghanistan.
- This common ethnic bonding and tacit political support for Taliban has earned Imran the notorious moniker "Taliban Khan" in the liberal press.
- **Political** Mr. Khan's "Tehreek-e-Insaf party" came to power nationally with its base in "Khyber Pakhtunkhwa Province" bordering Afghanistan.
- It is the province that suffered the most in the U.S. invasion of 2001 and the subsequent insurgency and counterinsurgency
  operations.
- Mr. Khan's rivals in the province the religious right and the secular nationalist Pashtuns will tear into him for failure in Afghanistan.



- **Diplomacy** Considering all this, Imran is likely to argue for a sustained peace process in Afghanistan, which includes the Afghani Taliban.
- As both the U.S. and Afghan administration are currently open to direct talks with Taliban, it is only likely to make it easier for Imran.
- Nonetheless, balancing the expectations of Afghani government, the Taliban and the U.S. is likely to fall on the Pakistani PM, which would be a challenge.

#### What is the situation in Indo-Pak ties?

- It is difficult for any Pakistani PM to improve ties with India as there are multiple vested interests.
- The Pak Army have the power to derail any progress in this regard.
- The Kashmir conflict remains an unsolvable case with highly polarised positions that both countries currently hold.
- Despite distrust ranging high, Pakistan's Army Gen. Bajwa had indicated that he was positively inclined to better ties with India.
- Further, he is largely been credited for the current lull in relentless firing across the "line of Control" in Kashmir.
- The back-channel negotiations between Pakistan and India that Gen. Bajwa is reported to have supported may signal a rare new detente.
- If the civilian Imran government and the powerful military are indeed on the same page as far as India is concerned, it will mark a promising start.

#### What is the context in U.S.-Pak ties?

- Mr. Khan also wants to improve Pakistan's relationship with the U.S., something the previous administrations haven't been successful with.
- But the military has resented this and even Mr. Khan's own nationalistic campaign against American policies might hinder any significant progress.
- **Economy** Pakistani foreign exchange reserves are dwindling to very low levels and it desperately needs \$10 billion to save its economy.
- Hence, Pakistan is likely to turn to the International Monetary Fund (IMF) as it is the most viable option, where the
  influence of U.S. is crucial.
- Currently, U.S. officials have stated that they won't support any direct bailout package to save Pakistan from ill thought out Chinese investments and loans.
- In any case, Mr. Khan is unlikely to embrace austerity cuts that would be mandated by the IMF for borrowing due to various economic concerns.
- **Security** U.S. and Pakistan remain at odds over how the Pakistani state deals with militants on multiple international and bilateral forums.
- Pakistan was recently placed on the gray list of the "Financial Action Task Force" (FATF) for failing to shut down UN-sanctioned terrorist.

#### How does the future look?

- Mr. Khan has never held executive office before and will quickly realize that quick fixes and transparent government aren't
  easy to realize.
- While he won't be able to keep pace with public expectations, the military, which operates in the background, suffers no such constraints.
- If Mr. Khan can make the military a partner and enabler of his foreign policy ambitions he will pull off a significant feat.
- If that succeeds, it will help establish an unprecedented era of regional peace and stability, an outcome all will be positively
  inclined to.

# 6.2 India-Pakistan Trade Ties

# Why in news?

The new Pakistan administration wants the proper trade relations between India.

#### What is the status of India-Pak trade ties?

- Pakistan's annual trade deficit, which was \$20.435 billion in 2013, has been rising steadily.
- The deficit has been driven by the rising import bill of capital goods, petroleum products, and food products, and a steep fall in exports.



- The external balance of payments position is expected to be one of the top concerns for the Pak government.
- Trade between Indo-Pak jumped nearly three-and-a-half times between 2000-01 and 2005-06 (from \$251 million to \$869 million per annum).
- But progress was slower in the decade that followed, with volumes rising a little over three times.
- In 2016-17, "new exports" accounted for only 12% of India's total exports to Pakistan.

#### What are the existing Policy bottlenecks in Indo-Pak trade?

- Most Favoured Nation Article 1 of the General Agreement on Tariffs and Trade (GATT), 1994, requires every WTO member country to accord Most Favoured Nation (MFN) status to all other member countries.
- India accorded Pakistan MFN status in 1996; a Pakistani cabinet decision of November 2, 2011 to reciprocate this, however, remains unimplemented.
- Classifying Imports In 2012, Pakistan substituted a "Positive List" of a more than 1,950 tariff lines permitted for import from India, by a "Negative List" of 1,209 lines that could not be imported.
- India announced a 30% reduction in its SAFTA Sensitive list for Non-Least Developed Countries (NLDCs), including Pakistan, allowing for peak tariff on 264 items to be cut to 5% within three years.
- Land route trade Through the Wagah Attari land route near Punjab only 137 items are allowed currently, and the roadmap to address this has remained unimplemented.
- In 2014, both nations reaffirmed their commitment to expedite normal trading relations, and to provide Non-Discriminatory Market Access (NDMA) on a reciprocal basis.
- While both governments have facilitated a degree of industry outreach in recent years, progress on the ground has been subdued.

#### What are areas which needs to be explored?

- **For Pakistan** An influential grouping of businesses in Pakistan has recently sought a moratorium on new trade agreements, and renegotiation of the trade agreement with China.
- The 100-Day Economic Agenda of the Pakistan Business Council (PBC) has urged the new administration to increase trade with immediate neighbours such as India, Iran and Afghanistan.
- Obstacles in the way of normalising India-Pakistan trade relations, including weak logistics and customs processing, visa and travel restrictions needs to be addressed.
- For India While India's electricity diplomacy with Bangladesh has broken new ground, a similar initiative with Pakistan continues to hang fire.
- Under a proposal that was actively discussed until early 2015, Pakistan wanted to hook up a portion of Lahore with the Indian side, enabling the capital of its Punjab province to draw electricity from the Indian grid.
- The idea then was to transfer 250-300 MW from India as a short-term fix for Pakistan's power crisis, and there is potential to revive it yet.

# 6.3 China's Convergence with Indo-Pak Peace

## What is the issue?

- China has been actively pursuing India's participation in its BRI project.
- In this context, if things go smoothly, the opening up of Indo-Pak cross border trade is also likely as a consequence.

#### How is the BRI influencing Indo-Pak dynamics?

- India has always seen China as an irritant in Indo-Pak relationship.
- But currently a number of factors might be at work in the north western region, to usher in a more positive "Indo-China-Pakistan" axis.
- **Context** Beijing is seeking to extend "China-Pakistan Economic Corridor" (CPEC) projects to India, in order to make it more remunerative for all.
- Significantly, CPEC is part of Chinese President Xi Jinping's ambitious and expansive "Belt and Road Initiative" (BRI).
- Other countries in the region "Afghanistan, Iran, and the Central Asian Republics" have already responded very positively to the BRI.
- **Problem** Delhi has voiced against CPEC as a matter of policy as it passes through Gilgit-Baltistan (PoK), which is a territory claimed by India.



• Further, India's long standing view that projects under BRI are economically unsustainable is another major impediment for any compromise.

#### How can these issues be addressed?

- Beijing led diplomacy to improve Indo-Pak ties may aid in addressing India's political concerns with CPEC.
- If China portrayed genuine neutrality on the Kashmir question, it could make it a lot easier for Delhi to become part of CPEC.
- The differences on economics of the BRI project can easily be overcome by negotiating terms on specific projects alone on a case by case basis.
- Further, despite strategic and historical reasons, Pakistan too has a lot to gain by admitting India into its infrastructural mesh.

#### What are the benefits for Pakistan from all this?

- Pakistan is currently undergoing a period of extreme macro-economic stress and is on the verge of seeking foreign loans to support its budgets.
- The incoming PM Imran Khan has stated that instead of borrowing international, he wants to revive the economy through indigenous means.
- Letting India export its goods to Afghanistan and Central Asia through Pakistan's territory is of the ways to boost Pakistan's economy.
- Apart from helping Pakistan earn a handsome transit fee, it will also open up more business opportunity for truckers and other industries in Pakistan.
- Pakistan had been refusing to facilitate such trade with India for long, but the current situation seems conducive for opening up.

#### What is the way ahead?

- Any such sub-regional economic integration will involve cross the Indo-Pak border (or Radcliff line) that divided the erstwhile Punjab on both sides.
- Notably, Punjab was historically at the heart of trans-regional trade routes, but with partition in 1947, it has in effect become a complete dead end.
- Over the last two decades, multiple governments had been making efforts to overcome the border to facilitate trade but will little success.
- With China emerging as a major player in the region, there is indeed an enhanced thrust towards enhancing cross border businesses.

# 6.4 Indo-Pak Gurdwara Corridor

#### Why in news?

Pakistan plans to open a corridor to Gurdwara Darbar Sahib at Kartarpur in Pakistan.

#### What is the brief history of kartarpur Gurdwara?

- The gurdwara in Kartarpur stands on the bank of the Ravi, about 120 km northeast of Lahore.
- It was here that Guru Nanak assembled a Sikh community and lived for 18 years until his death in 1539.
- The shrine is visible from the Indian side, as Pakistani authorities generally trim the elephant grass that would otherwise obstruct the view.
- Indian Sikhs gather in large numbers for darshan from the Indian side, and binoculars are installed at Gurdwara Dera Baba Nanak.

#### What is the significance of the gurdwara?

- The gurdwara was opened to pilgrims after repairs and restoration in 1999, and Sikh jathas have been visiting the shrine regularly ever since.
- There are no restrictions on visiting Gurdwara Kartarpur Sahib once a pilgrim has entered Pakistan on a valid visa.
- Sikh jathas from India travel to Pakistan on four occasions every year for Baisakhi, the martyrdom day of Guru Arjan Dev, the death anniversary of Maharaja Ranjit Singh, and the birthday of Guru Nanak Dev.
- These Indian pilgrims are given access to all gurdwaras in Pakistan.

#### What is the plan on Gurdwara corridor?

• There have long been demands from pilgrims and political leaders to build a "corridor" flanked by barbed wire to allow pilgrims to cross over into Pakistan to visit the Kartarpur Sahib shrine, and return the same day.



- A bridge will need to be constructed over the Ravi, and there shall be no need for passports or visas.
- Most recently, the demand was placed before a Parliamentary Standing Committee that visited Dera Baba Nanak last year.
- By which Pakistan plans to open a gurdwara corridor in Narowal district on the 550th birth anniversary of Guru Nanak next year.
- The "corridor" would bring Pak infrastructure right up to the Indian border.

#### What are the concerns with the plan?

- Over the past year, gurdwaras in Pakistan have been used for a pro-Khalistan campaign.
- Earlier this year, a gurdwara displayed posters and distributed pamphlets for the so-called "Sikh Referendum 2020", and Pakistan denied permission to the Indian envoy and diplomats to visit it.
- Pakistan's intent also remains suspect, and Indian officials are wary of the corridor being misused by both state and non-state actors in that country



# 7.1 India in US's STA-1 List - Import of Dual-use Tech

#### Why in news?

- After 11/2 years of negotiations, the US has eased controls on high-technology dual-use exports to India.
- The US has granted India exemption under the Strategic Trade Authorisation-1 list.

#### How has India-US defence ties evolved?

- India signed the civil nuclear deal with the United States in 2008.
- A key objective was to gain access to high technology.
- Notably, India had been denied access, especially from the 1970s through the 90s.
- Towards the end of Obama's presidentship, the US recognised India as a "Major Defence Partner".
- It committed itself to sharing technology to the same level as its closest allies and partners.
- It also agreed to collaboration for defence co-production and co-development.

#### Why is the delay then?

- The US either has military alliances such as the NATO or bilateral defence treaties with other countries.
- Hence, the status of Major Defence Partner is unique to India.
- So Indian and American negotiators had to draw up the framework of what the status would entail.
- Given this, the export of defence and dual-use technology by the US is mostly a "political determination".
- This is driven by two factors namely US national security and the recipient's regional stability.
- <u>Dual-use</u> exports refer to an item or technology that can be put to <u>both military and civilian use</u>.

## What is the recent move?

- India was in STA-2 list (Strategic Trade Authorisation-2), along with 7 other countries.
- These include Albania, Hong Kong, Israel, Malta, Singapore, South Africa, and Taiwan.
- India has now been elevated to the STA-1 list of countries.

# What is Strategic Trade Authorisation?

- In 2009, Obama announced a comprehensive review of the US export control system.
- As part of this came the concept of Strategic Trade Authorisation (STA).
- This is a move towards a licence-free or license exemption regime.





- Accordingly, two lists were created namely STA-1 and STA-2.
- STA-1 and STA-2 established a hierarchy among those the US was willing to certify as "good countries".
- STA-1 STA-1 countries are America's most trusted allies.
- The STA-1 list has 36 countries including NATO allies and bilateral treaty allies like Japan, South Korea, and Australia.
- The US considers the non-proliferation controls of these countries the best in the world.
- These are also among those that are part of the four multilateral export control regimes:
  - i. the Nuclear Suppliers' Group (NSG)
  - ii. Missile Technology Control Regime (MTCR)
  - iii. the Australia Group
  - iv. the Wassenaar Arrangement
- STA-1 countries have <u>licence-free access to almost 90% of dual-use technology.</u>
- They are also eligible to import items for reasons of national security, chemical or biological weapons, etc.
- This is irrespective of whether the technology or item impacts regional stability or American national security.
- STA-2 Countries in the STA-2 list enjoy some form of licensing exemption.
- But they cannot access dual-use items/technology that may impact regional stability, or contribute to nuclear non-proliferation, etc.
- Others A vast majority of countries remain outside both STA-1 and STA-2.
- They cannot access high technology from the US without specific licences.
- They have to apply for a licence for every item on the Commerce Control List (of dual-use items).

#### What is the significance?

- China, Pakistan, and Russia are on neither list.
- Albania is a NATO member, but is still in STA, and Israel, a major US ally, is not in STA-1.
- Given these, India joining an elite group of allies of the US is a significant move.
- India is now part of STA-1, despite not being member of all four multilateral export control regimes.
- This is thus another testament to India's non-proliferation credentials.
- India can now access 90% of defence technology and equipment for dual-use supplied by US government and its defence industry.
- It is expected to lead to greater high-technology trade and commerce.
- For Indian high-tech industry, this could open up doors for both sales and manufacturing in India.
- Third countries can also set up manufacturing units, requiring import of dual-use equipment from the US, without the license process.

# 7.2 India-Maldives - Dispute with Elections

#### What is the issue?

- Maldives Foreign Secretary has summoned Indian High Commissioner to Maldives and conveyed Male's "displeasure".
- It comes as the latest sign of a lack of trust that has developed between India and Maldives over the last few years.

# What is the recent happening?

- The reason for expression of dissatisfaction was a tweet by BJP's Rajya Sabha MP Subramanian Swamy.
- He said India should invade Maldives if rigging of election takes place.
- The tweet included a link to a Maldivian news report.
- It related to the meeting between him and exiled former Maldives President Mohamed Nasheed.
- India's Ministry of External Affairs has clarified that it was his personal opinion.
- The Ministry also made it clear that it did not reflect Indian government's views.



#### Why was India-Maldives relationship strained?

- Suspicion on India's role has intensified after India expressed concern over Maldives elections.
- Maldives announced of elections without allowing democratic institutions.
- The Parliament and the judiciary were kept away from working in a free and transparent manner.
- Relations are soured, especially since President Yameen declared emergency for 45 days despite Delhi's call for restraint.
- Notably, the exiled President Nasheed had sought India's military intervention to release dissidents in prison.
- He called on for India to send an envoy, backed by its military, to free the judges and political detainees.
- Democracy The Maldivian election is due in September, 2018.
- India has constantly urged Maldives to restore democracy.
- It has also demanded a "credible restoration" of political process and the rule of law before the elections are conducted.
- Given this, Swamy's tweet is being viewed in Maldives as an indication of Indian strategy.

#### Why is India concerned?

- India believes it is a "responsible" power in the region.
- It also urges major powers in the world to follow "rules-based order".
- So India would not want to play an interventionist role in Maldives elections.
- But like the western community, its priority is restoration of full-fledged democracy.
- However, for India, more than this, the geopolitical stakes in the island rank high.
- Notably, Maldives has emerged as a spot of geopolitical tussle between India and China.
- It has been carefully using its newfound proximity to China to make India wary.
- China is expanding its footprint in Maldives through the Belt and Road Initiative.
- It is also involved in building massive infrastructure in and around Malé.
- India also faces an economic challenge, with Maldives signing a Free Trade agreement with China.

# 8. INETRNATIONAL ISSUES

# 8.1 Responding to Yemen Civil War

#### What is the issue?

- A recent attack on a bus in a crowded market in southern Yemen has killed at least 45 people, most of them children.
- The rising toll on civilian lives calls for serious measures to address the Yemen civil war.

# What is going on in Yemen?

- The Yemeni Civil War is an ongoing conflict that began in 2015.
- It is the tussle between two factions claiming to constitute the Yemeni government.
- One is Yemen's Shia Houthi rebels, loyal to the former President.
- They are in clashes with forces loyal to the current government.
- The Houthi forces captured huge swathes of territory, significantly the Yemen capital Sana'a.
- Al-Qaeda in the Arabian Peninsula (AQAP) and the Islamic State of Iraq and the Levant (ISIL) are also involved in the conflict.
- Saudi Arabia led military intervention in Yemen began over 3 years ago.
- A coalition led by Saudi Arabia launched military operations by using airstrikes.
- This is to restore the Yemeni government which is overthrown by Houthi.
- The Saudi-led coalition is backed by the U.S.

# Yemen: Who controls what





## What are the implications?

- There is absence of a functional government in the country and the rebels are fighting the Saudi invasion.
- The attacks have targeted public infrastructure, killed thousands of civilians, and displaced many more.
- The recent attack comes in the line of atrocities as part of the Saudi's military intervention.
- Ever since the air strikes, the civilian toll had been particularly rising.
- UN reports that from March 2015 to March 2017, around 16,000 people have been killed in Yemen, including 10,000 civilians.
- Saudi Arabia's use of excessive force has plunged Yemen among the poorest in West Asia.
- The military intervention had even led to a blockade, affecting food and aid supplies.
- More than eight million people are threatened by acute hunger.
- The health-care system has collapsed and people have been cut off from regular access to clean water.
- In recent years, the country has had an unprecedented cholera outbreak that killed over 2,000 people.

#### What is Saudi's response?

- The United Nations has called it the world's most severe humanitarian crisis.
- But Saudi Arabia has paid little attention to growing international criticism.
- Worryingly, it has not come under any serious international pressure to halt its catastrophic campaign.
- It even said the recent bus attack was "a legitimate military action".
- It only accused the rebels of using children as human shields.
- The Saudis say the Houthi rebels are backed by Iran, its regional rival.
- It also claims that its campaign has been on behalf of the internationally recognised government of Yemen.
- But ironically, Yemeni President Abdrabbuh Mansour Hadi is nowhere to be seen.
- He is reported to be under house arrest in Riyadh, the Saudi capital.

#### 8.2 Greece's Economic Bailout

#### What is the issue?

- Greece recently celebrated its exit from bailout plans that commenced in 2010.
- Nonetheless, some imminent risks persist, which Greece needs to handle.

## What is the context of Greece's Bailout?

- Recently, Greek PM Alexis announced the end of Greece's third and final of the multiple bailouts since 2010, that helped
  the country avoid a financial collapse.
- During the 8 year period since 2010, Greece borrowed over \$330 billion from multiple lenders IMF, European Commission and European Central Bank.
- In return, Greece undertook structural reforms, submitting itself to a controversial and painful austerity programme.
- Notably, during that phase, Greek economy shrunk by a quarter, unemployment was at 28%, and government spending was slashed heavily.
- Further, salaries and pensions of employees were also cut, and hundreds of thousands of Greeks emigrated and a third of the country fell into poverty.

## What are the other aspects that haunt Greece?

- While Greece has sailed through the bailouts and is looking optimistically towards the future, the path ahead is far from clear.
- Greece owes a staggering 180% of GDP in debt and also, and has also agreed for stringent budgeting conditions to its lenders for getting bailed out.
- Notably, Greece will now need to maintain a 3.5% primary surplus (a budget surplus prior to interest payments) until 2022 and then around 2% until 2060.
- IMF has warned that such budget surpluses are rare and is especially challenging for a country with an ageing population.



- Further, with the country just emerging out after a decade of economic strife, maintaining such high budgetary surpluses might impact its growth potential.
- This in turn might affect Greece's ability pay off its debt.

#### What are the pending reforms?

- Many reforms were taken up during the bailout period, but a lot else remains to be done like greater flexibility in the labour market.
- Simplified licensing processes for companies and banking reforms to reduce non-performing assets (NPA) on bank's balance sheets are other areas.
- Notably, almost half of all outstanding loans of banks are now NPAs.
- Further, the existing tax base needs to be reorganised to ensure that the bulk of the burden doesn't fall on the middle classes as it now does.

#### How does the future look?

- Greece's Euro zone creditors agreed in June to a softening of debt repayment terms, including extended maturity periods.
- Delayed interest payments and buffer funds to stabilise and ease the country's re-entry into financial markets are also being mulled over.
- Despite all this, the IMF has cautioned that Greece is at risk of getting stuck in a debt trap with onerous surplus conditions having to be maintained.
- These conditions imply restraints on government spending programmes that could, for instance, be used to stimulate growth.
- The country's creditors need to consider reducing the mountain of debt, so Greece stands a solid chance of emerging out completely from its downfall.

## G.S PAPER III

# 9. ECONOMY

## 9.1 Repo Rate Hike

## Why in news?

The monetary policy committee (MPC) of the RBI has decided to increase the repo rate by 25 basis points.

## What are the driving factors?

- Inflation Fear of rising inflation rates has been a major factor for raising the policy rates.
- According to the RBI, inflation outlook is likely to be shaped by several factors:
  - The foremost is the government's decision to increase the minimum support price (MSP) for kharif crops.
    - MSP hike may have a direct impact on food inflation and eventually on headline inflation.

## Repo Rate

- Repurchase rate or the repo rate is the rate at which the RBI lends money to commercial banks.
- This is availed by the banks in the event of any shortfall of funds.
- Reverse repo is the rate at which the RBI borrows money from commercial banks within the country.
- RBI has now increased the repo rate by 25 basis points to 6.5% in the recent MPC meet.
- The Reverse repo is adjusted to 6.25 per cent.
- 2. The gradual impact of HRA (house rent allowance) revision by state governments could push inflation further up.
- 3. There is a continuing volatility in <u>crude oil prices</u> and is also vulnerable to geopolitical tensions.
  - The resultant supply disruptions is one of the main risks to the inflation outlook.
- 4. Rainfall has so far been 6% below the long-period average and deficient over a wider area than last year.
  - This has resulted in a drop in the total sown area under kharif.
  - Regional imbalances in rainfall could pose risks to paddy output and eventually reflect in CPI inflation.
- 5. The recent round of the <u>RBI's survey of households</u> also reported a rising inflationary trend.
- 6. Moreover, RBI's inflation projection stands at 5% in the first quarter of 2019-20.
  - It has projected inflation at 4.6% in Q2 and 4.8% in the second half of the financial year 2018-19, with risks evenly balanced.
  - So the overall inflation trend demands that India opt for a tight policy (higher rates).
- Currency The recent global trade war has resulted in competitive currency devaluation.



- In the event of a currency war, the domestic currency has to give way for depreciation pressure of the region.
- But depreciation is likely to contribute to the vulnerability of the economy. Click here to know more
- Thus, avoiding such risks is essential for ensuring macroeconomic stability.
- It is also crucial for maximising the chances of a growth profile of 7 to 7.5% in India.
- A rate hike by the central bank thus attempts to strengthen the currency and avoid getting affected by the currency war.
- Recovery The MPC was for long wary of an interest rate hike due to the impact it could have on growth prospects.
- However, there was an increased output of the eight core industries in the recent period.
- This suggested that the economic recovery was back on track.
- It was thus convincing for MPC to now focus on containing headline inflation.
- Given all these, the rate hike seems to be a right measure at the right time to ensure growth as well as avoid risks.

## Why a neutral stance?

- Given the projected inflationary risks, there were widespread demands for higher policy rates.
- But the RBI has maintained fairly a neutral policy stance.
- This means that RBI has made only a marginal increase which is proportionately lesser to the inflation projections.
- One of the reasons is that the risks that are cited as the factors for the rate hike are not well established.
- Primarily, the CPI inflation risks are only a projection, though informed, with a fair bit of uncertainty.
- Hence a neutral stance would help accommodate the upcoming domestic and external uncertainties.
- This could be in relation with the
  - i. impact of government's policies
  - ii. oil price direction
  - iii. trade disputes and impact on global growth
  - iv. US rate trajectory
- So according to RBI, a neutral stance would keep the policy options open for any future economic scenario.

## 9.2 Back Series GDP Data

## Why in news?

- The report on back series GDP data by an expert committee set up by National Statistical Commission (NSC) was released recently.
- It has led to debates on the validity of the figures, and the MoSPI has termed the estimates 'unofficial'.

## What is the report on?

- Back series calculations are done to link a new series of national accounts with an old series.
- This gives a better comparison of growth over the years.
- The NSC had constituted a Committee on Real Sector Statistics under the Chairmanship of SudiptoMundle in 2017.
- The objective was improvement and modernisation of the real sector database.
- The committee has worked out a back series for economic growth from 1994-95.

# What is the complication?

- The report compared growth rates between old series (2004-05) and new series based on 2011-12 prices.
- E.g. As per the old series (2004-05), the expansion in the GDP at constant prices was 9.57% during 2006-07.
- As per the new series (2011-12), the growth number stands revised at 10.08%.
- The committee has thus adjusted the GDP figures from 2005-06 to 2014-15.
- This was based on the new base period adopted in 2015 (from 2004-05 to 2011-12).
- Notably, the series was for the new form of calculation of gross domestic product (GDP) and gross value added (GVA).
- GVA gives a picture of the state of economic activity from the producers' side or supply side.



- On the other hand, GDP gives the picture from the consumers' side or demand perspective.
- The back series calculation has been complicated because of the change in methodology.
- As, some of the data used under the new methodology is not available for earlier years.
- These recommendations of the NSC Committee will be examined by MoSPI and other experts.
- The appropriate methodology to be adopted for generating the back series estimates will then be decided.
- The data would be released officially later by the MoSPI.

## What are the highlights?

- The GDP growth, calculated at market prices, touched double digits twice in 2007-08 and in 2010-11.
- The overall trend follows a spurt in growth during the boom of the mid-2000s.
- It is followed by a sharp deceleration in 2008-09, the year of the global financial crisis.
- GDP growth at factor cost went down from 9.3% in 2007-08 to 6.7% in the crisis year.
- · However, there was a quick recovery, with unprecedented increase in public spending and subsidies in that year.
- The stimulus helped the economy reach boom-level heights in the first years of the second UPA government.
- But a combination of over-extension, high oil prices and administrative paralysis following the anti-corruption movement
  caused a swift fall.
- The country went down to 5.4% growth in 2012-13 but recovery then began in 2013-14.
- It was benefitted from the current government's cautious approach to macroeconomic stability.
- Also, rapidly improving global growth and a sharp fall in oil prices helped.

## What does it imply?

- The broad structural trends in the Indian economy have not been changed by these figures.
- The average growth rate under the current NDA does not reach the levels achieved under either the first or second terms of the UPA.
- The back series reveals again that much of the expansion in the 2000s was driven by government action.
- This is the period when GDP growth is higher than GVA growth.
- (Both measures need not match because of the difference in treatment of net taxes)
- This means that subsidies are increasing more than indirect taxes.
- Worryingly, there was no major upward momentum since the broad recovery that began in 2012-13.
- This is despite the fact that global growth has largely recovered, in the past few quarters in particular.

#### How does the future look?

- The macroeconomic stability must be examined more closely as recent gains are now at risk.
- At \$18 billion, the trade deficit was at a 62-month high in July, 2018.
- It is argued that the full-year current account deficit will be at least 2.8% of GDP.
- This is riskier given the fact that global capital is turning unfavourable for emerging markets.
- The government will thus have to examine ways to reach the heights of GDP growth scaled by its predecessor.
- This should, however, be done without further destabilisation of the macro-economy.

## 9.3 Understanding Back Series GDP Data

## What is the issue?

- An expert committee set up by National Statistical Commission (NSC) released recently the report on <u>back series GDP</u> <u>data</u>.
- In this context, it is essential to understand certain aspects associated with the report and the calculations.

# What was the 2015 shift?

- In 2015, the government moved to a new base year of 2011-12 from the earlier 2004-05 for national income accounting.
- The base year of national accounts had been revised earlier in 2010.



- In the new series, the Central Statistics Office (CSO) did away with Gross Domestic Product (GDP) at factor cost.
- It adopted the international practice of valuing industry-wise estimates as gross value added (GVA) at basic prices.

#### What was its effect?

- With the new base year, the growth rate of the economy for 2013-14 was estimated at 6.9%.
- But notably, it was 4.7% on the 2004-05 base.
- Similarly, the growth rate for 2012-13 was revised upwards to 5.1% from 4.5%.
- Growth of the manufacturing sector also became higher in the new series.

# What was the resultant challenge?

- MCA-21 It is an e-governance initiative of the Ministry of Company Affairs (MCA) that was launched in 2006.
- It allows firms to electronically file their financial results and advance filing of corporate accounts to calculate national
  accounts.
- The CSO, as usual, used the establishment-based datasets.
- These are Index of Industrial Production (IIP) and Annual Survey of Industries (ASI).
- But apart from this, it started to use the enterprise-level corporate database of MCA-21.
- **Data** With the above change, for years preceding 2011-12, the CSO faced issues for evaluating GDP with the new base year.
- This was due to the lack of availability of the MCA-21 database.
- Hence the back series calculation proved to be a "major statistical challenge".

#### What does the GDP, GVA difference imply?

- As per the new methodology, CSO calculates GDP by adding product taxes to the GVA at basic prices, and removing subsidies.
- [GDP = GVA at basic prices + Product taxes subsidies on products]
- GDP, which incorporates indirect tax collections net of subsidies, should normally be higher than GVA.
- But if net indirect tax collections grow slower than subsidies, GVA could be higher than GDP.
- The new series shows that on at least 12 occasions out of 18 until 2011-12, GVA was higher than GDP.
- This is possibly because fertiliser subsidy was scaled up significantly from 2005-06 following poor agricultural growth.

# 9.4 Fall of Rupee &Turkey's Currency Crisis

## Why in news?

The value of Turkey's currency, lira, has nosedived since January and has lost more than 34% of its value against the dollar.

## What caused this?

- Construction Boom The Turkish economy has been in slow-motion decline for a while, with the lira sliding steadily downhill since 2016.
- A construction boom was happening and it reached its height in 2013 and 2014, as Turkish banks issued low-interest loans.
- This construction frenzy has been at the heart of Turkey's economy, accounting for up to 20% of the country's GDP growth in recent years.
- But this was not accompanied by having enough foreign capital.
- So property developers funded this construction frenzy with cheap loans in foreign currencies. (In a parallel to the 2008 financial crash, the boom was funded by low-interest loans and ballooning debt.)
- Turkey is also heavily reliant on imports for construction materials.
- Much of the properties were built with the expectation that it would be bought by wealthy investors from Gulf countries.
- But the demand from the Gulf failed to rise to the level hoped.
- This lack of demand, alongside rising costs for iron and steel, has caused many projects to stall.
- This was further complexed by poor regulation of this industry.
- These factors affected the exchange rate of lira heavily.



- **Foreign Relations** The present crash was triggered by a spat with the US government over Turkey's ongoing imprisonment of the American pastor Andrew Brunson, who is accused of involvement with a 2016 coup attempt.
- Lira experienced a further blow when Trump Administration said doubled the tariffs on Turkish steel and aluminium.
- Central Bank In many nations, the central bank is independent of government. This means it can keep control of
  inflation by raising them when necessary.
- But in Turkey, Mr Erdogan has made sure he controls the reins.

#### What are the consequences?

- To repay loans in dollars and euros, as the weakened lira means there is now more to pay back.
- Many middle class homebuyers who paid for new apartments upfront are also affected as these apartments are now on permanent hold because the companies can't afford to build them.
- Only upside to this is that the tourism industry has been flourishing due to the fall of lira.

## How did this affect Rupee?

- This turmoil has impacted many emerging markets due to deteriorating emerging-market sentiment among investors.
- Rupee faced a huge blow as it was already being affected by lack of FII inflows and growing oil prices.
- Hence the rupee plunged to hit a record low of 70.08 a dollar.
- Central bank intervened to slow the pace of fall but it is unlikely that there could significant intervention as factors
  impacting the currency are coming from external sources.
- Experts feel that the fall is not so dramatic and so not a time to panic.
- Foreign investors investing in government bonds or fixed income may feel some impact due to this.
- But the fall provides a big opportunity for exports especially at a time when trade wars are happening.

## 9.5 Dispute Settlement in WTO

## What is the issue?

- The World Trade Organisation is now amidst a crisis for ensuring a legitimate dispute settlement mechanism.
- The changes in the global trade regime and the multilateral institutions necessitate a greater role for the developing world.

#### Why a trade organisation?

- The new financial trade order with the coming of Bretton Woods institutions (World Bank and IMF) demanded a trade organisation at the international level.
- It became necessary for the regulation of the international monetary system.
- It was also needed to establish multilateral rules for the settlement of trade disputes.
- Adherence to the rules was expected to serve as an important domestic incentive for governments.
- It would allow them to resist protectionist demands and provide for greater legal certainty.
- The World Trade Organisation (WTO) was created primarily to address these demands.

#### How has the US's role been?

- The US's push for the creation of WTO was mainly to pursue its own commercial interests.
- The U.S. has never truly embraced the idea of a multilateral system in which its leadership could be contested.
- Evidently the US is isolating itself from NAFTA, TPP, NATO and UNESCO in the recent times.
- In the trade negotiations too, the U.S. put forward excessive demands that countries are unprepared to meet.
- So the current crisis with the WTO dispute settlement system largely follows this unequal power formula.

#### What is the crisis with WTO?

- The nature of the trade disputes is now increasingly getting hypertechnical.
- Despite this, the WTO currently faces a trade dispute settlement crisis.
- The U.S. has systematically blocked the appointment of new Appellate Body members (judges).
- This has impeded the work of the WTO appeal mechanism.
- It is under great stress with only four working members out of seven normally serving office.



- If no appointment is made, the mechanism would be destroyed by December 2019.
- It would be left with only one remaining member to tackle a massive number of disputes.
- But the Appellate Body requires a core of three members to decide a dispute.

## What are the other concerns?

- It is to be noted that the WTO dispute settlement mechanism is not a world trade court.
- So logically, the process remains political and diplomatic.
- WTO members are thus concerned over the politicisation of the Appellate Body appointment and reappointment process.
- There is also a concern with the quasi-attribution of permanent Appellate Body seats to the U.S. and the European Union (EU).
- Besides, there is concern over the possibility of China finding its way to have a permanent seat.
- **Cases** Some Appellate Body members continue to hear cases which have been assigned to them during their tenure.
- The U.S. has persistently attacked this practice.
- · However, the blame lies on the U.S. itself, for delay in filling up of vacancies and reappointment of members.
- This is indicative of the fact that the US is deliberately pushing the WTO legal mechanism for deterioration.

## How is China's prospect?

- Despite limitations ensured by US and EU, China has largely benefited from the rules-based WTO system.
- It might well be the new WTO leader in the coming future.
- China's growing assertiveness, in fact, may be the reason for the U.S.'s hard measures.
- Its emerging power and the impact of its commercial domination on other economies are evident.
- But how far will China's legitimacy be, among other trading members, remains largely uncertain.

## 9.6 Resolving Power Sector NPAs

## Why in news?

The Allahabad High Court hears petition by power companies against RBI's February 12 circular.

# What was the circular on?

- It requires banks to finalise a resolution plan in case of a default on large accounts of Rs 2,000 crore and above within 180 days.
- Failing this would result in insolvency proceedings being invoked against the defaulter.
- This would be as per the Insolvency and Bankruptcy Code (IBC) provisions.

## What is the ongoing case?

- By RBI's circular, the unresolved accounts would undergo IBC process by the end of August, 2018.
- However, the power sector producers sought relief from the court.
- Power sector is one of the most financially stressed ones.
- It has potential non-performing assets (NPAs) of Rs 2.6 trillion.
- Hence, the Centre called for regulatory relief for the power sector.
- It also sought an extension of the deadline for the sector.
- The issue has thus led to a stand-off between the Central government and the RBI.

# What are the centre's views?

• There is evidently lack of structural reforms in the power sector.

## WTO Appellate Body

- The Appellate Body of the WTO was established in 1995 with its seat in Geneva, Switzerland.
- It is a standing body of seven persons.
- It hears appeals from reports issued by panels in disputes brought by WTO Members.
- The Appellate Body can uphold, modify or reverse the legal findings and conclusions of a panel.
- The Appellate Body Reports, once adopted by the Dispute Settlement Body (DSB), must be accepted by the parties to the dispute.



- So there is a good chance that power sector assets may not attract reasonable bids.
- Hence, strict adherence to the IBC for power sector can force banks to accept deep haircuts.
- Moreover, power sector has some issues that are unlikely to disappear in a short time.
- These include low power demand, lack of reliable coal supply, etc.
- Given this, the existing power capacity will also be destroyed if liquidation happens.
- On the other hand, recovery rates in the IBC have hovered just around 25%.
- So liquidation will not be desirable in the power sector either for the promoters or the government.

#### What are the alternatives?

- The government as well as other related agencies have suggested various ways to deal with power sector NPAs.
- The government has come up with the <u>Sashakt scheme</u> which is likely to bring relief to banks.
- Banks can get rid of the NPAs from their books quickly while hoping for better recovery rates in the future.
- State Bank of India and Power Finance Corporation, with the highest exposure to the power sector, have suggested the Samadhan scheme.
- The Rural Electrification Corporation has suggested the *Pariwartan scheme*.

#### What is RBI's stance?

- The RBI is not convinced with the proposed alternatives.
- It relies on the two key promises that IBC holds when it comes to NPAs resolution.
- One, IBC provides the framework for getting the best possible price of assets.
- Secondly, its application ensures a speedy resolution of assets that would have been otherwise stuck in litigation for decades.
- Given these, RBI asserts that nothing should be done to dilute the IBC process.
- So the central bank says that the law should be applied equally to all.
- Accepting exception for the power sector would invite more such requests.
- This is especially true, given the rising mountain of NPAs across different sectors.

## Samadhan Scheme

- Samadhanis the Scheme of Asset Management and Debt Change Structure.
- Under this, the bankers' consortium shortlisted 11 power plants with an overall capacity of over 12 GW, which are either complete or are nearing completion.
- The idea is to carry out an assessment of what would be sustainable debt of these assets.
- The remaining debt which is unsustainable would be converted into equity to be held by the banks.

## **Pariwartan Scheme**

- 'Pariwartan' refers to 'Power Asset Revival through Warehousing and Rehabilitation'.
- This is a Central Government's scheme to protect the value of stressed power projects and prevent their distress sale under the IBC.
- The State-run Rural Electrification Corporation (REC) has identified projects with a total debt of around Rs 1.8 trillion.
- These stressed projects will be housed under an asset management and rehabilitation company (AMRC) that will be owned by financial institutions.
- The promoter's equity will be reduced to facilitate a transfer of management control and the lenders will convert their debt into equity.

# 9.7 Highlights of GST Council Meet

# What are the proposals?

- MSMEs A six-member panel of ministers would be set up to look into the issues in the MSME sector.
- It will be headed by the Minister of State (MoS) for Finance.



- Taxation The Law Committee will take decisions related to taxation law.
- On the other hand, the Fitment Committee will take decisions related to taxation rates.
- Digital Payments It was proposed to incentivise digital payments through Rupay cards, BHIM app and UPI system on trial basis.
- A 20% cashback will be available on digital payments through these mediums.

#### **Fitment Committee**

- The rate fitment committee comprises of tax officials of the central and state governments.
- Its task is to evolve a principle and an appropriate methodology to determine rates for various supplies under GST.
- Customers would get cashback of 20% of the total GST amount, subject to a maximum limit of Rs 100.
- This is to promote cashless transactions in rural and semi-urban areas and help small firms.
- The GSTN and the National Payments Corporation of India will soon develop a system for the above.
- States will volunteer to run a pilot on these lines.
- A final decision will be taken after a detailed system-wide evaluation of such incentives.

## What is the significance?

- There were many implementation concerns in the MSME sector ever since the roll out of GST.
- Firms with an annual turnover of less than Rs. 5 crore constitute 93% of the registered taxpayers under the GST.
- GST has notably been a major hindrance to the smooth functioning of this large proportion of small firms.
- The proposed ministerial panel may recommend further easing of compliance for micro firms.
- It may also enhance the Rs. 50,000 threshold for mandatory use of e-way bills.
- It is thus expected to facilitate the growth of MSME sector in many ways.

## 9.8 CBDT's Decision on Tax Appeals

## Why in news?

Central Board of Direct Taxes (CBDT) has reportedly announced a new scheme aimed at a speedier disposal of tax appeals.

## What is the status of Tax appeals in India?

- Every tax appeal before the CBDT comes to the First Appellate Forum (FAF) before cases move on to the Income Tax Appellate Tribunals, the high courts and finally the Supreme Court of India.
- The number of appeals before the FAF has been rising and now total over 320,000.
- As of March 31, 2018 the amount involved is over 55 per cent of estimated collections for the current financial year.
- By its recent move CBDT aims to reduce litigation and enhance the credibility of tax administration in order to secure a
  fair system.
- CBDT's move is with regard to dealing with issues causing tax disputes, the latest move incentivises CIT(A)s to actually
  further enhance assessments.
- It aims to do so by adhering to stiff timelines for disposing of cases and by instilling a sense of accountability in the whole
  process.

#### What are the concerns with CBDT's move?

- While all measures of CBDT are commendable, the method chosen by the government to achieve it is likely to be counterproductive.
- As part of the CBDT Action Plan, Commissioners of Income Tax (Appeals), or CIT (A), will be given additional credits of two units per order in case they pass what is called a "quality" order.
- Quality orders essentially include those that strengthen the assessment order of an assessing officer and levy penalties on such orders.
- But CIT(A) levy penalties when, under law, its proceedings are supposed to be independent of the assessment process.
- Incentivising CIT(A) to enhance assessment orders introduces a conflict of interest given that the CIT(A)'s quality order will be judged by his immediate supervisor, i.e. the chief commissioner.
- It also undermines its impartiality as he or she is prejudiced against the concerned taxpayer.
- Given that such credits might well be used in determining career growth, they will lead to decisions that will increase litigation further, instead of its stated objective of reducing it.



## 9.9 FRDI Bill Withdrawal

## What is the issue?

- The Centre has recently withdrawn the Financial Resolution and Deposit Insurance Bill, 2017. Click <u>here</u> to know more on the Bill
- However, there are lot many issues in relation with this, that remain unaddressed.

#### Why was the opposition?

- The "bail-in" clause is one of the major provisions that had triggered opposition to the Bill.
- Banks, by the very nature of their business, are essentially dependent on the funds lent to them by depositors.
- This serves as the pool of lendable resources from which they provide credit to borrowers.
- The Bill essentially disturbs this crucial aspect.
- The bill makes a depositor apprehend of risking her hard-earned savings placed in a bank.
- The depositor is forced to partake in the pain of financial losses if the bank is forced into resolution on account of distress.

#### What is the rationale for withdrawal?

- The government did make efforts to reassure the public, explaining the rationale for the Bill.
- It also tried convincing the public on the built-in "safeguards" relating to the bail-in provision.
- However, it failed to make any progress.
- So resolving the issues require a comprehensive examination and reconsideration of the Bill.
- Therefore the government deemed it "appropriate" that the Bill be withdrawn.

## What are the concerns and way forward?

- A bank failure can pose risk to the overall financial stability.
- So it does need specialised considerations to cope with large financial corporations on the verge of breaking down.
- But the existing frameworks have shortfalls in resolving bankruptcy scenarios among financial entities.
- The withdrawal of the FRDI Bill is thus not a solution; policymakers should reappraise the existing mechanisms.
- The progress of Insolvency and Bankruptcy Code in addressing debt resolution in the banking sector must be evaluated.
- It must also look at ways to strengthen the Deposit Insurance and Credit Guarantee Corporation.
- Holistic measures to prevent further erosion of public faith in the banking system are essential.

# 9.10 IMF's Projection on India

#### Why in news?

International Monetary Fund (IMF) has posited India as the world's growth engine for the next 30 years.

#### What are the findings of IMF?

- IMF has projected a medium-term growth rate of 7.75 per cent on the back of macro-financial and structural policies to help boost inclusive growth.
- The GST and the insolvency code are rightly expected to go a long way in lifting India's productivity.
- This will also lead to an uptick in investment activity to 32.2 per cent of GDP in 2018-19 and 2019-20, against 30.6 per cent in 2017-18.
- IMF has projected a 13.2 per cent increase in exports this year and 10.1 per cent the next.
- The Fund-Bank combine tends to view India as a counterpoint to China as a market reformer and a country with credible democratic institutions.

## What are the macroeconomic concerns of India?

- The current account deficit (CAD), or the savings-investment gap, is estimated at 2.6 per cent this fiscal and 2.2 per cent in the next.
- The rising oil prices and strong demand for imports offset by a slight increase in remittances.
- Whether a rising CAD can create situations of volatility on the external account is a moot point.



- It is not clear on what basis the IMF is banking on an improvement in investment, which has dipped from 34.2 per cent of GDP in 2014-15 to 30.6 per cent now.
- There isn't convincing evidence of any surge in demand in agriculture, industry and services.
- Apart from this an area of acute concern is India's poor socio-economic indicators, affecting both labour productivity and technological up gradation.

#### What measures needs to be taken?

- IMF suggests that public dis savings should be curtailed to curb the CAD.
- In this situation, the reliance on FDI and portfolio flows cannot be underestimated.
- A projected headline inflation of 5.2 per cent in 2018-19 is way above the Reserve Bank's comfort level, with the IMF hoping for a prudent fiscal policy to keep it in check.
- Reducing trade documentation requirements, lowering tariffs and generally improving governance may avoid choking of growth.
- Despite supply-side reforms, which have pushed India up several notches in the 'ease of doing business index', investment needs a demand stimulus.

## 9.11 Insights from NABARD's Survey Findings

#### Why in news?

NABARD has released the All India Rural Financial Inclusion Survey (NAFIS).

#### What is the NAFIS about?

- NAFIS is based on a sample of 40,327 rural households in 29 states of which 48 per cent are agriculture households (agri-HHs), 87 per cent are small and marginal farmer households.
- The survey combines the strengths of the NSSO's Situation Assessment Survey (SAS) and RBI's All India Debt and Investment Survey.
- Among other things, the survey estimates 2015-16 farmers' income levels.

## What are the significant findings of the survey?

- **Doubling Farmers Income** The vision of doubling farmer incomes by 2022-23 had no assessment of the base (2015-16) aggregate income levels, the estimates from NAFIS fill that gap.
- Benchmark Income Levels The Dalwai Committee set up in 2016, to advice on the strategy to double farmers' incomes by 2022, did not have any benchmark income levels for 2015-16.
- So, the committee derived them by applying yearly growth rates of state-wise net-state-domestic-product (NSDP) to the NSSO estimates of 2012-13 income levels.
- In terms of sources of income, NAFIS offers interesting insights, particularly for the Dalwai Committee.
- **Agri and Non- Agri Incomes** NAFIS estimates that in 2015-16, 35 per cent of farmers' income came from cultivation, 8 per cent from livestock, 50 per cent from wages and salaries and 7 per cent from non-farm sectors.
- The survey also estimates income of non-agri rural HH at Rs 7,269/month, more than half of which comes from working as wage labourers.
- **Insights based on Climate** NAFIS data finds that working as labourers is a fall-back option for average farmers in drought years.
- Besides, the increasing pressure as a result of shrinking average holding size is presumably forcing farmers to work as labourers to meet their needs.

#### How it differs from other surveys?

- NSSO used wider definition of rural areas, the NABARD survey includes areas that are bigger including Tier Three, Four and Five towns.
- NAFIS estimates that an average Indian farming household earnings based on household-level data.
- At Rs 5,000, it has a higher threshold level of income from agricultural and allied activities compared to the NSSO's threshold income level of Rs 3,000.
- This is likely to create an upward-bias in NAFIS's estimates of farmers' income.
- If NAFIS followed NSSO's definitions, the 2015-16 estimate of farmers' income would have been somewhat lower, and so would have been its growth rate (below 3.7 per cent).



 NAFIS data is very different from the assumptions of the Dalwai Committee, which states that by 2022-23, 69 to 80 per cent of farmers' incomes will accrue from farming and animal rearing.

## 10. INFRASTRUCTURE

## 10.1 Kaleshwaram Irrigation Project

#### Why in news?

The Kaleshwaram lift irrigation project in Telangana has attracted considerable national attention.

#### What is Kaleshwaram project about?

- Kaleshwaram is a town on Godavari right bank about 300 km downstream of major dam, Sriram Sagar project (SRSP).
- At Kaleshwaram, the major tributary Pranahita, which merges with Godavari brings large quantity of water, the place is also known as Sangam and Dakshin Ganga.
- The project proposes to lift about 180 TMC (about 5 billion cubic meters) of water.
- It includes construction of barrages, high speed pumps for transport of water upstream for providing for irrigation.
- Besides, it involves constructions of network storage dams, series of tunnels, canals water passing through several stages of pumping and reverse flow into Godavari River.



## What are the concerns with the project?

- **Feasibility concerns** Various civil society organisations involved in water management and resettlement of evictees have questioned the proposed benefits accruing to farmers, they argue that
  - 1. The 180 TMC water is not enough for 26 lakh acres for any meaningful irrigation.
  - 2. The crop yields have been grossly inflated almost 10 times as compared to the current levels for projecting highly favourable benefits/outcomes.
  - 3. The complete omission of social and ecological costs in the report.
- **Financial concerns** The estimated project cost is ₹80,450 crore and the annual maintenance costs including interest payments will be around ₹13,923 crore.
- In short, this project is unlikely to generate benefits of more than ₹4,000 crore while the State would spend ₹13,000 crore every year.
- The Telangana government is going to spend four times more on the operation and maintenance costs than all the benefits that would accrue to farmers.
- **False Claims** The benefits from the agriculture sector in the report are based on three assumptions, such as irrigation to 24 lakh acres, increases in the yield of 12 crops will be of 500-900 per cent more than current reported yields and all the produce will be getting higher prices.
- But normally when production of a crop like chilli increase by 20 per cent more than the average of the previous year, prices tend to slump to historic lows with few buyers in the market.
- Even the data on the projected increase in the area of irrigation, yields, and profit margins in the DPR are based on
  questionable assumptions which fail to reflect the current realities of costs of products and prices of the products at the
  market place.
- **Ecological and livelihood concerns** The project will displace at least 30,000 people in 19 villages.
- Further, the project is going to affect the total land of around 100,000 acres (40,015 hectares).
- Considering all other costs, this project is going to be a major burden for Telangana people and farmers for generations to come.
- One thing the DPR clearly proves is that the project is not about sustainable development of the State.

## 10.2 Dams and Flood Control

# What is the issue?

- The recent Kerala floods have highlighted the dangers of excess water accumulation in dams.
- It is essential, in this context, to understand the role of dams in flood control.



## Why are dams dangerous?

- Dams store millions of tonnes of fresh water in large reservoirs.
- However, this is only after submerging prime forests, villages, farms and livelihoods.
- The 4,700 large dams built since 1947 have cumulatively displaced 4.4 million people.
- This makes dams the single largest cause for displacement post-Partition.
- These dams take decades to come up, but only a fraction of their output is for the household sector.
- Over 85% of them are used in agriculture for producing cash crops such as sugarcane.
- Dams have displaced the poorest of India's people in favour of richer farmers and urban residents.
- Notably, this often comes with little or no compensation.
- Worryingly, dams are far more hazardous than any other infrastructure project, except nuclear plants.
- Moreover, many dams in India are over a century old, and so have major defects.
- There is also a case for reservoir-induced seismicity (RIS) from the weight of the reservoir.
- This has resulted in earthquakes in various parts of the country.

## How should dams be managed?

- The water level of a reservoir should be kept below a certain level before the onset of the monsoon season.
- This is an internationally accepted practice.
- This ensures that there is enough space to store the excess rainwater when the monsoon rains come.
- This also facilitates releasing water in a regulated manner.
- It thus prevents floods downstream when there is heavy inflow to the dams.

## What is the concern?

- The roles of dams in irrigation and power generation are acknowledged.
- However, its role in flood control has always been underestimated.
- It is unfortunate that in both irrigation and hydel projects, flood control is completely ignored.
- Authorities always look to store the maximum amount of water in reservoirs during the monsoon season.
- It is then used for irrigation and generation of electricity during the summer months.
- Despite the extra quantity of electricity produced and area of land irrigated, excess storage is risky.
- It leads to loss of human lives, infrastructure and agricultural land, in times of heavy rains as in Kerala.
- The estimated loss to Kerala runs into thousands of crores and it will take years to rebuild the state.

## What should be done?

- Dams The meteorological department can predict rains or cyclones only a few days in advance.
- So keeping space in reservoirs is must, whether or not there are heavy rains.
- It is essential that at least 30% of the storage capacity of dams is kept free before the monsoon.
- This is crucial to ensure that the flood control purpose of dams is met.
- This allows discharge of water as well as increase of storage slowly as the monsoon progresses.
- There is also a task of critically reviewing every dam in the country.
- Decommissioning those that are at end-of-life, stopping building new ones and establishing sound safety protocols are essential.
- **Policies** It is high time that government formulate water management policies for reservoirs.
- This should be in such a manner that dams are used to control floods, and not cause them.
- There is also a need to act on decentralised alternatives involving water recycling and reuse.
- **Electricity** The over-dependence on hydel projects to produce electricity is another driving factor.
- So enhancing non-conventional sources for electricity generation is important in this context.



- **Authority** Dam and water management is vested with the Public Works Department, Electricity Board, and Irrigation Department.
- But even in normal conditions there are contradictory opinions among these.
- This poses implementation hurdles to the decisions taken.
- So, the State Dam Security Authority, if competent, should be entrusted with the task of water management in reservoirs.
- It should also be empowered to take decisions in emergency situations.

#### 11. AGRICULTURE

## 11.1 GM Regulations in India

#### What is the issue?

- Despite the ban on local production and import of foods having genetically modified (GM) content, GM food has widely penetrated the Indian markets.
- But this has led to no real health or environmental consequences, which only supports the assertion that GM food is safe.

## What are the shocking regulatory lapses?

- "Centre for Science and Environment" (CSE) study indicated that as much as 32% of the processed foods marketed in India carry GM ingredients.
- As GM imports are banned, importers have to currently make a declaration that their goods are free of GM components at the customs.
- Yet, nearly 80% of the marketed foods that tested GM-positive in the CSE study were imported in contravention of the ban.
- More significantly, some of the GM products falsely claimed on their labels to be GM-free, which is a clearly spiteful
  violation to deceive consumers.
- All this reflects poorly on the country's GM regulatory systems.

#### What is the GM crop scenario in India?

- Currently, BT cotton is the only approved GM crop for commercial cultivation in India and it accounts for 90% of the cotton acreage now.
- While no GM food crop has been permitted thus far, GM foods have already deeply penetrated into the Indian markets.
- Notably, Cottonseeds (of BT-cotton), which bear GM DNA, are routinely fed to cattle whose milk is part of regular human diet
- In recent years, even cottonseed oil has begun to be used as a cooking medium individually or admixed with other edible
  oils.
- This oil, if not properly refined, can retain remnants of GM DNA.

# What the differing opinions on GM?

- The fundamental issue really is the impact that the genetically tweaked foods can have on health and environment.
- If the vociferous anti-GM lobby argues that "GM Food" can pose wide-ranging hazards but most scientists disagree on this.
- In fact, there has been no detectable incidence of health or environmental hazard due to GM crops in the past 2 decades (since GM trials began).
- Also, several scientific studies conducted in the countries where GM crops are extensively farmed and consumed have not found any adverse effect.

#### What is the way ahead?

- Poor regulations in India have resulted in careless sowing of BT-Cotton and the extensive penetration of GM foods into the markets.
- Despite these serious lapses, hardly any harmful fallout has been observed until now, which is hence a vindication of safety
  of GM crops.
- The government should, therefore, take note of these facts and lift the ill-advised embargo on the approval of new GM seeds.



• The cutting-edge technology of genetic manipulation needs to be put to gainful use for the benefit of farmers, consumers and biotech-based industries.

#### 12. SCIENCE & TECHNOLOGY

## 12.1 Liquid Water Lakein Mars

## What is the issue?

- Scientists have recently discovered a liquid water 'lake' in Mars.
- This is expected to facilitate a better understanding on the likely presence of life on Mars.

## What is the recent finding?

- Mission An 11-member Italian team of researchers surveyed the Planum Australe region, or the southern polar plains of Mars.
- They used the Mars Advanced Radar for Subsurface and Ionosphere Sounding (MARSIS) instrument.
- This is alow-frequency radar on board the European Space Agency's Mars Express Orbiter.
- The instrument beams radar pulses down to the planet's surface and measures how the waves reflect back to the spacecraft.
  - surface and reflect back to the spacecraft.
- This would give information on the kind of materials, even below the surface.
- **Findings** The team had discovered a lake stretching for 20-km.
- It is found 1.5 km under the southern polar ice cap of Mars.
- Despite temperatures at about -68° C, the water remains in a liquid form.
- The radar profile of the lake closely matches those of subglacial lakes on Earth, beneath the ice sheets of Greenland and Antarctica.

## How in liquid form?

- Atmospheric pressure on the Martian surface is almost a hundred times less than on Earth.
- This ensures that water would not be in liquid form, but rather, as ice or vapour.
- So the presence of water is much beneath the surface.
- The liquid form could be due to the heavy presence of sodium, magnesium and calcium salts.
- This may reduce the temperature and help it retain liquid form.
- This, along with the immense pressure of the ice from above, lowers the freezing point.

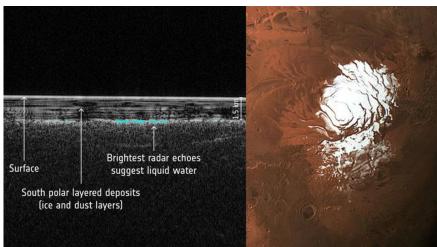
# What is the significance?

- The majority of modern Mars is dry and barren.
- But plenty of evidence has been found that the Red Planet used to be a much wetter place.
- However, any liquid water was believed to be transitional, in short-lived pools or flowing down hillsides in the Martian summer.
- So the discovery of a large, stable, stagnant lake on Mars is significant.
- It offers new potential targets for future missions and places, to search for signs of past or present microbial life.
- However, the sheer saltiness of the spot raises doubts to this belief.

## 12.2 India's Manned Mission to Space

## Why in news?

Indian Space Research Organisation (ISRO) has announced the definitive timeline for Gaganyaan mission.





## What is ISRO's plan?

- ISRO has announced its first manned mission which is set to be a reality by 2022.
- By this, an Indian astronaut will go on a space odyssey by 2022 on board 'Gaganyaan'.
- ISRO has roped in Indian Air Force pilots to identify the first set of astronauts for a human space flight.

#### What are the works in progress?

- Launch vehicle The launch vehicle for this mission is planned to carry heavy payloads into space.
- The spacecraft carrying human beings, called crew module, is likely to weigh in excess of 5 to 6 tonnes.
- For this purpose, GSLV Mk-III (or) Launch Vehicle Mark-3 (LVM-3) is being developed.
- This comes with cryogenic engine, with capabilities to deliver much heavier payloads much deeper into space.
- Re-entry & Recovery tech ISRO has already tested the GSLV Mk-III with experimental crew module.
- It came back to Earth after being taken to an altitude of 126 km into space.
- This this known as Crew module Atmospheric Re-entry Experiment (CARE).
- Crew Escape System (CES) ISRO had tested the Crew Escape System, a mechanism for an advance warning.
- System warns the crew module of anything going wrong with the rocket and pulls it away to a safe distance.
- After this, it can be landed either on sea or on land with the help of attached parachutes.
- Life support -The Environmental Control & Life Support System (ECLSS) is meant for humans inside to live comfortably.
- It ensures that conditions inside the crew module are suitable for living.
- The ECLSS
  - i. maintains a steady cabin pressure and air composition
  - ii. removes carbon dioxide and other harmful gases
  - iii. controls temperature and humidity
  - iv. manages parameters like fire detection and suppression, emergency support
  - v. takes care of food and water management
- Astronaut training ISRO still plans to set up a permanent facility like a foreign facility, to train candidates for the first manned mission.
- Candidates would be trained for at least two years in living in zero gravity.
- It would also include dealing with a variety of unexpected experiences of living in space.

## What are the challenges?

- A manned space mission is very different from all other missions that ISRO has so far completed.
- In terms of complexity and ambition, even the missions to the Moon (Chandrayaan) and Mars (Mangalyaan) are nowhere in comparison.
- For a manned mission, the key distinguishing capabilities that ISRO has had to develop include
  - i. the ability to bring the spacecraft back to Earth after flight
  - ii. building a spacecraft in which astronauts can live in Earth-like conditions in space
- Over the years, ISRO has successfully tested many of the technologies that are required.
- However, many other challenging ones are still to be developed and tested.

## 12.3 Probing for Water on Moon

#### What is the issue?

- NASA recently reconfirmed its 2009 assertion on the presence of water on Moon's surface by using new data from the M3 (Moon Mineralogy Mapper).
- Notably, the instrument had been sent to space on India's Chandrayan –I and has thus far provided ample evidence of water on Moon.

#### What is the recent news?



- M3 was sent to space through India's Chandrayaan-1 spacecraft in 2008 and data from it has been subjected to rigorous study worldwide.
- Recently, NASA had stated that new data from its M3 instrument has reconfirmed presence of water (solid ice) in moon without any ambiguity.
- NASA's M3's could differentiate between solid, liquid and vapour ice, and its data indicated that solid ice was patchily deposited on the moon's surface.
- It collected data that not only picked up the reflective properties of water molecules but also the distinctiveness in reflections by different water states.
- Most of the newfound water ice lies in the shadows of craters near the poles, where the warmest temperatures never reach above -250°F (-150°C).
- Notably, because of the very small tilt of the Moon's rotation axis, sunlight never reaches these regions.

#### What are the other studies that confirmed water on moon?

- Confirmation In September 2009, an analytical study of data from NASA's "M3 instrument" on board ISRO's Chandrayan I spacecraft was published.
- This announced the "unambiguous evidence" of presence of water across the lunar surface, which was done after reconfirmation by NASA's EXPOXI craft.
- Notably, NASA's EPOXI spacecraft passed by the Moon on its way to comet Hartley 2, and its data was corroborated with M3's.
- This was further verified by reassessing the data produced by a spectrometer aboard Cassini spacecraft in 1999.
- The data from ISRO's hyper-spectral imager, an instrument used for mapping minerals, also aboard Chandrayaan-1, supplemented the evidence.
- This is the final confirmation of water on Moon, something that had been hypothesised since the first lunar missions in the 1960s.
- **Subsequently** Another of ISRO's instruments on Chandrayaan-1, the Moon Impact Probe (MIP), had produced compelling evidence of water on the Moon.
- Notably, MIP, a 35-kg cube-shaped instrument with the Tricolour on all sides, is the first Indian object to land on the Moon.
- After 2009, several studies have pointed to the presence of water, in different forms although most of these have used the same data sets as used in 2009.
- In August 2013, scientists looked at the same M3 data and detected magmatic water (that originates within the Moon's interior), on the lunar surface.

## How is water distributed on the lunar surface?

- While water molecules were found mostly in the polar regions of the Moon, a 2017 study showed that water was present across the lunar surface.
- Interestingly, the 2017 study also produced the first map of water distribution on the lunar surface using the M3 data set.
- In February 2018, NASA reported data from two lunar missions that presented fresh evidence of water being "widely distributed" across the surface.
- It said the water appeared to be present on the lunar surface abundantly, although it is not necessarily easily accessible.

## 12.4 Genetically Modified Mosquitoes

#### Why in news?

The Department of Biotechnology (DBT) is hesitant to permit field trials to release GM mosquitoes to tackle certain diseases.

# What is the initiative?

- Aedes aegypti mosquito is the carrier of diseases such as Zika, dengue and chikungunya.
- A new initiative thus aims at reducing the population of Aedes aegypti mosquito.
- It comes from the Mumbai-based company, GangabishanBhikulal Investment and Trading Limited (GBIT).

#### What is the new gene?

- Diseases such as Zika, dengue and chikungunya are transmitted when an infected, pregnant female mosquito bites somebody.
- Males do not bite and are, therefore, harmless.



- So GBIT wants to introduce a new Genetically Modified(GM) male Aedes aegypti mosquito.
- This GM insect has been bred by Oxitec, an R&D biotech company with roots in the University of Oxford.
- Oxitec has bio-engineered a transgenic male Aedes aegypti mosquito.
- This carries a new gene fatal only to female mosquitoes.

#### What does it do?

- The idea is to release a large number of such GM male mosquitoes into the trial zone.
- These will then breed with normal females in the wild.
- In the next generation, only the males would survive and these would breed again, with normal females.
- After a few generations, the female population will be drastically reduced.
- Eventually this cycle will result in a reduction of the entire mosquito population.

## How is it justified?

- The life cycle of a mosquito is only around two-three weeks.
- So the effects of the trial should be apparent in a few months.
- Transgenic males do not bite and the modified genes are said to be harmless to humans.
- The so-called "Friendly Aedes" project launched "closed cage" trials at the Oxitec facility in Maharashtra.
- Trials have been launched in Malaysia, Brazil, and Florida as well.
- Given these, permission has now been sought for open field trials in India.

# Why is DBT hesitant to approve?

- Indian policy has been very cautious about allowing the genetically modified technologies.
- DBT scientists fear that there may be unknown hazards associated with large scale trials.
- It is thus feared that it could result in harmful consequences to the environment or ecology.
- Notably, the Aedes aegypti is part of the food chain.
- During its life cycle, it is consumed by fishes.
- Also, during its early aquatic phase, it is consumed by frogs and then by birds, lizards and spiders.
- Life cycle of wild male and female mosquiloes produces blood-sucking females shall auda taken the male male and female mosquiloes produces blood-sucking females

  1. Odd male with starke gone and wild female mosquiloes produces blood-sucking females

  2. female lays eggs that contain starke gone and wild female mosquiloes produces blood-sucking females

  3. eggs hatch into laine and female mosquiloes produces blood-sucking females

  3. eggs hatch into laine and female mosquiloes produces blood-sucking females

  3. eggs hatch into laine and female male and female mosquiloes produces

  1. Introduction of GM males breaks this cycle as faulty gene causes offspmg to prematurely die

  More GM males are created

  More GM males are created

  In the lab by a adding teletacyticine to larvee to allow of development
- A drastic reduction in the mosquito population could thus impact prey species.
- This could also potentially result in ecological collapse.
- There is also a possibility that the engineered genes could directly harm the species that consume mosquitoes.
- More research may be required to ensure that there are no unforeseen consequences.

# 13. ENVIRONMENT

# 13.1 Restriction on Highways - Bandipur Tiger Reserve

## Why in news?

The Centre has asked Karnataka the consent to allow night traffic on the highway passing through Bandipur Tiger Reserve.

## What and why is the current restriction?

- The National Highway (NH) 212 cuts through the Bandipur Tiger Reserve.
- Speeding vehicles on the highway were taking a toll on the reserve's animals.
- This included tigers, elephants and several other endangered species.



- Karnataka High Court thus, in 2010, banned traffic between 9 pm and 6 am through the highway.
- Road kills have dropped by nearly six times after it was imposed.
- Neighbouring Tamil Nadu has imposed a similar measure in the Mudumalai Wildlife Sanctuary.

#### What is the contention?

- The Kerala government has contested the restriction, in the Supreme Court.
- It said it was an inconvenience to those travelling from Wayanad (Kerala) to Karnataka and also hampering the state's
  economic development.
- However, the Karnataka High Court order does offer a middle path.
- It suggests an alternate road to the standards of NH 212 to take care of Kerala's concerns.
- The National Tiger Conservation Authority has also spoken in favour of such a solution.
- This is an ongoing case in the Supreme Court.

## What is the Centre's proposal?

- Before the arrival of SC judgement, the Centre now tries to relax this ban.
- The Centre has asked the Karnataka government to give consent to open the road 24×7 with certain mitigation measures.
- The proposal included elevating the road over four 1-km stretches to provide wildlife passageways below.
- It also proposes to fence the entire highway passing through the reserve with 8-foot-high steel wire barriers.
- Rationale The argument for not going for a new alternative road is that it would be 30 km longer and pass through hilly terrain.
- It thus increases travel time, fuel consumption, and pollution.
- Also, it is argued that as traffic endangers wildlife even during the day, fencing and passageways are a better idea.

## What are the larger concerns?

- Plan Underpasses are unlikely to suffice in dense wildlife-rich forests where too many animals compete for space.
- For territorial animals, just four openings in a 24-km stretch may not suffice.
- They may have to use a passageway in their neighbour's territory to move between two halves of its territory (split by the highway).
- This may endanger them through the resultant habitat and prey loss.
- Threat Roads, railway lines and irrigation canals become barriers that hinder wildlife movement.
- This is especially worse at night when bright headlights blind even swift species like cats.
- This, in turn, contributes to habitat loss, fragmenting wildlife populations and restricting their gene flow.
- Global examples Roads have destroyed tropical rainforests in South America, Asia and Africa too.
- Though under severe pressure, the Amazon rainforests still hold over 1 million sq km of no-go zones.
- In North America and Europe, where road network is extensive and wildlife density lower, wildlife passageways are more common.
- Such features are seen in Malaysia and Kenya as well, and in South Africa, night traffic is prohibited.

## What is the policy in this regard?

- National Board for Wildlife (NBWL) is the apex advisory body to the central government on all wildlife-related matters.
- In 2013, the NBWL objected to any new roads through protected forests.
- It was however open to the widening of existing roads only if alternative alignments were not available.
- It nevertheless mandated adequate mitigation measures irrespective of the cost.





- The government accepted this as the policy in 2014.
- Recently, the NBWL made it mandatory for every road/rail project proposal to include a wildlife passage plan.
- This has to be as per guidelines framed by Wildlife Institute of India.
- · However, passageways have their own limitations in dense forests.

## 13.2 SC Order on Nilgiris Elephant Corridor

#### Why in news?

Supreme Court recently directed the TN government to seal resorts and hotels in the Nilgiris elephant corridor.

#### What is the Court's order?

- The Tamil Nadu government has to seal or close down within 48 hours, 11 resorts and hotels.
- These were constructed on the elephant corridor of Nilgiris in violation of law.
- Owners of other resorts and hotels in the area were asked to place their documents of approval before the Collector within 24 hours.
- The Collector will verify the documents and check if a resort or hotel has been constructed with proper prior approval.
- If not, then the same should also be closed down within 48 hours.

## What is the status of elephant corridors?

- As estimated, there are 101 elephant corridors, of which almost 70% are used regularly.
- Nearly three-quarters of the corridors are evenly divided among southern, central and northeastern forests.
- The rest are found in northwest Bengal and the northwestern region.
- Some of these passages are precariously narrow, at only a hundred metres wide.
- **Nilgiris** There are an estimated 6,500 elephants in just the Brahmagiri-Nilgiris-Eastern Ghats ranges.
- Most of the resorts in the Nilgiris have come up right under the gaze of the Forest Department.
- The majority continue to function without the requisite permissions.
- This must be thoroughly investigated to check whether there was any wrongdoing.
- The grey area of mushrooming home-stay structures, which are just hotels on forest fringes, also deserves scrutiny.

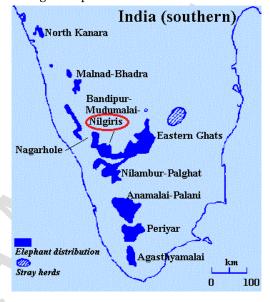
# What is the need?

- Forests that have turned into farms and unchecked tourism are blocking animals' paths.
- Animals are thus forced to seek alternative routes resulting in increased elephant-human conflict.
- Weak regulation of ecotourism is severely impacting important <u>habitats</u>.
- It particularly affects animals that have large home ranges, like elephants.
- The movement of elephants is essential to ensure that their populations are genetically viable.
- It also helps to <u>regenerate forests</u> on which other species, including tigers, depend.
- Elephant corridors are also crucial to reduce <u>animal fatalities</u> due to accidents and other reasons.
- So fragmentation of forests makes it all the more important to preserve migratory corridors.
- Ending human interference in the pathways of elephants is more a conservation imperative.
- The Supreme Court's order is thus a necessary step to restore the ecology of these spaces.

## 13.3 Concerns with IMD's Prediction

# Why in news?

India Meteorological Department (IMD) has predicted a normal and well-distributed rainfall in the second half of the monsoon season.





#### What is the status of 2018 monsoon?

- Over 80 per cent of the country's total geographical area has already received normal or above normal rainfall, Part of the rain-deficient region of Bihar, Jharkhand and the
- Northeast, too, has received some welcome showers in the past few days.
- Though the pace of kharif sowing has so far been slower than in the last year, the estimated 7.5 per cent lag in crop planting can be made up in the next few weeks since the sowing season is still not over.
- Besides, the total water stock in the country's 90-odd major reservoirs has already swelled to about 11 per cent above normal for this time of the year.

## What is the significance of IMD's prediction?

- In the last 17 years since 2001, the weather office's preliminary predictions have been on the mark on only a couple of occasions though, admittedly, the margin of error has gradually been narrowing, especially since 2010.
- This is despite perceptible advances in the IMD's short- and medium-range weather gauging capabilities, expansion of data-gathering infrastructure and availability of better-computing facilities.
- Recently IMD has predicted that second half of the monsoon August-September will have normal and well-distributed rainfall.
- The markets have, predictably, reacted positively to the optimistic monsoon outlook.

# What are the issues with IMD's prediction?

- The IMD's prediction rainfall seems to have largely quelled the disquiet caused by other weather watchers by projecting sub-par monsoon rainfall this year.
- The past accuracy record of the IMD's long-range monsoon forecasts, issued normally in April every year, does not inspire
  much confidence.
- The major reason for the wide disparity in the monsoon outlook of the IMD's is their perception of the likely adverse impact on the rainfall of some key monsoon-influencing parameters that are threatening to turn unhelpful.
- The local private weather forecaster, Skymet anticipates below-average rains this year on the assumption that oceanic parameters are at present unfavourable for the monsoon's progress.
- The IMD, on the other hand, has stuck to its original stand that the rainfall would be normal or close to that throughout the season
- The sharpest contrast in the forecasts by Skymet and the IMD is in the rainfall projections for the current month of August.

## 13.4 Heavy Rains in Kerala

#### What is the issue?

- Southwest monsoon has caused a series of floods and landslides in several districts of Kerala.
- The loss due to the floods highlights the shortfalls in approaching the environmental issues, and calls for a more inclusive and holistic view.

#### What was the impact?

- Kerala as a whole has received 15% excess rain and Idukki district got 41% excess until the first week of August.
- The rains have caused a series of floods and landslides in several districts of Kerala.
- Persistent rain since the onset of the monsoon has left Idukki and other reservoirs downstream overflowing.
- One of the five shutters of the Cheruthoni dam on Idukki reservoir was opened as waters rose close to the maximum storage level.
- Notably, this is the first time that the dam was opened due to rains from southwest monsoon.
- The dam was opened to ease the pressure of water on the Idukki hydel reservoir.
- Also, for the first time, shutters of 22 dams including Idamalayar were opened due to heavy rains.

## What are the man-made causes for the disaster?

- The short-sighted attempts in building man-made capital is a major cause.
- Buildings in hilly forests, wetlands and rivers encroachments, stone quarries are notable ones.
- This has ignored the degradation of natural, human and social capital.



- All these have played a significant role in exacerbating the effects of a natural event.
- The immediate task in the State is relief and rehabilitation.
- But it is equally crucial to simultaneously identify the root causes of the havoc.

## What are the larger reasons?

- Law The root causes prevail throughout the Western Ghats and, indeed, the rest of the country.
- The first is the breach of laws that have been established to safeguard natural capital.
- The Shah Commission inquired into the illegal mining in Goa.
- It observed that mining beyond permissible limits had caused serious damage.
- It has caused damage invariably to water resources, agriculture and biodiversity.
- Human capital There is ignoring of serious degradation of human capital.
- This is in the context of effects on health and employment due to certain projects.
- E.g. there is overuse and pollution of water resources by the Coca Cola factory in the Plachimada panchayat in Palakkad district
- This has resulted in losses to the tune of Rs. 160 crore.
- **Scientific knowledge** and advice has been continually disregarded.
- E.g. the case of the proposed Athirappilly hydroelectric project
- An analysis showed that the project document had overestimated the availability of water.
- So the likely power production in no way justified the costs of construction and running of the project.

## What should be done?

- **Approach** It is not advisable to continue to focus only on man-made capital.
- There is a need to enhance the sum total of man-made, natural, human and social capital.
- Communities The genuine stake of the local communities should be acknowledged.
- The have a larger role in health of the ecosystems.
- They also have a better understanding of the working of ecological components.
- The 73rd and 74th constitutional amendments must be implemented in true spirit.
- Local bodies at the ward, gram panchayat, and town and city levels should be empowered.
- They must be allowed to prepare reports on the status of environment.
- They should also decide on how budget should be spent on the basis of these reports.
- BMCs The government must set up Biodiversity Management Committees (BMC) of citizens.
- It must empower them to document the status of local ecosystems and biodiversity resources.
- They must be given powers to levy collection charges for access to biodiversity.
- The intellectual property relating to community knowledge should be acknowledged.
- The BMCs should be given a central role in preparing environmental impact assessments.
- The assessments should reflect the true state of affairs instead of being the fraudulent documents as now.
- **Forest** The government must fully implement the Forest Rights Act.
- This would empower not only tribals, but all traditional forest dwellers.
- They could control, manage and market non-timber forest produce.
- Governance The current system is of protecting natural resources through negative incentives.
- This too is in the hands of a coercive and corrupt bureaucracy.
- This must give way to positive incentives that can be monitored in a transparent fashion.
- The Western Ghats Ecology Expert Panel proposes such incentives.
- E.g. payment of conservation service charges



- This could be employed in protecting biodiversity such as sacred groves, soil carbon enrichment, etc.
- Information Government must stop distortion of environment and development-related information.
- It must begin uploading information suo moto on websites, as the Right to Information Act demands.
- It must initiate building a public and transparent database on environmental parameters.
- Ecology The local knowledge, on levels of ecological sensitivity in different parts, should be utilised.
- This should be given importance alongside the expert committee reports.
- This would help in appropriate management regimes for regions of different levels of sensitivity.
- Technology Government should begin to proactively use modern technologies in a user-friendly manner.
- The inputs from the various local bodies should be made available to all citizens.
- All these would ensure a broad-based inclusive approach to conservation and development.

## 13.5 Gadgil Panel Report and Kerala Floods

#### What is the issue?

- The recent floods of catastrophic dimensions have ravaged the state of Kerala.
- This has proved the rejection of Gadgil panel report to be a costly error for people and environment.

## What was the Gadgil Panel on?

- About 8 years ago, the Centre constituted the Western Ghats Ecology Expert Panel (WGEEP).
- It is a 14-member panel under the chairmanship of noted ecologist Madhav Gadgil.
- It was tasked to look into measures to arrest the ecological devastation from human activities in the Western Ghats.
- The 1600-km-long mountain range of Western Ghats is a fragile ecosystem.
- It is regarded as one of the eight 'hottest' biodiversity hotspots in the world.
- Kerala accounts for nearly 18% of the biodiversity-rich Western Ghats.
- The Gadgil panel submitted its report in 2011.

## What are the key recommendations?

- The Gadgil Committee divided the Western Ghats into three ecologically sensitive zones (ESZ).
- These are the highest (ESZ1), high (ESZ2) and moderate sensitivity (ESZ3) zones.
- This is in addition to the Protected Areas managed under acts such as the Wildlife Protection Act.
- It suggested that ESZ1 and ESZ2 would be largely 'no-gone' zones.
- So mining, polluting industries as well as large-scale development activities, including new railway lines are restricted.
- It also objected to new dams, thermal power stations or massive windmill farms or new townships in ESZ1.
- The panel however gave importance to the local communities and gram sabhas.
- They were given a larger say in deciding on matters relating to the ecology of these regions.
- It also called for
  - i. stricter regulation on tourism
  - ii. phasing out of plastics and chemical fertilisers
  - iii. a ban on diversion of forest land into non-forest applications
  - iv. a ban on conversion of public lands into private lands

## What happened next?

- The Gadgil panel report was rejected by the then Union Environment Minister.
- The report was also unacceptable to any of the six Western Ghats States.
- These included Kerala, Karnataka, Tamil Nadu, Goa, Maharashtra and Gujarat as well as Pondicherry (UT).
- A year later, the government appointed a new committee under the chairmanship of K Kasturirangan.
- It was tasked to "examine" the WGEEP report.



# What were the changes made?

- The Kasturirangan committee did away with the graded approach in terms of ecological sensitivity.
- It rather divided the Western Ghats into cultural lands (where there are currently human settlements) and natural lands.
- It recommended declaring cultural lands into ecologically sensitive area (ESA).
- This spanned around 60,000 sq-km or 37% of the total area.
- Recently, the Environment Ministry notified an area of around 56,000 sq km in the Western Ghats as ESA.
- In Kerala, the Kasturirangan committee had proposed an area of 13,000 sq km as ESA.
- But under pressure from the Kerala government, the notified area was brought down to less than 10,000 sq km.

#### Why was the Gadgil panel report rejected?

- The Gadgil panel faced stiff resistance from all political parties, particularly in Kerala.
- It was primarily because of the involvement of private land.
- A large part of the ecologically sensitive zones belonged to private citizens.
- Attempts to introduce social control over the use of private land have often been challenged.
- The restrictions may not have much of an impact on people.
- But they are often instigated, by groups with vested interests, to oppose such moves.
- Popular resistance thus increases the political considerations in implementing such regulations.

## What are its implications?

- Nearly 40% of the granite quarries in Kerala in 2014-15 were located in ecologically sensitive areas.
- Significantly, a quarter of them were in the Gadgil committee-earmarked extremely sensitive ESZ1.
- These are notably some of the regions which have been devastated by the recent floods.
- · The present disaster caused by heavy rainfall in Kerala could not have been completely avoided.
- But its severity could have significantly been reduced, if not for the rejection of WGEEP's proposed zoning.
- If the measures to protect the fragile environment were in place, man-made factors would not have worsened the impact.
- Development in the State in the last several years had materially compromised its ability to deal with a disaster of this
  proportion.

# 13.6 Defining a National Disaster

#### What is the issue?

- Unprecedented rains in Kerala and associated devastation has led to calls for declaring the floods a national calamity.
- It is imperative at this juncture to look into how calamities are actually classified as a national disaster.

# What is a "disaster" legally?

- A "disaster" is defined as per the specifications in Disaster Management Act, 2005.
- Accordingly, a "disaster" means a catastrophe, mishap, calamity or grave occurrence in any area.
- This could arise from natural or man-made causes, or by accident or negligence.
- It should result in
  - i. substantial loss of life or human suffering (or)
  - ii. damage to, and destruction of, property (or)
  - iii. damage to, or degradation of, environment
- It should either be of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area
- By this, a natural disaster may include an earthquake, flood, landslide, cyclone, tsunami, urban flood, heatwave, etc.
- It may also include a man-made disaster of nuclear, biological and chemical nature.

## What is a national disaster?



- The central government has examined proposals in the past to define a national disaster.
- However, there is no provision, executive or legal, to declare a natural calamity as a national calamity.
- Hence there is no fixed criterion to define any calamity as a national calamity.
- In this regard, the 10th Finance Commission (1995-2000) examined a proposal.
- The proposal was to term a disaster "a national calamity of rarest severity" if it affects one-third of the state's population.
- The panel did not define a "calamity of rare severity".
- But it stated that a calamity of rare severity would necessarily have to be adjudged on a case-to-case basis.
- It would have to take into account:
  - the intensity and magnitude of the calamity
  - ii. the level of assistance needed
  - iii. the capacity of the state to tackle the problem
  - iv. the alternatives and flexibility available within the plans to provide relief, etc
- Accordingly, 2013 Uttarakhand flood and 2014 Cyclone Hudhud in Andhra Pradesh were classified as calamities of "severe nature".

#### What are the benefits of such a declaration?

- On declaration as a calamity of "rare severity"/"severe nature", support to the state government is provided at the national level.
- The Centre also considers additional assistance from the National Disaster Response Fund.
- A Calamity Relief Fund (CRF) is set up, with the corpus shared 3:1 between Centre and state.
- When CRF resources are inadequate, additional assistance is considered from the National Calamity Contingency Fund (NCCF).
- NCCF is funded 100% by the Centre.
- Relief in repayment of loans or grant of fresh loans to the affected persons on concessional terms are also considered.

## How is the funding decided?

- It works as per the National Policy on Disaster Management, 2009.
- The National Crisis Management Committee deals with major crises that have serious or national ramifications.
- It is headed by the Cabinet Secretary.
- The inter-ministerial central teams are deputed to the affected states.
- They make assessment of damage and relief assistance required.
- An inter-ministerial group, headed by the Union Home Secretary, studies the assessment.
- It then recommends the quantum of assistance from the NDRF/NCCF.
- Based on this, a high-level committee approves the central assistance.
- It comprises of Finance Minister as chairman, and Home Minister, Agriculture Minister, and others as members.

#### 13.7 Concerns with Coastal Conservation Measures

## Why in news?

National Centre for Coastal Research (NCCR) has found that nearly one-third of the country's coastline is severely eroded.

# What are findings of NCCR?

- Over 234 square kilometres of Indian land has already been lost and more would vanish if erosion continues unrestrained.
- The problem is more formidable on the eastern coast because of frequent and relatively stronger cyclonic activity in the Bay of Bengal than on the western coast though the latter is also not fully immune to it.
- West Bengal is the most vulnerable state, with 63 per cent of its shoreline affected by erosion, followed by Puducherry (57 per cent), Kerala (45 per cent) and Tamil Nadu (41 per cent).

#### What are the reasons behind the erosion?

 Climate change-driven rise in sea level and increased intensity of ocean storms are among the most significant reasons for coastal erosion.



- Human activity closer to the shoreline, such as construction, dredging, quarrying and sand mining, is exacerbating the
  menace.
- In its natural state, this eco-system has a sobering influence on saline winds, cyclones, sea waves and incursion of seawater into underground aquifers.
- Though the coastal zone regulations, amended from time to time, are meant to preserve the seashore yet their implementation has been below par.

## What are the concerns with government measures?

- Union government intends to dilute these norms by bringing a new Coastal Regulation Zone Notification, 2018.
- Under this notification, even some of the fragile coastal areas are mooted to be opened up for tourism and other purposes by simplifying the project clearance procedures and giving greater say to states to manage the seaside tracts.
- Environmentalists feel that this would impair the ecology of the coastal belts and might aggravate sea erosion.
- The changes mooted in the land use of the coastal regulation zone-I and zone-II, for instance, can be a case in point.
- The zone-I comprises ecologically the most sensitive areas, which are currently marked "off-limit" for tourism and infrastructure.
- But the draft notification allows this zone to be used for nature trails and eco-tourism, though with the state government's
  consent.
- Similarly, coastal zone-II, comprising relatively undisturbed areas close to the shoreline, which has a "no development" belt of 200 metres, is proposed to be redrawn to restrict the no-development strip to merely 50 metres.

#### What measures needs to be taken?

- Instead of relaxations government should concentrate on taking anti-erosion measures such as creating wave-breakers and raising vegetative protection belts of the kind successfully tried out in the tsunami-hit areas.
- · The most endangered regions should, at least, be effectively shielded against any kind of potentially erosive activity.
- The seashore needs special care because it harbours valuable mangroves, seaweeds, coral reefs, and other kinds of marine biodiversity, which serve as a source of raw material for several industries, notably pharmaceutical and cosmetic units.
- This belt, moreover, is ecologically highly sensitive because of the constant interaction of marine and territorial ecosystems
  and, therefore, needs cautious handling.

## 13.8 Kaziranga and Brahmaputra Floods

#### What is the issue?

While on one side Kerala is devastated by floods, here is why floods are crucial and beneficious for the Kaziranga national park.

#### Why is Brahmaputra significant for Kaziranga?

- Kaziranga National Park is a 117-year-old park and a UNESCO World Heritage Site since 1985.
- Every year, the Brahmaputra takes away portions of land from the Park.
- Resultantly, on paper the park is 1,030 sq km in area, but in reality it is 884 sq km.
- It also continues to shrink year after year.
- It affects mostly hog deer, swamp deer, wild boar and other few animals.
- These are those that fail to reach higher ground in time after floods.
- Despite the above, Brahmaputra contributes more to, than harms, the wildlife in the park.
- It gives more to the habitat of the world's largest population of one-horned rhinos.
- The unique biodiversity of Kaziranga is rejuvenated by a dynamic system that connects the Brahmaputra with its alluvial floodplains.
- But this year, the park has not been inundated, causing concerns for the park authorities.

# Why are floods essential?

Floods have long been beneficious to Kaziranga and Assam. Click <u>here</u> to know more.





- The deluge happens up to four times a year between April and October.
- Unlike farmlands across the Brahmaputra floodplain, monsoon floods are essential to Kaziranga's ecosystem.
- Kaziranga's plant and animal life are intrinsically linked to the floods.
- Its vast grasslands and beels (wetlands) are revitalised annually by the Brahmaputra's overflow.
- The floods help deposit mineral-rich alluvial soil.
- This facilitates growth of grass and shrubs that are the main source of fodder for herbivores.
- Besides, the floodwaters, while receding, flush out aquatic weeds and unwanted plants.

#### What are the concerns?

- During floods, animals in Kaziranga flee to higher grounds within the park.
- These include 111 highlands built in the late 1990s.
- Each of them is 12 ft high and large enough to accommodate up to 50 large animals.
- There are 33 more being built, each 16 ft high, with a total area of 22 hectares.
- But when 70-80% of Kaziranga is under water, the animals usually flee to the hills of KarbiAnglong.
- · This is located south of the park beyond a National Highway running along its edge.
- Speed of vehicles is regulated during floods, but some animals invariably get killed.
- Of greater worry is the destruction of the hills because of indiscriminate stone quarrying.
- Some of the major quarries are on animal corridors and thus affect their movement.
- Quarrying has increased, and extracted materials have been dumped at sites adjoining the park.
- So if floods happen, Kaziranga's animals could find their escape route blocked or altered.
- Hence, while floods are good for the park, it needs interventions to make them really beneficious for environment and
  ecology.

# 14. INTERNAL SECURITY

# 14.1. Fingerprint, Face Recognition data in CCTNS

#### Why in news?

Home Affairs Ministry is planning to link fingerprint, face recognition data to the Crime and Criminal Tracking Network System (CCTNS).

#### What is CCTNS?

- Aim CCTNS aims at creating a comprehensive and integrated system for effective policing through e-Governance.
- It is envisaged as a countrywide integrated database on crime incidents and criminals.
- It aims to connect all police stations, with their crime and criminal data, with a central database.
- It was conceived as a response to the Mumbai attacks of 2008 and approved in 2009.
- Implementation The system is already in operation in many states but with a limited coverage.
- The first phase of CCTNS is nearing completion.
- 14,500 of 15,500 police stations across the country have been connected.
- Only Bihar, for various administrative reasons, is lagging behind.

# What is the current proposal?

- As part of Phase II of CCTNS, MHA is planning to scale up fingerprint collection from all police stations and link it to CCTNS.
- It also plans to connect the Railway Protection Force's stations and their data, apart from the revenue police stations of Uttarakhand.
- The proposal has provisions for integrating face recognition system and iris scans as well with the CCTNS.
- Integration of these data will boost police department's crime investigation capabilities.
- It will also help civilian verification when needed.



- Also, lakhs of motor vehicle offences, registered by the transport department, has no central database.
- Now, this too would be connected to the CCTNS.
- This would help in ascertaining the history of criminal offences that a vehicle is involved in.

#### What is the need?

- The Central Finger Print Bureau (CFPB) now stores the fingerprint database.
- It currently uses Automated Fingerprint Identification System (AFIS), also called FACTS, for matching fingerprints.
- However, this technology is an outdated one when compared to Federal Bureau of Investigation's technology (FBI of the US).
- Also, while FBI has over 4 crore fingerprints in its database, the CFPB currently has a database of just over 10 lakh fingerprints.
- Hence, scaling up data collection is an essential prerequisite for better criminal investigations.

## Revenue police stations of Uttarakhand

- Uttarakhand is known for a unique police system.
- Although regular police is established, in some hill areas, jurisdiction of the police is yet to be extended.
- So the civil officials of the Revenue Department have powers and functions of Police.
- They perform functions of police like arrest of offenders and investigation.

## 14.2. Facial Recognition for Aadhaar Authentication

#### Why in news?

UIDAI has announced a phased rollout of face recognition feature as an additional mode of authentication.

#### What is the decision?

- The Unique Identification Authority of India(UIDAI) has made facial scanning and recognition for Aadhaar-based authentication mandatory.
- This will accompany the fingerprint- and iris-based scanning procedures already in place.
- This added feature is being piloted for just telecom subscriptions at the moment.
- A minimum of 10% of each company's monthly authentication transactions have to be achieved through facial recognition.
- The phased rollout will allow UIDAI and industry to observe and assess any possible alterations needed.
- These will be incorporated before it is available for services in other sectors.

#### What are the benefits?

- The feature makes Aadhaar more inclusive, with fine-tuning detection of identity-faking.
- Those who are unable to provide a clean fingerprint due to the nature of their work will get benefitted.
- Usually, a labourer is unable to provide fingerprint due to clay and micro-grit getting embedded in the lines of the fingers.
- Many kinds of work also cause an erasure of finger-prints.
- This applies to people in brick-laying to those working with corrosive chemicals such as lime, in the absence of protective gear.
- Even constant paper-handling could erase finger-prints either temporarily or permanently.
- So those who are deprived of services and government benefits because of this systemic issue will now be benefitted.
- Also, the feature will help people affected by certain disabilities and diseases.
- Facial recognition will also serve as a safeguard to prevent scams such as those involving forging finger-print records.

# 14.3. Countering the Surveillance State

## What is the issue?

 Over the past few years, the government has taken several steps to enhance its capacity to monitor citizens through various structures.



• This has led to apprehensions of India becoming a surveillance state due to the government's growing powers to spy on citizens.

## What are the significant government moves to establish surveillance?

- Home Ministry The ministry recently stated its intention to create a centralised nationwide database of fingerprints of criminals.
- This is part of the proposed "Crime and Criminal Tracking Network System" (CCTNS), which also plans to include face recognition capability.
- There are also reports of the ministry seeking access to the Unique Identification Authority of India (UIDAI) biometric database.
- SEBI Securities and Exchange Board of India (SEBI) had set up a panel to review the regulatory powers of it and recommend improvements.
- The panel recentlyrecommended that SEBI be given powers to wiretap and record phone calls in order to enhance its ability to monitor insider trading.
- **Cyber Space** The Netra (Network Traffic Analysis) system for internet monitoring has been operational for several years.
- But its exact capabilities are unknown since it is shielded from the Right to Information Act owing to security implications.
- Further, the government had also mooted creating a social media monitoring hub in order to enable "360-degree monitoring" of the social media activity.
- This was put on hold only after the Supreme Court (SC) observed that it would be akin to "creating a surveillance state".

## What are the implications?

- The above cases effectively mean that the SC judgment recognising the right to privacy as a fundamental right is being undermined in practice.
- Until there are specific laws limiting the surveillance powers of governments, the surveillance activities of the state will likely proliferate.
- But the recent data protection legislation as suggested by the Srikrishna Committee provides too much leeway for the government for surveillance.
- More significantly, even already existing rules limiting the state's powers to infringe on a citizen's privacy are not followed in letter and spirit.
- For instance, although wiretaps are supposed to be authorised only by senior officials for specific purposes, they are done on a truly massive scale.

## What is the way ahead?

- As the years roll by since technological advances are likely to make surveillance systems even more invasive and efficient.
- But technical solutions are also being evolved to better rationalise our ability to share data online like the MIT's "Social Linked Data (Solid)" project.
- However, the mere existence of technology will not prevent the government from coercively collecting data, and laws are needed for curbing them.
- While the state needs to create such capabilities for legitimate reasons, each case of surveillance must be justified by high profile requests.
- Moreover, the right to forget regulations need to be strengthened so that citizens can ask for data to be deleted from government databases.

#### 14.4. Proposal for Integrated Theatre Commands

# What is the issue?

- Military reforms and creation of "Integrated Theatre Commands" (joining Army, Navy and Air force) is being debated widely now.
- In this context, there is a need for clear policy-driven directives that meet India's national security needs and challenges.

## What is the context of the proposed defense reforms?

- "Naresh Chandra Committee report", prepared in the aftermath of Kargil War focused on a restructuring of "higher defense organization" as the first step.
- This was intended to improve synergy among different state departments bureaucracy, military, research and development, intelligence etc.



- While little progress has been made to institutionalize these recommendations, the debate has now gone towards reforming the operational realm.
- Here, the proposal is to set up joint theatre commands where interoperability across services like "army, navy and air force" is being sought to be enhanced.
- Unfortunately, in this regard too there has been no progress, with services getting pitted against one another in a series of turf wars for operational control.

#### What are the concerns?

- The proposal for standalone theatre commands like the pilot in Andaman & Nicobar Islands lacks clarity on the overall picture.
- The discussion of the kind of integration envisioned at the higher echelons (like the post of "Chief of Defense Staff") hasn't been having a clear direction.
- Whether theatre commands would reduce the powers of chiefs of the various services over their resources is also not known currently.
- The Indian Air force has also expressed operational problems in being delegated under theatre commands, due to shortage of resources.
- Notably, with a sanctioned strength of 45 squadrons, the Air force currently operates with just about 32, due to shortage of fighter jets.
- Further, during all previous military initiatives, the Air force under the current command structure has delivered clear and appreciable results.

## What is the way ahead?

- The evolving nature of the warfare has changed the way combat is carried out and the focus on integrated commands might actually be redundant.
- Further, it's only for far off offensive missions that theatre commands are more suited to and home defense is largely done through conventional commands.
- With technological advancements in weaponry, the focus should be more on upending the defense arsenal and its
  operability.
- The future battle field is lesser about mobilizing large armies and more about better surveillance, and cyber capabilities to pre-empt attacks.
- In this context, reducing the tooth-to-tail ratio (combatants-to-support staff) and improving the potency of the tail operators is vital for the military.

## 14.5. Delaying Naga Peace Accord

## What is the issue?

- A Framework Agreement was signed in 2015 to end the decades-old Naga insurgency.
- However, the Naga peace process (accord) is yet to be finalised.

#### What is the Nagaland issue?

- Few sections of the Naga people are particular of forming a separate new country.
- This 'Greater Nagalim' incorporates the entire state of present Nagaland and some Naga-inhabited parts.
- These include parts of Manipur, Assam, Arunachal Pradesh and Myanmar.
- While the area of Nagaland is around 16,500 sq km, Greater Nagalim sprawls over 1,20,000 sq km.
- The demand for Nagalim has always agitated Assam, Manipur and Arunachal.
- Peace talks with Nationalist Socialist Council of Nagaland (Isak-Muivah) [NSCN(I-M)], the then most lethal insurgent group started in 1997.
- BANGLADESH

  Tripers

  Mizorem

  NSCN(IM)'S MAP

  OF 'GREATER

  NAGALIM'

• In 1997, the insurgent group leaders agreed to a ceasefire.



#### What is the 2015 agreement?

- The Framework Agreement was a culmination of so many rounds of negotiations over the years.
- It 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.
- However, it does not change substantially the jurisdictional and administrative authority of neighbouring states.
- The framework agreement did accept special status for the Nagas.
- This gave due regard to the uniqueness of Naga history.

## How has the progress been?

- The Centre's interlocutor recently made a submission before a Parliamentary Standing Committee.
- He noted that it was implied in the agreement that "some special arrangement" would be made for the Nagas.
- With respect to Nagaland there is already a special arrangement.
- Article 371A of the Constitution makes this very clear and a special status has been accorded to them.
- The Nagas initially insisted on the unification of Naga inhabited areas "no integration, no solution".
- But they have now reached an understanding with the government.
- Accordingly, the current boundaries of Northeastern states will not be touched.
- Besides the NSCN-IM, the government also held discussions with six other groups.
- The NSCN-K, which violated the ceasefire in 2015, was not part of the peace process.
- It was declared an unlawful association under The Unlawful Activities (Prevention) Act, 1967.

#### Why is the delay in finalising the accord?

- All stakeholders other than the government appear keen on a conclusion.
- Many details of the 2015 agreement are concealed in mystery.
- The Naga groups have given up the demand for sovereignty and redrawing of boundaries.
- But the issues like a separate passport, flag and armed Naga battallions are still unresolved.

# PRELIM BITS CONSOLIDATION

## **GEOGRAPHY**

## **Holocene Epoch**

- The Holocene Epoch is the current period of geologic time.
- It refers to the last 11,700 years of the Earth's history, the time since the end of the last major glacial epoch, or "ice age."
- Another term that is sometimes used is the Anthropocene Epoch or "The Age of Man".
- The International Commission on Stratigraphy (ICS) had divided this Epoch in to three ages – Greenlandian, Northgrippian and Meghalayan which began at 11,700 year, 8200 year and 4200 year points.
- There are controversies over this newly designated geological age, though the stratification by ICS is official.

## **South Pars**

- South Pars is the world's single largest natural gas field located in Iran
- It is being developed in several phases with foreign collaboration.
- French Energy company had previously held 80% of the stake in this project.
- But following the US sanctions, it has reduced its shares.

# **International Commission on Stratigraphy** (ICS)

- ICS is a body of geological timekeepers and is the largest and oldest constituent scientific body in the International Union of Geological Sciences (IUGS).
- Its primary objective is to precisely define global units (systems, series, and stages) which are basic for the units (periods, epochs and age) of the International Geological Time Scale.
- It sets global standards for the fundamental scale for expressing the history of the Earth.



 China National Petroleum Corporation (CNPC), the world's third-largest oil and gas firm has replaced french company's stake.

#### **Cyclone Warning Centre**

- Union Ministry of Earth Sciences is proposing to set up a Cyclone Warning Centre in Thiruvananthapuram.
- At present, IMD has cyclone warning centres only at Chennai, Vishakhapatnam, Bhubaneswar, Kolkata, Ahmedabad and Mumbai.
- The newly proposed centre will cater to the needs of Kerala and Karnataka with rising incidents of tropical cyclones and extreme weather events in the region.

## 3D Printed Reef

- World's largest 3D-printed reef was installed in Maldives to help save corals.
- The artificial reef was developed using computer modelling and a 3D printer at a lab in Melbourne, Australia,
- It was designed to resemble reef structures typically found in the Maldives.
- It aims to help coral reefs survive the ravages of climate change and warming waters.
- 3D printing technology offers a new way of saving the corals to fight with global warming, bleaching and environmental
  pollution.

#### **Reasons for Intense Rainfall in India**

- NASA using its satellite data has provided an estimate of the intense rainfall that affected India from August 13 to 20.
- The first band extends across the northern, western and eastern part of peninsula which is associated with the general monsoon circulation.
- The second band is closely aligned with the southwest coast of India and the Western Ghats.
- It appeared more concentrated and intense due to an area of low pressure embedded within the general monsoon trough.
- Another contributing factor to the heavy rains in the second band is the Western Ghats.
- Western Ghats along the West Coast of India intercept the moisture-laden air drawn from the warm waters of the Northern Indian ocean and the Arabian Sea as part of the southwest monsoon circulation.
- Global Precipitation Measurement It is a joint mission of Japanese Space Agency and NASA to make frequent observation of Earth's precipitation.

# POLITY

#### **Commercial Courts Bill**

- The Lok Sabha has passed the Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts (Amendment) Bill, 2018.
- It will designate some courts as commercial courts for speedy disposal of commercial disputes.
- It allows adjudication of commercial disputes with a value of at least Rs. 3 lakhs. Previously the value was Rs. 1 crore.
- It allows state governments to establish commercial courts at the district level in the following territories where high courts have ordinary original civil jurisdiction
- In area
- s where High courts do not have original jurisdiction, it allows state governments to set up Commercial
  appellatecourts to consider appeals from commercial courts below the level of a district judge.
- The above amendments were aimed at improving the ease of doing business in India.
- It is also argued that the transfer of all commercial disputes above Rs. 3 lakhs may overburden the commercial courts and defeat the objective with which they were established.

#### **NRI and RTI**

- The central government has recently informed the Lok Sabha that NRI cannot file RTI applications to seek governance-related information from the Central government departments.
- Click here to know more about RTI.

# Deputy Chairman - Rajya Sabha

- Harivansh Narayan Singh was elected as the Deputy Chairman of the Rajya Sabha recently.
- Article 89 of the constitution has the provision about the method of the election of Deputy chairman of Rajya Sabha.



- The Deputy Chairman is elected from amongst the Rajya Sabha members.
- The chairman of Rajya Sabha (Vice President of India) presides over the session of election of Dy. Chairman.
- He/She presides over the proceedings of the Rajya Sabha in the absence of the Chairman of the Rajya Sabha.
- He/She will perform the functions of Rajya Sabha Chairman in case of a vacancy or when the Vice-President is discharging the functions of the President.
- There is also a panel of six Vice-Chairmen, which is constituted every year.
- A Vice-Chairman presides over the meeting of the Rajya Sabha in the absence of the Chairman or the Deputy Chairman.

## **More Assembly Seats for Sikkim**

- Home Ministry has proposed to Union Cabinet to increase the number of assembly seats for sikkim from 32 to 40.
- If approved, it will be the first expansion of the Assembly since Sikkim merged with India in 1975.
- The seats are being increased to accommodate the Limboo and Tamang communities, notified as Scheduled Tribes in January 2003.
- A petition was already moved in the Supreme Court that Limboos and Tamangs were not adequately represented in the Assembly.
- SC has directed the Home Ministry in 2016 to take action regarding this.
- By the Delimitation Act, 2002, the number of seats in an Assembly can be readjusted only on the basis of the first census after 2026.
- The Second Schedule to the Representation of People Act, 1950 and Section 5A of the Representation of People Act, 1951 have been amended to change the Assembly strength.

## **Restricted Areas Permit**

- Under the Foreigners (Restricted) Areas Order, 1963, entire Andaman & Nicobar Islands and part of the Sikkim State have been declared as 'Restricted' Areas.
- A foreign national (except Bhutan) is not normally allowed to visit the restricted areas.
- They require a special permit from the competent authority delegated with powers to issue such a special permit or from Ministry of Home affairs.
- Some areas are notified by the Union Government from time to time that allows foreigners to visit restricted areas with a view to promote tourism.
- Union Home Ministry has recently excluded Andaman & Nicobar Islands from the Restricted Area Permit (RAP) till December 31, 2022.
- · It was notified subject to condition such as,
  - 1. Citizens of Afghanistan, China and Pakistan would continue to require RAP to visit the UT,
  - 2. Citizens of Myanmar will continue to require RAP, which shall be issued only with the prior approval of the Home ministry,
  - 3. Separate approvals of the competent authority would be required for visiting reserved forests, wildlife sanctuaries and tribal reserves.

## **Internal Complaints Committee**

- Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 makes it mandatory for the constitution of Internal Complaints Committee (ICC).
- ICC will probe sexual harassment allegations at workplaces.
- It is mandatory for any organisation with 10 or more employees to constitute an ICC.
- An employer who doesn't do so could face a fine of up to Rs. 50,000.
- An ICC should consist of
  - o A presiding officer, who is a woman employee at a senior level in the same organisation,
  - o At least two employees "preferably committed to the cause of women", and
  - o A member from an NGO or a person "familiar with issues relating to sexual harassment."
- The committee would have powers similar to those of a civil court and would have to complete its inquiry within 90 days.



• Recently, the Corporate Affairs Ministry has amended the Companies (Accounts) Rules, 2014, which mandates companies to disclose whether they have constituted an ICC.

#### **Funding for National Calamity**

- There is no provision in the law or rules for the government to designate a disaster as a "national calamity".
- The funding for disaster relief are governed by the National Disaster Management Policy.
- As per the policy, the State governments have to provide disaster relief from their respective State Disaster Response Funds (SDRFs).
- Additional assistance will be provided from the National Disaster Response Fund (NDRF) only for a "calamity of severe nature".
- Click here to know the criteria to define calamity of severe nature.
- NDRF The NDRF is funded through a National Calamity Contingent Duty levied under GST for selected goods and contribution from any person or institutions.
- **SDRF** It is contributed by the Union government and the respective State governments in a 75:25 ratio for general category States and 90:10 for Special Category States.
- The allocation of the SDRF for each State is done by the Finance Commission, and the Centre contributes its specified share each financial year.

## **GOVERNMENT INITIATIVES**

#### **SAATHI Initiative**

- Sustainable and Accelerated Adoption of efficient Textile technologies to Help Small Industries (SAATHI) is a joint initiative by Ministries of Power and Textiles.
- It aims to accelerate the adoption of energy efficient textile technologies in the powerloom sector and promote cost savings.
- Energy Efficiency Services Limited (EESL), a public sector unit under Ministry of power will help in implementing the initiative.
- EESL will replace old inefficient electric motors with energy efficient motors.
- It would procure energy efficient powerloom and other kits in bulk and provide them to the small and medium powerloom units at no upfront cost.

## ARIIA

- Atal Ranking of Institutions on Innovation Achievements (ARIIA) is a new annual ranking of higher educational institutions.
- It will be based on innovation and will be launched on October 15, the birth anniversary of former President APJ Abdul Kalam.
- It will work parallel to National Institutional Ranking Framework (NIRF) published annually.
- NIRF focuses on research (New knowledge) and ARIIA focuses on innovation (Puts the new knowledge to use).
- ARIIA takes in to account innovation ecosystems supported through teaching and learning, innovative solutions to improve governance of the institution, revenues generated and ideas of entrepreneurship.

## **Niryat Mitra**

- It is a mobile app launched by the Ministry of Commerce and Industry.
- It provides wide range of information required to undertake international trade.
- The information includes policy provisions for export and import, applicable GST rate, available export incentives, tariff, preferential tariff.
- ITC (HS) code refers to Indian Trade Clarification (ITC) and are based on Harmonized System (HS) of Coding.
- It was adopted in India for import-export operations.
- This app works internally to map the ITC HS code of other countries with that of India and provides all the required data without the users bothering about the HS code of any country.

## TRAI App in UMANG platform

• Telecom Regulatory Authority of India has integrated its Mobile Apps namely DND 2.0 &MyCall with UMANG Platform.



- UMANG (Unified Mobile Application for New-age Governance) is developed by National e-Governance Division (NeGD), Ministry of Electronics and Information Technology (MeitY).
- It provides a single platform for all Indian Citizens to access pan India e-Gov services ranging from Central to Local Government bodies and other citizen centric services.
- It provides a unified approach where citizens can install one application to avail multiple government services.
- The services live on the app include Aadhaar, DigiLocker, Bharat Bill Payment System (BBPS) among others.
- 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.

#### **PARIVESH**

- Pro-Active and Responsive facilitation by Interactive, Virtuous and Environmental Single-window Hub was recently launched by the Prime Minister of India.
- It is a Single-Window Integrated Environmental Management System, launched on the occasion of World Biofuel Day.
- It has been designed, developed and hosted by the Ministry of Environment, Forest and Climate Change (MOEFCC), with technical support from National Informatics Centre, (NIC).
- It has been rolled out for online submission, monitoring and management of proposals seeking various types of environment clearances from Central, State and district-level authorities.
- It enables project proponents, citizens to view, track and interact with scrutiny officers, generates online mail alerts to state functionaries in case of delays beyond stipulated time for processing of applications.

#### **UPI 2.0**

- Unified Payment Interface is a platform created by the National Payments Corporation (NPCI) to facilitate faster and smoother digital payments.
- It allows a customer to pay directly from a bank account to another bank account & different merchants, both online and offline, without the hassle of typing credit card details, IFSC code, or net banking/wallet passwords.
- UPI 2.0 is an upgraded version with several new features added to UPI.
- It allows scheduling payment transfers at a later date with pre-authorisation.
- It allows customers to link their overdraft (OD) account with UPI. In the Earlier version, only current and savings account
  can linked.
- It will also let users verify UPI credentials using a QR code.
- Customers can now receive invoices from merchants directly in the inbox to verify the authenticity of credentials.

#### **North East Venture Fund**

- The fund was set up by the North Eastern Development Finance Corporation Ltd. (NEDFi) under the Ministry of Development of North Eastern Region (DoNER).
- The capital commitment to the fund is Rs.100.00 crore.
- The initial contribution of Rs. 75 crore is from DoNER and NEDFi. The balance (Rs.25 crore) has been committed by Small Industries Development Bank of India (SIDBI).
- It is the first dedicated venture capital fund for the North Eastern Region.
- Its primary objective is to promote investments in enterprises on various sectors like food processing, healthcare, tourism etc.
- It will provide resources for entrepreneurs from the region to expand throughout the country.
- Investments from this fund will be monitored by NEDFi.

## **Startup Academia Alliance Programme**

- Startup India under Ministry of Commerce and Industry has recently launched the Startup Academia Alliance programme.
- It is a unique mentorship opportunity between academic scholars and startups working in similar domains.
- It aims to reduce the gap between scientific research and its industrial applications in order to increase the efficacy and impact of these technologies.
- The first phase of the programme was launched in partnership with Regional Centre for Biotechnology and TERI.



#### **Biggest land survey exercise**

- The State government of Maharashtra, along with the Survey of India, had initiated a project, which will survey about 1.20 lakh hectares using drones.
- If the current method "Electronic Total Stations (ETS)" are used, it will take 30 years to survey such a big area.
- ETS is a field instrument for surveying of land, which establishes maps and boundaries for landowners.
- Survey of India will procure the drones, survey the lands, process the images and then hand over the data to the Settlement Commissioner office of Maharashtra.

## **Swachh Manch**

- It is a web-based platform which aims to bring together every stakeholder contributing to the Swachh Bharat Mission under a common platform.
- It will allow stakeholders to create/invite/participate in volunteering opportunities around neighborhoods.
- It will enable uploads of pictorial evidence of citizens and organizations participating in the initiatives as acknowledgement of their efforts and contributions to the cause of 'swachhata'.
- It will also be integrated with the existing Swachhata App to act as a citizens' grievance redressal platform.
- It is going to be launched as part of Swachh Survekshan 2019.

#### **National Logistics Portal**

- The portal is being developed by the Ministry of Commerce and Industry.
- It is a digital platform to bring all stakeholders in the logistics sector on board to cut down transaction cost and time for businesses.
- It will act as a single window online market place for trade.
- Stakeholders like traders, manufacturers, logistics service providers, infrastructure providers, financial services, government departments and groups and associations will all be on one platform.
- There are four main components of the portal logistics e-market place, logistics certification platform, integrated regulatory platform and banking and financial services platform.
- The portal is developed to achieve the government's target of reducing the logistics cost from the present 14% of GDP to less than 10% by 2022.

## **India Energy Efficiency Scale-Up Programme**

- Government of India and the World Bank has signed \$300 million agreement for the India Energy Efficiency Program.
- The program is being implemented by Energy Efficiency Services Limited (EESL).
- It will help scale up the deployment of energy-saving measures in residential and public sectors.
- Under the scheme, EESL will deploy LED bulbs, tubelights, ceiling fans and street lights which will be supplied by the private sector.
- It will help schemes such as UJALA (Unnat Jyoti by Affordable LEDs for All) and SLNP (Street Lighting National Programme).
- This programme will help India meet its Nationally Determined Contributions under the Paris accord.

## **UJALA and SLNP**

- Under UJALA scheme, LED bulbs at 40% of the market price will be distributed to every grid connected consumer.
- India Energy Efficiency Scale-Up Programme will help EESL expand UJALA's deployment of efficient ceiling fans, LED street lights and LED tube lights, along with its alreadysuccessful LED bulbs.
- SLNP scheme aims to replace conventional street light with smart and energy efficient LED street lights by March, 2019.
   Both the schemes are being implemented by EESL.
- India has set the target of avoiding additional generation capacity of 19.6 GW under National Mission for Enhanced Energy Efficiency target.
- Investments from the World Bank will help to achieve the above target and avoid lifetime greenhouse gas emissions.

#### Krishna Kutir

- Krishna Kutir is a special home for 1000 widows set up in Uttar Pradesh by the Ministry of Women & Child Development under SwadharGreh scheme.
- It is the largest ever facility of its kind created by a government organization.
- The construction will be funded by union government and managed by U.P government.



#### **Move Hack**

- Move Hack is a global level hackathon launched by NITI Aayog, to crowd source solutions aimed at the future of mobility in India.
- It aims to bring about innovative, dynamic and scalable solutions to problems pertaining to mobility.
- It is open to individuals from all nationalities, making it a truly global hackathon.
- Move Summit 2018, which is going to be organised by NITI Aayog in New Delhi, will announce the winners of this
  hackathon.
- It is expected that it will provide solutions to mobility-related challenges and pave the way for developing interconnected global community.

## **Sports University**

- The National Sports University Bill, 2018 was recently passed by Lok Sabha. It seeks to establish a National Sports University headquartered in Manipur.
- The university, first of its kind, aims to promote sports education in the areas of sports sciences, sports technology, sports management and sports coaching.
- It will undertake research on physical education, strengthen sports training programmes, and collaborate internationally in the field of physical education.
- As per the bill, key powers of the university includes,
  - i. Prescribing courses of study and conducting training programmes,
  - ii. Granting degrees, diplomas, and certificates,
  - iii. Providing facilities through a distance education system, and
  - iv. Conferring autonomous status on a college or an institution.
- The central government will review and inspect the functioning of the University.
- It will maintain a fund which is contributed by the central, state governments, UGC, income from fees and other sources.
- The government has signed an agreement with two Australian Universities to make the sports university a world-class institution.

## Maharshi Badrayan Vyas Samman

- There are two kinds of awards given by Indian president to language scholars a certificate of honor and Maharishi Badrayan Vyas Samman.
- Scholars in the Sanskrit, Pali, Prakrit, Arabic, Persian, Classical Oriya, Classical Malayalam, Classical Kannada and Classical Telugu languages are eligible.
- A certificate of honor is for scholars aged 60 and above.
- Maharishi Badrayan Vyas Samman is for scholars between 30-45 years of age.
- This distinction is conferred once a year on the Independence Day in recognition of substantial contribution to these languages.

# **GOVERNMENT SCHEMES**

## RashtriyaUchchatar Shiksha Abhiyan (RUSA)

- It is a Centrally Sponsored Scheme launched by Ministry of Human Resource and Development, in 2013.
- Its aim was to increase enrolment in higher education by 30% by 2020.
- It also seeks to increase the spending on higher education by the State Governments by providing strategic funding to eligible State higher educational institutions.
- The funding would flow from the central ministry through the State/UT to the State Higher Education Councils before reaching the identified institutions.
- During its 1st phase, central assistance to States has been provided for creation of one Model Degree College each in 60 Educationally Backward Districts.
- Educationally Backward Districts are those districts where Gross Enrolment Ratio (GER) in higher education was less than the national average of 12.4% based on 2001 census data.
- During its 2nd phase, RUSA focuses on opening new Model Degree Colleges in 'Aspirational Districts', in unserved & underserved districts in North Eastern and Himalayan States.



- Aspirational Districts are identified by NITI Aayog on the basis of composite index.
- The parameters under the index includes,
  - i. Deprivation enumerated under Socio-Economic Caste Census,
  - ii. Health & Nutrition, Education performance indicators
  - iii. Basic Infrastructure.

## Visvesvaraya PhD Scheme

- The scheme is initiated by Ministry of Electronics and Information Technology.
- It is launched with an intent to enhance India's competitiveness in knowledge intensive sectors.
- Its objective is to enhance the number of PhDs in Electronics System Design & Manufacturing (ESDM) and IT/IT Enabled Services (IT/ITES) sectors in the country.
- The salient features of the scheme are
  - o It provides 25% more fellowship amount than most of the other PhD Schemes.
  - o Part-time PhD candidates get one time incentive on completion of the PhD.
  - Scheme also supports 200 Young Faculty Research Fellowships in the areas of ESDM and IT/ITES with the
    objective to retain and attract bright young faculty members in these sectors.

## **Adopt a Heritage Scheme**

- It is an initiative of the Ministry of Tourism, in collaboration with the Ministry of Culture and the Archaeological Survey of India.
- Under the scheme, government invites public sector companies, private sector firms as well as individuals, to develop selected monuments and heritage and tourist sites across India.
- Selected firms and individuals will be appointed as "Monument Mitras" for the development of tourist amenities in the selected heritage sites.
- So far, 31 agencies or Monument Mitras have been approved to adopt 95 monuments/tourist sites.
- MoUs has been signed for adopting Mt. Stok Kangri (in Ladakh), Trail to Gaumukh, (in Uttarakhand), Red Fort (in Delhi) and the Gandikota Fort (in Andhra Pradesh).
- Union Minister of Tourism has recently replied to a question in Parliament, asserting that no site in the state of Assam has been chosen under this project.
- Kaziranga National Park is yet to be included in this project.

## **Unnat Bharat Abhiyan 2.0**

- The Government has recently launched the phase-2 of Unnat Bharat Abhiyan.
- It is the flagship programme of Ministry of Human Resource and Development.
- It aims to link the Higher Education Institutions with at least (5) villages, to enable the institutions contribute to the economic and social betterment of these village communities using their knowledge base.
- The institutions will provide the knowledge and technology support to improve the livelihoods in rural areas.
- It will also help in upgrading the capabilities of both the public and private sectors.
- Both technical and non-technical institutions have been invited to build systems in villages as per their strengths.
- Each selected institute would adopt a cluster of villages / panchayats and gradually expand the outreach over a period.
- IIT Delhi has been designated to function as the National Coordinating Institute for this program.

### **Swadesh Darshan Scheme**

- It is one of the flagship schemes of Ministry of Tourism for development of thematic circuits in the country in a planned and prioritised manner.
- It is a central sector scheme.
- The following thematic circuits have been identified, for development namely North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tirtankar circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Sufi circuit, Ramayana Circuit and Heritage Circuit.



- The first project under the Scheme and North-East India Circuit is going to be inaugrated in Manipur.
- The project covers two sites i.e. Kangla Fort and Khongjom.
- The completion of the projects sanctioned under the scheme would result in increased tourist inflow thereby creating employment opportunities for the local community.
- It is different from "PRASAD" scheme of Ministry of Tourism.
- National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD) focus on development and beautification of the identified pilgrimage destinations.

### **NABH Nirman Scheme**

- NABH (NextGen Airports for BHarat) Nirman is an initiative by the Ministry of Civil Aviation.
- Under the scheme, the government proposed to expand airport capacity by more than five times to handle a billion trips a year.
- The three aspects of NABH Nirman are building of airport capacity through,
  - i. fair and equitable land acquisition,
  - ii. long-term master plan for airport and regional development,
  - iii. balanced economics for all stakeholders

#### **Fame India Scheme**

- FAME India Scheme [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India] was launched in 2015.
- Its objective is to support hybrid/electric vehicles market development and Manufacturing eco-system.
- The FAME India Scheme is aimed at incentivising all vehicle segments i.e. 2 Wheeler, 3 Wheeler Auto, Passenger 4 Wheeler Vehicle, Light Commercial Vehicles and Buses.
- It has 4 focus areas i.e. Technology development, Demand Creation, Pilot Projects and Charging Infrastructure.
- The phase I of FAME expires on March 31, 2018.
- In phase II, the government is targeting a fully (100%) electric fleet for public transport, including buses, taxis and autorickshaws.
- An inter-ministerial panel has recently finalised the roadmap for the II phase spanning over five years and subsidy support for all types of electric vehicles.
- At present, the incentive is being offered on purchase of strong hybrid and electric cars, two-wheelers and three-wheelers.
- The panel decided to offer subsidy to all categories of electric vehicles, including two-wheelers, three-wheelers and four-wheelers.

## **O-SMART**

- Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART) is an umbrella scheme for the development of ocean activities.
- It encompasses a total of 16 sub-projects addressing ocean development activities by the Ministry of Earth Sciences.
- Its implementation period is from 2017-18 to 2019-20.
- It aimed at stepping up ocean research and setting up early warning weather systems.
- The important deliverables under the scheme are,
  - i. Strengthening of ocean observations, modelling, ocean services for fishermen,
  - ii. Setting up marine coastal observatories for tracking marine pollution in 2018,
  - iii. Setting up Ocean Thermal Energy Conversion Plant (OTEC) in Kavaratti in Lakshadweep.
  - iv. Setting up of the state-of-the-art Early Warning Systems to deal with ocean disasters like tsunami, storm surges.
- The technologies developed under this Scheme will help in harnessing the vast ocean resources of both living and non-living resources from the seas.

## Kangla and Khongjom

- Kangla Fort is one of the most important historic and archaeological site of Manipur located in the heart of the Imphal city.
- It served as the seat of Manipur's power till 1891.
- Under the project, restoration and rejuvenation of old Govindajee Temple in Kangla has been carried out.
- Khongjom is the place where the last war of resistance of Anglo Manipur War of 1891 was fought.
- Under the project a Pedestrian bridge and rejuvenation of Kombirei Lake has been carried out.



## NATIONAL INSTITUTES IN NEWS

## Agricultural Scientists' Recruitment Board (ASRB)

- Union Cabinet has recently approved the proposal of restructuring of ASRB.
- ASRB is an independent recruitment agency to various scientific positions in Indian Council for Agricultural Research (ICAR), the premier agency for agricultural research and education in the country.
- After the recent restructuring, the budget head ASRB would be delinked from ICAR and be attached with Department of Agricultural Research & Education (DARE).
- It will now be a 4-member body and have its own cadre of administrative staff.
- It will be done to ensure the autonomy and efficient functioning of the institutions.

### **Competition Commission of India**

- The Competition Commission of India (CCI) is a statutory body of the Government of India responsible for enforcing the Competition Act, 2002.
- Competition Act, 2002 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.
- The Competition Act, 2002, authorises the CCI to impose fewer penalties on firms that provide "full and true disclosure" of
  any cartel they are part of.
- This process of imposing zero or fewer penalities in dealing with cases related to cartelisation is known as Leniency Regime.
- The Lesser Penalty Regulations were first passed in 2009.
- In general, the investigation into cartels has proved to be difficult.
- The leniency regime has the possibility of affecting the formation of cartels among players because that trust is broken.

### **Bureau of Indian Standards**

- Bureau of Indian Standards (BIS) is the National Standard body of India which sets the quality regulations for various product.
- BIS is set to formulate new standards to measure quality of services offered to consumers across different sectors.
- The initial focus will be the 12 champion services sectors identified by the government.
- These include IT, tourism and hospitality, transport and logistics, accounting and finance services, legal services, communication services and construction.
- A framework for quality services will be provided to consumers and a benchmark to deal with consumer complaints will be set by BIS.

#### **PM-STIAC**

- Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC) is a 21-member panel.
- Scientific Advisory Committees (SAC) Cabinet and SAC-PM are dissolved and replaced by PM-STIAC.
- It will advise the Prime Minister on all matters related to S&T, innovation and monitor the implementation of PM's vision on the same.
- It is expected to act as a high-level advisory body to several ministries and execute mission-oriented programmes.
- It will be chaired by the government's Principal Scientific Advisor.
- Secretaries of various scientific ministries such as education, environment and health would be 'special invitees' to the council meetings.

## **BILATERAL ISSUES**

## **Trade Remedy Cooperation**

- Cabinet has recently approved the MoU between India and Korea on Trade Remedy Cooperation.
- MoU will promote cooperation between the two countries in the area of trade remedies such as anti-dumping, subsidy and countervailing and safeguard measures.

## **Air Services Agreement**



- Air services agreements are signed bilaterally to improve seamless air connectivity between two sovereign nations.
- Union cabinet has recently approved the revised air services agreement between India and Morocco.
- Under the agreement, both countries designate one of more airlines.
- · These designated airlines of either country
  - i. Have the right to establish offices in the territory of the other country for the promotion end sale of air services.
  - ii. Can enter into cooperative marketing arrangements with the designated carriers of same party, other party and third country.
  - iii. Can operate any number of services to/from the six points specified in the Route Schedule to the agreement.

## INTERNATIONAL ORGANISATIONS

#### **Inter-American Court of Human Rights (IACHR)**

- The IACHR is an independent, multinational court that handles the human rights cases of people affected by the laws of countries that are members of the Organisation of American States (OAS).
- It has recently given its advisory opinion on the issue of institution of asylum and its recognition as a Human Right.
- It has ruled that all nations have an obligation to ensure safe passage for asylum seekers to their final territory of asylum.
- This assumes significance in the light of asylum of Julian Assange, Editor-in-chief of Wiki Leaks, in Eucadorian embassy in UK
- He has been granted political asylum and citizenship by Eucador in 2012.
- But he is unable to come out of the embassy in U.K because of the arrest warrant issued by U.K court in the charges of sexual assault and rape allegations.
- In this scenario, the advisory opinion by IACHR gives him the moral victory.
- The ruling would meant that, U.K. has an obligation to allow safe passage for Mr. Assange to Ecuador, where he has been granted political asylum as well as citizenship.

# **Organisation of American States (OAS)**

- OAS is the world's oldest regional organization, which came into being in 1948.
- OAS brings together all 35 independent states of the Americas.
- It constitutes the main political, juridical, and social governmental forum in the Hemisphere.
- In addition, it has granted permanent observer status to 69 states, as well as to the European Union (EU).
- The Organization's four main pillars are democracy, human rights, security, and development.

# **Hague Adoption Convention**

- The Hague Convention on Protection of Children and Co-operation in Respect of Inter-country Adoption was adopted in the year of 1993.
- It protects children and their families against the risks of illegal, irregular, premature or ill-prepared adoptions abroad.
- It seeks to prevent the abduction, the sale of, or traffic in children.



- It reinforces Article 21 of the UN Convention on the Rights of the Child.
- The convention operates through a system of national Central Authorities.
- In India, Central Adoption Resource Authority (CARA) is the nodal agency designated to deal with the provisions of this convention.
- Recently, the government of Australia has decided to recommence the adoption programme with India as per this
  convention.



 The Australian government had earlier put the adoptions from India on hold citing the charges of trafficking of child by the Indian agencies for intercountry adoption.

#### **G20**

- The G20 is made up of 19 countries and the European Union.
- G20 Digital Economy Ministerial Meeting was recently held at Salta, Argentina.
- This event took place as part of G20 Leaders' summit, which is going to be held at the end of 2018
- It is going to be hosted by Argentina under the theme "Building consensus for fair and sustainable development".
- Under the Turkish presidency in 2015, G20 leaders recognized the modern period as a critical era of digital transformation.
- The **Digital Economy Task Force (DETF)** was established under the 2017 German presidency, based on the decision adopted in Hangzhou in 2016 under the Chinese Presidency.
- DETF will meet twice in a year to provide recommendations for inclusive development in the era of digital transformation.



## **World Breastfeeding Week**

- August 1-7 is celebrated every year as World Breastfeeding week to encourage breastfeeding and improve the health of babies around the world.
- It commemorates the **Innocenti Declaration** signed in August 1990 by government policymakers, WHO, UNICEF and other organisations.
- This year, WHO is working with UNICEF and partners to promote the importance of helping mothers breastfeed their babies within that crucial first hour of life.
- As per UNICEF, Ireland, France and USA ranked lowest among all countries in the breastfeeding rates.
- Bhutan, Nepal, Sri Lanka, Madagascar and Peru have the highest breastfeeding rates.

## **International Buddhist Conclave 2018**

- The 6th International Buddhist conclave was recently inaugurated in New Delhi by the President.
- The conclave aims to showcase the Buddhist heritage in India and boost tourism in the country.
- Delegates from 29 countries are participating in the conclave.
- It has been organised by the Ministry of Tourism in collaboration with State Governments of Maharashtra, Bihar and Uttar Pradesh.
- The conclave was held in New Delhi, Ajanta (Maharashtra) and site visits to Rajgir, Nalanda and Bodhgaya (Bihar) and Sarnath (Uttar Pradesh) will also be conducted.

Earlier conclaves were held biennially in Bodhgaya &

- 1. New Delhi in 2004
- 2. Nalanda in 2010
- 3. Varanasi in 2012 and 2014
- 4. Sarnath and Varanasi in 2016.

### **Indian Ocean Conference**

- It is an initiative to bring the state leaders, diplomats and bureaucrats from across the Indian ocean region under one roof to strengthen the understanding among each other.
- It is organised by India Foundation, an independent research centre along with the partners from Singapore, Bangladesh and Sri Lanka.
- Earlier, the conference was held in Singapore and Sri Lanka in 2016 and 2017 respectively.
- The 3<sup>rd</sup> edition of Indian Ocean Conference was organised recently in Hanoi, Vietnam.
- The theme of this year's conference is 'Building Regional Architectures', particularly with regards to trade and commerce, security and governance.



## **ECONOMY**

#### **Local Incorporation of Foreign Banks**

- Mauritius-based SBM Group, a foreign bank, has received RBI's approval to operate in the country through a whollyowned subsidiary route.
- It is the first foreign lender to receive such a licence after local incorporation was introduced in 2013.
- At present, many of the foreign banks are operating in the country through opening branches in India.
- In 2013, RBI has introduced the local incorporation model which allows foreign banks to operate as a wholly owned subsidiary (WOS) in India.
- It would involve local incorporation, a local board of directors, and a ring-fenced capital and assets profile that would not be affected by the impact of global events on its parent.
- It is to encourage foreign banks to move to this model following the global financial crisis of 2008.
- It will help in scaling up supply-chain finance, transaction banking and cash management operations.
- In SBM group case, at present, it operates through 4 branches in Mumbai, Chennai, Hyderabad and Ramachandrapuram (A.P).
- After the approval, the bank will soon operate as a banking subsidiary of SBM Group in India under the name of SBM Bank (India) Ltd.

## **Relaxation in Cabotage Law**

- Cabotage in shipping refers to the transport of goods or passengers between two ports within the same country by a foreign shipping operator.
- Union shipping ministry has recently lifted the restrictions on foreign registered vessels on transportation of loaded or empty containers between Indian ports.
- · Earlier, it was the prerogative of Indian registered shipping lines that paid taxes and were governed by Indian laws.
- It is expected that this move will lead to cargo growth in India.
- It will also improve the competitiveness of the Indian traders by reducing transshipment cost at a foreign port.
- For instance, Colombo port thrives on Indian cargo containers that passes through it and it is one of the major container transshipment hubs in the region.
- After the relaxation of rules, Colombo has cut the transshipment rates by 9.5 per cent, allowing foreign ships to operate on local routes.

## FDI in education institutions

- The Government has allowed Foreign Direct Investment (FDI) upto 100% under automatic route in the educational institutions.
- Consolidated FDI Policy of 2017 has accorded this limit but subject to applicable laws, rules/regulations/security
  conditions.
- UGC and All India Council for Technical Education (AICTE) have issued regulations/guidelines on collaboration between Indian and Foreign Universities.
- It is with a view to increase synergy between Indian and foreign academic institutions and to improve curriculum and educational content.
- As per these regulations, Indian Universities and Colleges having the highest grade of accreditation/threshold accreditation, can apply online to the UGC for starting twinning arrangement with Foreign Educational Institutions (FEI) having the prescribed quality.

## **Crypto-Pegged Forex rate**

- Venezuela has recently announced a single exchange rate based on its cryptocurrency.
- Petro is a cryptocurrency launched by the government earlier this year.
- The President has effectively devaluated the petrocurrency by 96 per cent.
- Exchange rates, salaries, pensions and prices are pegged to Petro.
- Now, one petro would equal \$60 and have the equivalent of 360 million bolivars (official currency of Venezuala).
- Since 2003 Venezuela has had strict currency controls, identified by economists as a major cause of its economic crisis.



- It has led to hyperinflation and rendered the bolivar currency near worthless.
- The International Monetary Fund has predicted that inflation in Venezuela would hit 1 million percent this year.

#### **Bond-i**

- Bond-i, an acronym standing for Blockchain Offered New Debt Instrument is the world's first public bond created and managed using only blockchain.
- It is launched by World Bank and the Commonwealth Bank of Australia is the sole manager of the deal.
- The total worth of the bond is 100 million Australian Dollars.
- It is viewed as an initial step in moving bond sales away from manual processes towards faster and cheaper automation.
- World Bank's bonds hold an AAA rating, creating a new bond markets and also engineers new methods to sell and trade securities.
- Blockchain technology refers to the distributed ledger technology that securely records all transactions made on the chain.
- This can help simplify raising capital and trading securities, improve operational efficiencies and enhance regulatory oversight.

#### **Share Buyback**

- A buyback is a mechanism through which a listed company buys back shares from the market.
- It can be done either through open market purchases or through the tender offer route.
- Under the open market mechanism, the company buys back the shares from the secondary market while under tender
  offer, shareholders can tender their shares during the buyback offer.
- A company prefers buyback usually when it has a significant cash reserve and feels that the shares are not fairly valued at the current market price.
- The brought back shares will have increased Earnings per share (EPS) by default.
- It is because a buyback is usually done at a price higher than the then prevailing market price, shareholders get an attractive exit option, especially when the shares are thinly traded.
- A company can use a maximum of 25% of the aggregate of its free reserves and paid-up capital for a buyback.
- Both Institutional investors and retail shareholders take part in a buy back offer.
- SEBI has recently revised the buy back regulations that stipulate 15% reservation for retail shareholders in a buy back offer.
- It gives retail investors a fair share in the offer, which otherwise could see large institutional investors tendering their shares leaving little or no room for small investors.

## **ENVIRONMENT**

#### **Chromium**

- According to the survey by Central Groundwater Board, groundwater in 5 districts of Tamil Nadu are contaminated by chromium (>0.05 mg/ltr) which is above Bureau of Indian Standards limits.
- Chromium is a naturally occurring heavy metal that is commonly used in industrial processes and can cause severe health
  effects in humans.
- It can exist in air, water, soil, and food, and common exposure pathways include ingestion, inhalation, or dermal contact.
- It is commonly found in two forms trivalent chromium (Cr III) and hexavalent chromium (Cr VI).
- Cr III is the most stable form of the element and occurs naturally in animals, plants, rocks, and soils and non-toxic.
- Cr VI rarely occurs in nature and is usually the product of anthropogenic activities and it is neurotoxic, genotoxic and a carcinogen.
- Chromium is used in the manufacture of alloys, inhibitory paints, wood preservatives, fixatives for dyes and tanning, photographic sensitisers and as anticorrosive in cooking systems and boilers.
- The industries with the largest contribution include leather tanning operations, metal processing, stainless steel welding, chromate production, and chrome pigment production.

## **Non-Attainment Cities**

• Non-attainment cities are those cities marked by Central Pollution Control Board that have fallen short of the National Ambient Air Quality Standards (NAAQS) for PM 10 and NO<sub>2</sub> over 5 years.



- There are 94 non-attainment cities in the country.
- These cities were asked as part of the National Clean Air Campaign (NCAP) to implement measures aimed at mitigating air pollution.
- The measures include control and mitigation measures related to vehicular emissions, re-suspension of road dust and
  other fugitive emissions, bio-mass, municipal solid waste burning, industrial pollution, and construction and demolition
  activities.
- The aim of pollution mitigation measures was to cut overall pollution in these cities by 35% in the next three years.

## **International Nitrogen Initiative**

- International Nitrogen Initiative was established in 2003 under sponsorship of the Scientific Committee on Problems of the Environment (SCOPE) and International Geosphere-Biosphere Program (IGBP).
- The key aims of the INI are,
  - 1. To optimize nitrogen's beneficial role in sustainable food production,
  - 2. To minimize nitrogen's negative effects on human health and the environment resulting from food and energy production.
- The INI holds a conference every three years to discuss ideas and exchange knowledge on nitrogen issues.
- The last INI conference was held in Melbourne, in December 2016, adopting Melbourne declaration.
- The next INI conference will be held in Berlin, Germany, in 2020.
- The 5th International Nitrogen Conference in 2010 (N2010) was organized by INI and its South Asia regional centre in New Delhi.
- N2010 enabled INI to bring together its contributions to the Global Nitrogen Assessment.
- Under this, Indian Nitrogen Group has released "The Indian Nitrogen Assessment", India's first-ever such attempt to study nitrogen pollution.
- INI is coordinated by a Steering Committee, led by a chair and six regional centre directors representing, Africa, Europe, Latin America, North America, South Asia and East Asia.
- Recently, Indian scientist-academician, N Raghuram, has been elected Chair of the Steering Committee of INI.

## **World Network of Biosphere Reserves**

- The Khangchendzonga Biosphere Reserve in Sikkim has been included in the UNESCO designated World Network of Biosphere Reserves (WNBR).
- The decision was taken at the 30th Session of International Coordinating Council (ICC) of Man and Biosphere (MAB) Programme of UNESCO held at Palembang, Indonesia.
- It has become the 11th Biosphere Reserve from India to be included in WNBR.
- The core zone of Khangchendzonga National Park was designated a World Heritage Site in 2016 under the 'mixed' category.
- The biosphere reserve is one of the highest ecosystems in the world, reaching elevations of 1, 220 metres above sea-level.

### **Man - Animal Conflict**

- In a first of its kind, the UP government has given its in-principle approval to bring man-animal conflict under listed disasters in State Disaster Response Fund.
- It is to ensure better coordination and relief during such incidents.
- This move will give proper guidelines to handle situations when wild animals venture in human in-habitation.

## **Biodiversity Heritage Sites**

- The Tamil Nadu State Biodiversity Board has initiated steps to identify and declare Biodiversity Heritage Sites (BHS).
- BHS are well defined areas that are unique, ecologically fragile ecosystems.
- Under Biological Diversity Act, 2002 (BDA), the State Government in consultation with local bodies may notify in the official gazette, areas of biodiversity importance as Biodiversity Heritage Sites (BHS).
- The State Government in consultation with the Central Government may frame rules for the management and conservation of BHS.
- The National Biodiversity Authority (NBA) issues the guidelines for selection and management of the BHS.
- It covers terrestrial, coastal and inland waters and, marine ecosystems having rich biodiversity.



• Ameenpur lake in Telangana is the first waterbody in the country to be declared as a BHS.

### **Lab for Conservation of Species**

- The Laboratory for the Conservation of Endangered Species (LaCONES) is India's only facility for conservation of endangered species.
- It is a dedicated facility of CSIR's Centre for Cellular and Molecular Biology (CCMB) in Hyderabad.
- It was set up in 2007 with the support of Department of Biotechnology, Central Zoo Authority, Council of Scientific and Industrial Research (CSIR) and Govt. of Andhra Pradesh.
- It uses modern biotechnologies for conservation of endangered wildlife.
- It supports both in-situ habitat preservation and Ex-situ conservation through captive breeding in controlled environment to restock original wild populations.
- It is the only laboratory in India that has developed methods for collection and cryopreservation of semen and oocytes from wildlife and successfully reproducing endangered blackbuck, spotted deer and Nicobar pigeons.
- It has established Genetic Resource Bank for Indian wildlife and collected genetic resources from 23 species of Indian wild animals.

## Portuguese man-of-wars

- Portuguese man-of-war is a jelly-like marine organism, commonly known as 'bluebottle' or 'floating terror'.
- It was recently spotted on the popular beach in North Goa.
- While most jellyfish stings are harmless to humans and cause only a mild irritation, species like the bluebottle are venomous and can cause harm on contact.
- Goa Tourism's beach safety agency has issued an advisory for tourists as well as residents to refrain from venturing into the sea.

#### **Star Tortoise**

- Directorate of Revenue Intelligence (DRI) has recently seized thousands of star tortoises from that were being smuggled to Bangladesh.
- A star tortoise is one of the most expensive reptiles in the international pet market in countries in Asia, like Malaysia, Singapore, Bangladesh and Sri Lanka, as well as in Europe and America.
- Indian star tortoise is native to India (Andhra Pradesh, Karnataka, Orissa, Tamil Nadu), Pakistan and Sri Lanka.
- It naturally inhabits scrub forests, grasslands, and some coastal scrublands of arid and semi-arid regions.
- It has been included on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- It is placed under Schedule IV of the Wildlife (Protection) Act
- It is listed as "Vulnerable" in IUCN red list of threatened species.
- It is also prohibited for export under the Foreign Trade Policy.

## **India's First Penguin**

- India's first penguin was recently born in Byculla zoo in Mumbai.
- It belongs to the category of Humbolt Penguin, named after cold water current in the coastal areas of Chille and Peru in South America.
- The species is listed as "Vulnerable" in IUCN list of threatened species.
- In 2016, 8 humbolt penguins were imported to Mumbai from South Korea for captive breeding.

## **Directorate of Revenue Intelligence**

- The Directorate of Revenue Intelligence is the apex anti-smuggling agency of India.
- It is working under the Central Board of Indirect Taxes & Customs, Ministry of Finance, Government of India.
- It is tasked with detecting and curbing,
  - Combating commercial frauds related to international trade and evasion of Customs duty.
  - Illicit international trade in wildlife and environmentally sensitive items,
  - Smuggling of contraband, including drug trafficking,
- DRI was previously 'C.R.I.B.' (Central Revenue Intelligence Bureau) which was made in 1953.

#### Hilsa

• It is the most priced variety of fish, originates in the coastal waters of Myanmar.



- It travels to the mouth of the Ganga in West Bengal, Padma and Meghna rivers in Bangladesh to lay eggs in fresh water during the monsoon.
- It is a sensitive species and its breeding ground is mostly concentrated at the confluence of river and oceanic waters.
- After breeding in freshwater, the fish makes its way to seawater by undertaking a return journey to the confluence points.
- It belongs to the family of Clupeidae.
- It is known as "King of Fish" due to its soft oily texture and mouthwatering flavour.

## SCIENCE AND TECHNOLOGY

#### **SPACE**

## Gaganyaan

- Gaganyaan is India's ambitious manned spaceflight mission.
- It aims to send a three-member crew to space for a period of five to seven days.
- It will be launched by ISRO by 2022.
- · It will make India the fourth nation in the world to launch a Human Spaceflight Mission after USA, Russia and China.
- ISRO has developed some critical technologies through demonstrations like Space Capsule Recovery Experiment (SRE-2007), Crew module Atmospheric Reentry Experiment (CARE-2014) and Pad Abort Test (2018).
- The spacecraft will be placed in a low earth orbit of 300-400km.
- GSLV Mk-III launch vehicle will be used to for the mission. It has the payload capacity of 4000 kg satellites in Geosynchronous Transfer Orbit (GTO) and 8000 kg payload to Low Earth Orbit.
- The crew will be selected by Indian Air Force (IAF) and ISRO jointly after which they will undergo training for two-three
  years.
- **Crew Escape System** It is an emergency escape measure to quickly pull the astronaut crew out to a safe distance from launch vehicle during a launch abort.
- Pad Abort test was conducted earlier to demonstrate this to ascertain the efficiency of crew escape system.

#### **Green Propellants**

- ISRO is developing green propellants for use in future rocket & satellite propulsion systems.
- It has made a beginning by developing an eco-friendly solid propellant to eliminate the emission of chlorinated exhaust products from rocket.
- The propellants are based on Glycidyl Azide Polymer (GAP) as fuel and Ammonium Di-Nitramide (ADN) as oxidizer.
- ISRO is also carrying out various technology demonstration projects involving green propellant combinations such as Hydrogen Peroxide (H2O2), Kerosene, Liquid Oxygen (LOX), Liquid Methane etc.
- It has successfully developed ISROSENE, which is a rocket grade version of kerosene as an alternative to conventional hydrazine rocket fuel.
- It has already used Liquid oxygen and liquid hydrogen combination in cryogenic upper stage of GSLV MK-III.

# **SSLV**

- A small Indian satellite launch vehicle has been developed by ISRO, it costs looks set to revolutionise the global satellite launch industry.
- The Small Satellite Launch Vehicle (SSLV) will be an on-demand rocket for small satellites weighing about 500-700 kg, it will act as a quick response space vehicle.
- It will be autonomous and highly intelligent, versatile and capable of adapting to different launch situations and requirements.

## **SUBSEA**

- Systematic Underwater Biogeochemical Science and Exploration Analog (SUBSEA) research program was proposed by NASA in the year 2017.
- It brings together the space and ocean exploration by simulating a Space mission at sea.
- The design of SUBSEA is similar to joint human-robotic space missions in which astronauts give directions to robots in surface based on the commands from Earth based science team.



- Under this programme, under water remotely based vehicles or robots are operated by ship-based human operators, who
  inturn receive guidance from remote science team.
- The target of SUBSEA 2018 is Loihi seamount, an underwater volcano off Hawaii Island.
- The submarine will analyse the warm springs emanating from Loihi.
- The purpose behind this is to predict conditions in other ocean worlds such as moons of Saturn (Enceladus) and Jupiter (Europa).
- It will also help mission design teams to develop methods for doing operations in deep space environments such as Mars.

#### **Aeolus Satellite**

- Aeolus is a European wind survey satellite launched by Arianespace, world's leading satellite launch company.
- It is part of the **Copernicus project**, a joint initiative of the European Union and the European Space Agency (ESA) to track environmental damage and aid disaster relief operations.
- It is the fifth of the ESA's planned Earth Explorer missions and Arianespace's 50th launch for ESA.
- It was recently launched from French Guiana using Vega rocket.
- It will use advanced laser technology to track global winds and improve weather forecasts.
- The satellite is equipped with Doppler wind lidar, an advanced laser system designed to accurately measure global wind patterns from space.
- It will probe the lowermost 30 kilometres of the atmosphere in measuring winds around the Earth.
- It is the world's first space mission to gather information on Earth's wind on a global scale.

## **Galileo**

- Galileo is a navigation satellite program being developed by the European Union as a rival to the U.S. Global Positioning System.
- It was commissioned in 2003 and is due for completion by 2020.
- It is a project of the European Commission and European space agency.
- It consists of 24 satellites in which 22 are currently in orbit and it is likely to reach 30 in 2021.
- It promises eventual real-time positioning to accuracy of one metre or less.
- The project has recently emerged as a flashpoint between Britain and the EU in the Brexit process.
- It is because of UK's access to sensitive security information could be restricted after Brexit.

### Chang'e 4

- Chinese space agency has recently revealed images of the exploration vehicle which will carry Chang'e 4 by the end of this year.
- Chang'e 4 is a Chinese lunar exploration mission.
- The mission will incorporate an orbiter, a robotic lander and rover.
- It will be China's second lunar lander and rover.
- It will reach the far side of the Moon, not visible from the Earth, a feat no country has ever achieved.
- Chang'e-4 will follow China's successful Chang'e-3 mission which soft-landed on the visible side of the Moon in 2013.
- The exploration vehicle is similar to Yutu, China's first lunar rover launched in 2013 along with Chang'e 3.

## **Radio Galaxy Spotted**

- Radio galaxy are colossal galaxies with a super massive black hole in their centre that actively accretes gas and dust from its surroundings.
- They are very rare objects in the universe.
- Most distant radio galaxy ever known, located at a distance of 12 billion light-years was discovered by Indian Telescope.
- It was found using the Giant Metrewave Radio Telescope (GMRT) in Pune, operated by the National Centre for Radio Astrophysics.
- The distance to this galaxy was determined using the Gemini North telescope in Hawaii and the Large Binocular Telescope in Arizona.
- This discovery is important for understanding of the formation and evolution of galaxies.



#### **DEFENCE**

## **Smerch MBRL - Multiple Barrel Rocket Launchers**

- Smerch is designed to defeat soft and hard-skinned targets, artillery and missile systems.
- It features an automatic rocket preparing and launching system and range of up to 90km.
- It was developed by Russia in the early 1980s and entered service with the Russian Army in 1988.
- In December 2005, India placed an order for an initial 38 systems and deliveries began in May 2007.
- A tender for mobility vehicles to carry this Smerch system and missiles developed by DRDO, was opened by the Indian government earlier in 2015.
- For the first time, an Indian vehicle manufacturer (Ashok Leyland) has acquired the tender and it will deliver heavy duty, high mobility vehicles for the above stated purpose.

#### **Advanced Area Defence (AAD)**

- DRDO has recently conducted the successful test of Ballistic missile interceptor AAD from Abdul Kalam Island, Odisha.
- Ballistic Missile Defence (BMD) is a two tired defence shield which aims to destroy enemy ballistic missiles.
- The BMD consists of two interceptor missiles, the Prithvi Defence Vehicle (PDV) and the Advanced Area Defence (AAD) missile.
- PDV/Pradyumna Ballistic Missile Interceptor is capable of destroying missiles at exo-atmospheric (high) altitudes of 50–80 km.
- PDV is a two stage supersonic missile fuelled by solid motor in 1st stage and liquid fuelled in 2nd stage.
- AAD/Ashvin Advanced Defense interceptor is capable of destroying missiles at endo-atmosphere (low) altitudes of 15-30 kilometers.
- AAD is a single-stage supersonic solid fuelled interceptor missile.
- BMD shield is expected to be achieved by 2022.

## **Advanced Medium Combat Aircraft**

- It is India's next indigenous fighter and expected to make its first flight by 2032.
- It is built under India's only **fifth generation aircraft**programme.
- The aircraft will feature geometric stealth which is different from material stealth feature.
- In material stealth, radar-absorbing materials are used to absorb the radio waves thus reducing the radar footprint.
- Whereas, in geometric stealth, the aircraft is designed at such angles to deflect away maximum radar waves to minimise radar cross section.
- Thus, the fighter will have low radar cross section, making it difficult for the enemy to spot it.

## **Smart Anti-Airfield Weapon**

- It is an indigenously developed light weight glide bomb, capable of targeting large enemy infrastructure, like airfields.
- It was recently flight tested from Indian Air Force's Jaguar aircraft successfully.
- It is an accurate bomb and is termed a precision-guided munition (PGM).
- It has "Inertial navigation system" which guides it precisely to its target, typically an enemy airfield up to 100 km away.
- This precisely guided one bomb is more economical than traditional free fall bombs which are less accurate.
- It has another advantage that it can release the bomb at a safer distance to enemy airfield and return without exposing itself to enemy anti-aircraft defences.

# HELINA

- HELINA is an acronym for "Helicopter Launched Nag" missile.
- Nag is a third generation Anti-Tank guided missile indigenously developed under "Integrated Guided Missile Development Programme (IGMDP)" of DRDO.
- Anti-Tank Guided Missiles are primarily designed to hit and destroy heavily armored military vehicles.
- Helina is the helicopter launch variant of Nag, that can be fired from Dhruv advanced light helicopter and HAL Rudra attack helicopter.
- It is a heavier and longer-range version of the vehicle mounted Nag missile with a 7-km range.



- Typically, a land version of Nag missile has a range of only 4 km.
- The missile is guided by "infrared imaging seeker", that homes in on the target's heat signature.
- IGMDP involves the development of Agni, Akash, Trishul, Prithvi and Nag missiles.

## **Operation 'Madad'**

- The operation 'Madad' has been launched by the Southern naval command at kochi.
- It is for assisting the state administration of Kerala and undertaking disaster relief operations due to the unprecedented flooding experienced in many parts.
- Flooding in many parts is due to incessant rainfall and release of excess water from Idukki and other dams.
- INHS Sanjivani has been deployed for rendering medical assistance.

#### **Exercise KAKADU**

- It is a multilateral regional maritime engagement exercise hosted by the Royal Australian Navy and supported by the Royal Australian Air Force.
- It is held biennially in Darwin and the Northern Australian Exercise Areas (NAXA).
- The 14<sup>th</sup> edition of the exercise is going to be held in Darwin this year.
- It would see participation from 25 different countries.
- Exercise derives its name from Kakadu National Park, which is a protected area in the northern territory of Australia.
- Indian ship Sahyadri participated in this exercise.

## **Exercise Maitree**

- It is a joint military exercise between Indian Army and Royal Thai Army.
- It will emphasize in joint counter insurgency and counter terrorist operations in rural and urban scenario under UN mandate.
- It is going to be held in Thailand this year.

## **OTHERS**

## **Thermal Battery Plant**

- World's first-ever thermal battery plant was recently inaugurated in Andhra Pradesh.
- It aims to create a new energy storage form with commercial applications, maintaining a low carbon footprint and less dependent on external factors like weather.
- Conventional battery technology is based on the system of charging/discharging cycles that are driven by electricity. Eg. Lithium ion battery used in electronic devices.
- Thermal batteries use thermal energy to operate, i.e. the energy created by temperature differences.
- The energy transfer in thermal batteries helps store heat when heat travels from one part of the battery setup to the other.
- Working of Thermal Battery It consists of two parts such as a cool zone known as sink, and a hot source called source.
- When the sink of a thermal battery receives heat, it transforms physically or chemically, thereby storing energy, while the source cools down.
- During operation, the sink is cooled down, so it releases the stored energy, while the source heats up.
- Applications Electric vehicles, Telecom infrastructures, Power intensive industries.

## **RUCO** initiative

- Repurpose Used Cooking Oil (RUCO) is an initiative launched by The Food Safety and Standards Authority of India (FSSAI).
- It will enable collection and conversion of used cooking oil to bio-diesel.
- Under this initiative, 64 companies at 101 locations have been identified to enable collection of used cooking oil.

## **INS Sahyadri**

- It is the third and latest indigenously built stealth frigates.
- It belongs to the Shivalik Class of Frigates and forms a part of the Eastern Fleet of Indian Navy.
- It participated in trilateral Malabar war games with Japan and the U.S. off the Coast of Guam.
- It has also participated in RIMPAC (Rim of the Pacific Exercise) off the Hawaii coast and has been adjudged runner-up in an innovation competition.



- FSSAI is also working in partnership with Biodiesel Association of India and the food industry to ensure effective
  compliance of used cooking oil regulations.
- The cooking oil regulation mandates that the maximum permissible limits for Total Polar Compounds (TPC) have been set at 25 per cent, beyond which the cooking oil is unsafe for consumption.
- TPC is one of the reliable variable to keep track of the changes in quality of oil during frying process.
- The repeated use of oil at high temperatures result in oxidative, polymerization and thermal degradation reactions.
- These reactions will lead to changes in their physical, chemical, nutritional and sensory properties which increases the TPC of oil.

#### **Maize Pest**

- An invasive agricultural pest Fall Armyworm (Spodopterafrugiperda) was discovered in Karnataka and Telangana by the Indian Council for Agricultural Research.
- It is a major maize pest in North America and it arrived in Africa in 2016.
- It has spread to Central and Western Africa in 2016 and has proved very hard to control.
- It prefers Maize, but can feed on 80 species of plants, including rice, sorghum, millet, sugarcane and cotton.
- The recent attack in Karnataka is the first report of the pest in Asia. Andhra Pradesh and Tamil Nadu are at immediate risk.
- India's tropical climate could allow the pest to thrive.
- It can be controlled with insecticides, through natural enemies or by inter-cropping.

## **Polio**

- Recently, 28 children in the Democratic Republic of the Congo (DRC) were paralyzed by the circulating vaccine-derived polio virus Type 2 (cVDPV).
- WHO termed the health risk at national level to be very high and the risk of international spread to be high.
- Immunisation using Oral Polio Vaccination (OPV) reduced the outbreak caused by wild polio virus by 99.9% since 1988.
- OPV contains weakened but live polio virus, which can cause paralytic polio.
- The vaccine-virus is excreted by immunized children, it can move from one person to another.
- On the one hand, a vaccinated person protects unvaccinated people she comes in contact with by spreading immunity through faeces.
- But on the other, such circulation allows the virus to stick around and mutate to a more virulent form, raising the spectre of vaccine-derived poliovirus (VDPV).
- VDPV, like imported wild polio, can cause outbreaks in under-immunised population.
- It is for this reason that the eradication of polio worldwide requires OPV to be stopped and replaced with the Inactivated Polio Vaccine (IPV).
- IPV is an injectable form of polio vaccine administered alone or in combination with other vaccines including the OPV (oral polio vaccine).
- IPV does not cause VDPV but protects children equally well against polio.

## **West Nile Virus**

- Kerala Health department has suspected a viral infection similar to West Nile in a woman from Kozhikode district.
- West Nile Virus (WNV), typically spread by mosquitoes, can cause neurological disease and death in people.
- It is a member of the flavivirus genus and belongs to the same family of Japanese encephalitis Flaviviridae.
- Its transmission cycle, by nature, revolves between birds and mosquitoes. Humans, horses and other mammals can be infected.
- Mosquitoes become infected when they feed on infected birds, which circulate the virus in their blood for a few days.
- Human infection is most often the result of bites from infected mosquitoes.
- To date, no human-to-human transmission of WNV through casual contact has been documented.
- It may be transmitted through contact with other infected animals, their blood or other tissues.
- No vaccine is available for humans.



- It is commonly found in Africa, Europe, the Middle East, North America and West Asia.
- It was first isolated in a woman in the West Nile district of Uganda in 1937. In India, it was first noticed in 1956 and it had its presence in Kerala in 1973.

### **Scrub Typhus**

- Scrub Typhus is an acute illness in humans caused by a bacteria.
- It is transmitted by the bite of infected mite larva present in the soil.
- Gorakhpur in U.P is treated as a hub of Acute Encephalitis Syndrome (AES).
- Number of patients affected by AES admitted in the Hospital has increased during Monsoon period.
- To find out the reason behind this, researchers has identified the role of scrub typhus.
- Almost, 65% of the AES patients got infected by Scrub Typhus.
- This finding is important, given that scrub typhus can be treated easily if detected early.
- The increase in infestation of rodents by mites during August-October explains why scrub typhus incidence peaks during monsoon.

#### Wolbachia

- Wolbachia is a tiny bacterium that is present in 60% of all species of insects, including several mosquito species.
- But the bacterium is not usually in the Aedes aegypti mosquito, which is primarily responsible for transmitting dengue, chikungunya and Zika.
- It is one of the world's most common parasitic microbes and the most common reproductive parasite in the biosphere.
- If this bacterium is introduced in mosquitoes, it could stop disease-spreading viruses from replicating, growing and spreading the diseases.
- India and several countries are carrying out experiments to look in to the possibility of breeding Wolbachia in Aedes aegypti.
- The experiment has proved remarkably effective in a small town in Australia, preventing fresh outbreaks of dengue.
- At present, large-scale trials are under way in Brazil, Colombia and Indonesia.

## **Wheat Genome**

- A team of international researchers, including 18 from India decoded the wheat genome.
- It is considered as a breakthrough which will help to identify genes controlling complex agronomic traits such as yield, grain quality, resistance to diseases and pests, as well as tolerance to drought, heat, water logging and salinity.
- It would accelerate the breeding of climate-resilient wheat varieties to help address global food security.

### INDEX AND REPORT

### State Energy Efficiency Preparedness Index (SEEPI)

- The 1st edition of the SEEPI was recently released jointly by the Bureau of Energy Efficiency (BEE) and NITI Aayog.
- The index accessed state policies and programmes aimed at improving energy efficiency in five key sectors.
- The sectors are buildings, industries, municipalities, transportation, agriculture and electricity distribution.
- The criteria taken into account includes Sector-wise energy consumption, Energy saving potential and States' influence in implementing energy efficiency
- It has classified states in to four categories front runner, achiever, contender and aspirant, based upon their efforts towards energy efficiency.
- Kerala topped the list followed by Rajasthan and Andhra Pradesh. These states are categorized as front runners.
- Gujarat, Karnataka, Tamil Nadu and Haryana have been categorised in the second-best category of 'achiever' states.

## **State Investment Potential Index**

- National Council of Applied Economic Research (NCAER), Delhi based non-profit think tank on economics has launched this index in 2016.
- It ranks 20 states and 1 UT (Delhi) based on six parameters.
- They are land, labour, infrastructure, economic climate, governance and political stability and business perceptions.



- Delhi has topped followed by Tamil Nadu, Gujarat, Haryana and Maharashtra.
- Gujarat had topped both the previous editions of the ranking.
- Assam, Jharkhand and Bihar are ranked among the least favourable states for investment.

#### **Global Innovation Index - 2018**

- The 2018 edition of the index was recently launched in New Delhi.
- The index is developed jointly by Cornell University, the Paris-based business school Insead and WIPO in Geneva.
- The top rankers of 2018 are Switzerland, Netherlands and Sweden.
- India's rank has been improved from 60 in 2017 to 57 in 2018. It also ranked 1st in ICT service exports category and 4th in labour productivity growth.
- India is 2nd among middle-income economies (after China) in the index indicators that capture the quality of the innovation inputs and outputs.

## **Ease of Living Index**

- It is an initiative of the Ministry of Housing and Urban Affairs (MoHUA) to help cities assess their liveability vis-a-vis global and national benchmarks. Ranking of cities based on this index was recently released.
- It ranks 111 cities based on four pillars namely Institutional, Social, Economic and Physical.
- Three cities in Maharashtra Pune, Navi Mumbai and Greater Mumbai topped the first Ease of Living Index. The three cities at the bottom of the rankings are Rampur, Kohima and Patna.
- The national capital, New Delhi, is ranked 65 among 111 cities, while Chennai is in 14th place. Kolkata did not participate in the survey.
- The other cities in the top ten include Tirupati, Chandigarh, Thane, Raipur, Indore, Vijayawada and Bhopal.

## **Global Liveability Index**

- The index is released by Economist Intelligence Unit (EIU), research and analysis wing of "The Economist" group, headquartered in London.
- It ranks 140 global cities based on their living conditions. It quantifies the challenges that might be presented to an individual's lifestyle in the cities worldwide.
- The index assigns cities scores on five broad parameters such as stability, healthcare, culture/environment, education, and infrastructure using 30 indicators.
- In this year's Global Liveability Index 2018, Vienna displaces Melbourne as the most liveable city in the world. The other top 10 cities are Melbourne, Osaka, Calgary, Sydney, Vancouver, Tokyo, Toronto, Copenhagen and Adelaide.
- Syrian capital of Damascus continues to be ranked at the bottom, Dhaka in Bangladesh is the second worst and Karachi in Pakistan is the fourth worst.
- Indian cities Delhi and Mumbai ranked at 112 and 117 respectively.
- This index is in contrast with the Ministry of Housing and Urban Affairs' Ease of Living Index for 111 Indian cities wherein Mumbai ranked at number 3, far ahead of New Delhi at a low 65th rank.

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