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MAY 2018
G.S PAPER II

1. POLITY

1.1 Significance of S.R Bommai vs Union of India

What is the issue?

- Recently SC ordered a floor test in Karnataka after the assembly elections.
- In this regard it is significant to refer to the case of S.R. Bommai Vs Union of India.

What is S.R Bommai vs Union of India case?

- S.R. Bommai was the Chief Minister of the Janata Dal government in Karnataka.
- His government was dismissed on April 21, 1989 under Article 356 of the Constitution and President's Rule was imposed.
- The dismissal was on grounds that the Bommai government had lost majority following large-scale defections engineered.
- The then Governor refused to give Bommai an opportunity to test his majority in the Assembly despite the latter presenting him with a copy of the resolution passed by the Janata Dal Legislature Party.
- Bommai party went to Supreme Court against the Governor's decision to recommend President's Rule.

What is the judgement of Supreme Court in this regard?

- Supreme Court issued the historic order, which in a way put an end to the arbitrary dismissal of State governments under Article 356 by spelling out restrictions.
- The verdict concluded that the power of the President to dismiss a State government is not absolute.
- The verdict said the President should exercise the power only after his proclamation (imposing his/her rule) is approved by both Houses of Parliament.
- Till then, the Court said, the President can only suspend the Legislative Assembly by suspending the provisions of Constitution relating to the Legislative Assembly.

What is the significance of this judgment?

- The case become one of the most cited whenever hung Assemblies were returned and parties scrambled to form a government.
- The case put an end to the arbitrary dismissal of State governments by a hostile Central government.
- The verdict ruled that the floor of the Assembly is the only forum that should test the majority of the government of the day, and not the subjective opinion of the Governor.
- SC issues order which stated that, if the Presidential proclamation is not approved by the Parliament then,
 1. Both Houses of Parliament disapprove or do not approve the Proclamation, the Proclamation lapses at the end of the two-month period. In such a case, the government which was dismissed revives.
 2. The Legislative Assembly, which may have been kept in suspended animation gets reactivated.
 3. Also the Court made it amply clear that a Presidential Proclamation under Article 356 is subject to judicial review.

1.2 Madras HC's Decision on Patriarchal System

Why in news?

Madras high court has ruled an outstanding judgement on natural guardian.

What is Natural Guardian means according to judiciary?

- In divorce situations, the parent with custody Of the child is considered the natural guardian.
- The opposite of a natural guardian is an appointed guardian or legal guardian, who will be authorized by a court or a will to care for and make decisions on behalf of a minor child.
- The natural or legal guardian must authorise the financial and medical decisions of the minor children who do not have legal authority to make such decisions.



- In India, on the grounds of Section 6 of the Hindu Minority and Guardianship Act, 1956, the “natural guardian” was the father.

What is the case ruled by Madras HC?

- Madras high court ruled an unusual paternity case where the petitioner was legally separated from her husband, had subsequently conceived a child through artificial insemination.
- The efforts of the petitioner to get authorities to leave the father’s name blank in the child’s birth certificate were repeatedly rejected.
- This was because of the bureaucratic cussedness and notions of hard-wired patriarchy in the officialdom.
- Given the complexities of the case, name of a male friend of the petitioner had been erroneously entered as the child’s father.
- The officials’ unwillingness to accommodate the petitioner’s repeated requests for name deletion and leaving the ‘father’s name’ column blank betrayed an excessive preoccupation with rules and regulations, unmindful of the human dimension.
- In this case Madras HC directed authorities to leave the father’s name blank by sending out signal against regressive notions centred on paternity.

What is the significance of Madras HC’s decision?

- The directive of the Madras High Court in an unusual paternity case advances the progressive spirit of earlier rulings in related matters of gender justice.
- The Madras High Court directive advances the spirit of other similar rulings including the famous 1999 case taken by the Supreme Court.
- That case, in which author the petitioner challenged the RBI’s rejection of an application for investments in her son’s name (with her as the “natural guardian”).
- In this case the petitioner argued that the provision discriminated against women in the matter of guardianship rights over their own children.
- In its ruling, the Court asserted the pre-eminence of the child’s welfare in all considerations, and held that in this instance the mother was the “natural guardian”.
- Thus Madras High court’s decision have steered bureaucratic rules away from the rigidities of a patriarchal system.

1.3 Role of the Governor after Polls

What is the issue?

Karnataka assembly elections has brought focus for a clearer definition on role of a governor after polls.

What happened in Karnataka?

- The Karnataka assembly has 225 seats out of which 224 are elected members and one is the nominated member from Anglo-Indian community by the governor of the state.
- In the recent assembly elections candidates from three major political party contested in the polls and BJP secured 104, Congress 78, JD(S) 37 and others 6 seats respectively.
- After the polls BJP approached the governor of the state to call their party to form the government on the basis of single largest party in the state.
- At the same time the opposition parties got majority of seats by forming collation government, hence approached the governor to give a call to form the government.
- But the governor ordered the BJP candidate to form the government and provided him 15days of time to prove his majority.
- Against this decision the opposition parties approached the SC, in this case SC ordered for a floor test which was to be telecasted live.
- In the end, the Bharatiya Janata Party’s (BJP’s) gambit to turn a hung assembly in Karnataka into victory failed.

What is the reason behind SC's decision?

- The Supreme Court did not allow enough time for the BJP party to peel away members of the other two legislative parties, the Congress and the Janata Dal (Secular).
- In any case morale in the newly created post-poll coalition seemed high.
- Transcripts of phone calls released in the media exposed BJP's move to bribe newly elected members of the Karnataka legislative assembly to stay away from their respective parties.
- SC gave a strong blow to BJP's effort to engage openly in underhand means, when the opposition appeared newly energetic.

How political parties misuse the powers of the governor?

- The office of the governor has been made dull by some of its occupants as the ruling parties in the centre used to freely misuse the governor's powers.
- Depending on the outcome of state elections, various political parties have expected the governor to do different things, and call on different leaders to "prove" their mandate on the floor of the assembly.
- Earlier Congress wanted the governor to call on it, as the largest-single party, in Goa and Manipur, for example.
- This kind of inconsistency is not supportive of constitutional morality.

What measures need to be taken?

- Pre-poll alliances take precedence over post-poll alliances, which, in turn, supersede individual parties in terms of numbers.
- The role of the governor in appointing speakers and scheduling the vote of confidence also needs to be spelled out.
- If politicians do not step in and define a clear set of guidelines for the governor on the occasion of a hung assembly, then the Supreme Court will have to do so.
- Proper political consensus need to be evolved on this matter and the Supreme Court has already addressed the subject on various occasions.
- By this the faith of the electorate in the democratic process and in the power of votes would be restored.

1.4 Abuse of Discretionary Power by Governor

Why in news?

The Karnataka Governor has exercised his discretion and has called BJP to form the government.

What are the discretionary powers of the Governor?

- The Governor exercises his discretion at following instances -
- Selecting a chief minister after elections when there is hung assembly.
- Dismissing the government, if the cabinet no longer holds the confidence of the house.
- Dissolving the Legislative Assembly due to political instability.
- Advising the President to proclaim emergency if the conditions in state are not viable for normal conduct of the government.

How did the Karnataka Governor misuse his powers?

- Governor could not call the party with majority votes i.e., BJP to form government as there was no simple majority.
- But the Governor called the BJP to form the government and prove its majority within 15 days.
- This act is seen as abuse, because the Governor did not take into account the other two major parties Congress and JDP.
- Even though these parties did not gain majority they formed post poll alliance and thus had majority to form the government.



- Since the post of Governor is seen as a link between the Union and State Government, this decision is seen as an act to align with the ideals of the government at the centre and not with people.

What are the concerns due to abuse of power by Governor?

- The people will lose faith in the office of Governor who in most cases act like an agent of the union government and not as an independent office.
- The union government is able to control the affairs of the states with the Governor who is appointed by them and reports directly to the President.
- Abusing the discretionary powers while selecting the parties to form government will break the democratic set up as government is formed by parties who did not have majority support of people.

1.5 Empowering the National Human Rights Commission

Why in news?

Union Cabinet has approved the Protection of Human Rights (Amendments) Bill, 2018

What is National Human Rights Commission all about?

- National Human Rights Commissions (NHRC) is an autonomous public body constituted under the Protection of Human Rights Ordinance.
- It was given a statutory basis by the Protection of Human Rights Act, 1993.
- NHRC is responsible for the protection and promotion of human rights, defined by the Act as rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants.

What are the concerns with NHRC?

- The National Human Rights Commission (NHRC) has been often described as a paper tiger.
- It is unable to protect ordinary citizens from human rights violations, committed at times by the state machinery.
- In one such case, the NHRC, disillusioned by its helplessness in bringing justice in the alleged extrajudicial killings of 1,528 persons in Manipur.

What is Protection of Human Rights bill about?

- Union Cabinet recently approved the Protection of Human Rights (Amendments) Bill in order to protect and promote better human rights in India.
- For more inclusiveness the bill proposes to include one member of the National Commission for Protection of Child Rights within its fold as a deemed member as well as a woman member.
- It proposes to enlarge the scope of eligibility and selection of the Chairperson of the NHRC as well as of State Human Rights Commissions.
- It also proposes to incorporate a mechanism to look into cases of human rights violations in Union Territories.
- Further, it proposes to amend the term of office of the Chairperson and members of the NHRC and the State Human Rights Commissions.

What is the significance of this bill?

- The Amendment Bill seeks to strengthen human rights institutions so that they can discharge their roles and responsibilities effectively.
- The amended Act will be in sync with the agreed global standards and benchmarks on ensuring rights relating to life, liberty, equality and dignity of individuals in the country.
- The amendment to the Protection of Human Rights Act, 1993 will make the NHRC and State Human Rights Commissions more compliant with the Paris Principle.



- Which is based on concerning its autonomy, Independence, pluralism and wide-ranging functions in order to effectively protect and promote human rights”.

1.6 Rajya Sabha – ‘Rules of Procedure’ Reforms

What is the issue?

- Vice President (and RS Chairman) Mr. Venkaiah Naidu appointed a two-member committee for suggesting reforms to the rules of the Upper House.
- V.K. Agnihotri, former secretary general of RS, is heading the committee.

What is the salience of Rules of Procedure?

- Both Houses of Parliament have their own rules of procedure and these rules govern every detail of how the Houses function on a daily basis.
- They determine MPs’ participation in parliamentary proceedings while making laws, passing budgets, questioning the government and representing us.
- In the seven decades since independence, governance has become complicated and the subjects of laws are more technical.
- But the rules governing the functioning of the Rajya Sabha have not kept pace with the times, thereby proving to be a retardant.
- There was hence a need for reforming them and the Agnihotri committee has been constituted with a mandate to submit its report within 3 months.

How did the current Rules of Procedure of Rajya Sabha evolve?

- When Rajya Shaba commenced for the 1st time in early 1952, it didn’t have rules of its own and rather relied on the constitutional assembly.
- Subsequently, a committee of 15 MPs were constituted from with the Rajya Shaba to evolve its own rules of procedure, which was finalised in late 1952.
- But only in 1964, Rajya Sabha got its rules codified into Article 118(1) of the constitution – which continues till now with minor alterations.
- Periodic reviews have been carried out and the last such review for the Rajya Sabha happened in 2009.

What are the critical issues facing Agnihotri Committee?

- The Agnihotri committee has to address four fundamental issues that are currently plaguing our parliamentary system.
- **Firstly** - It seems that the two Houses of Parliament meet mostly for transacting government business (stifling of the opposition voices).
- The committee will have to balance completion of government business with discussions raised by other political parties.
- **Secondly** - The existing mechanisms (like Question Hour) for securing the government’s accountability to Parliament have lost their edge.
- Measures for completely overhauling these mechanisms are required.
- **Thirdly** – As issues facing Parliament are now more complex and technical, strengthening the deliberative prowess of the houses is needed.
- **Finally** – Disruptions in parliament has become increasingly regular.
- Hence, suggesting solutions for protecting the sanctity of parliamentary proceedings is needed.

1.7 SC Judges Appointment - Concerns

What is the issue?

- The government recently sent back the SC collegium's recommendation on judges appointment.
- It has raised concerns on the propriety of the Centre to hold back names from the collegium’s list.

What is the ongoing tussle?

- The SC collegium recommended a list of names to be elevated as Judges of SC.
- Justice K.M. Joseph and senior advocate Indu Malhotra were recommended together.
- Justice K M Joseph is currently the Chief Justice of Uttarakhand High Court.
- The government however approved only Indu Malhotra's name.
- It however returned Justice K.M. Joseph's name for reconsideration.
- This too was done more than 3 months after the Collegium had approved them.
- The collegium recently decided to reiterate its recommendation to elevate Justice K M Joseph as SC judge.
- **When reiterated unanimously, the Centre is bound to act** on the collegium resolution.
- This is as per the law laid down by the SC in the Third Judges Case of 1998.

What are the concerns?

- **Power** - The government's decision to send back the collegium's recommendation was unprecedented.
- It is suspected to have been influenced by some political considerations. Click [here](#) to know more.
- The executive power of the Centre holding back names from the collegium's list needs a reassessment.
- **Seniority** - The Centre has selectively approved some names from a batch of recommendations.
- It could make a difference to the seniority of the judges concerned.
- Notably, seniority is the sole consideration for appointment of the Chief Justice as well as membership of the collegium.
- **Delay** - Justice K M Joseph's name would only be part of the collegium's next set of recommendations.
- This would include proposals to elevate the Chief Justices of some more high courts.
- The collegium seems to address the Centre's concern on fair representation to all high courts.
- However, it remains a concern why collegium did not send its reiteration to the Centre immediately.

1.8 Implications of "Citizenship Amendment Bill, 2016"

What is the issue?

- Citizen amendment bill (2016) seeks to ease norms for religious minorities from neighbouring countries (non-Muslims) to get Indian citizenship.
- But it has polarised regions in border states like Assam as the locals fear a demographic change might be ushered due to immigration.

What is the amendment bill about?

- "Citizenship Act, 1955" allows an immigrant to apply for citizenship if he/she has lived in India for 12 months immediately before applying.
- Additionally, the applicant should've also resided in India for 11 of the last 14 years before the date of application.
- In 2016, an amendment bill was introduced, for relaxing the 11-year cutoff to 6 years out of 14 for immigrants of the 6 religious faiths.
- It is for enabling "Hindus, Sikhs, Buddhists, Jains, Parsis & Christians" from Bangladesh, Afghanistan and Pakistan to apply for Indian citizenship.
- In other words, the amendment seeks to make non-Muslim illegal immigrants from three neighbouring countries eligible for Indian citizenship.
- Also, the government passed two notifications for exempting such immigrants from the Foreigners Act 1946 and the Passport (Entry into India) Act 1920.
- Notably, this meant that they can't be deported – thereby enabling them to continue living in India (provided that they had arrived before 2015).



What were the subsequent political developments in Assam?

- The bill has stirred protests in the Brahmaputra valley of Assam, which has a predominantly Assamese speaking population.
- But on the contrary, the Bengali speaking region of Barak Valley in Assam has largely welcomes the proposal.
- Notably, Barak Valley is a breakaway Bengali speaking region from the erstwhile East-Bengal, which became East-Pakistan (Bangladesh) in 1947.
- Though the region was joined with Assam for administrative convenience, it has retained its Hindu-Bengali identity over the years.
- A parliamentary committee was sent to Guwahati (Brahmaputra Valley), Silchar (Barak Valley) and Shillong (Meghalaya) to seek public opinion.
- The bill received acceptance only in Silchar, and it was met with stringent opposition from Guwahati (Meghalaya's cabinet also opposed it).
- The BJP is pushing for the Bill, but all other parties in Assam are against it.
- Even within the parties, there is a geographical divide as many leaders have contradicted their party line and aligned themselves with their constituencies.
- Assam's BJP CM Sarbananda Sonowal has merely stated that he would step down if the rights of Assam's citizens aren't protected.

What are the different perspectives?

- **Opponents** - They vouch that the bill will aggravate the illegal migration, from Bangladesh, which might alter the demography of the state.
- The bill is also in violation of the 1985 Assam Accord, which was signed to end illegal Bangladeshi migration (irrespective of religion).
- Under the Accord, any person who came into Assam after midnight of March 24th 1971 (just before Bangladeshi war), would be identified as a foreigner.
- **Supporters** - They of the amendments argue that it is to save the victims of Partition (Hindu-Bengalis), who got stuck in east-Pakistan in the initial years.
- Notably, religious minorities in Bangladesh are indeed being persecuted by non-state actors (Islamic extremists) and are said to be in desperation.
- Subsequently, many have crossed the borders and settled down in border states illegally, and they remain stateless for years now.
- The supporters of the amendment bill have also asked for further reduction in the time period for citizenship.

What are the implications of getting the bill passed?

- Since 1971, about 20 lakh Bengali Hindus are living illegally in India.
- The current bill seeks to relax citizenship rules for these people who are living in India illegally (since before 2015) by giving them due recognition.
- Additionally, as the bill also seeks to relax citizenship rules for religious minorities from the neighbourhood, it might enhance influx.
- Notably, some estimates hold that as many as 1.70 crore Hindus who are currently living in Bangladesh, might want to get Indian citizenship.
- Nevertheless, some legal experts have opined that the amendment bill will not stand legal scrutiny as it discriminates on the basis of religion.

Is the Citizen's Registry Update related the amendment?

- An exercise for updating the National Registry of Citizens (NRC, 1951) is currently underway, which is in order to weed out illegal immigrants.
- While the NRC update operates with March 1971 as the cutoff date, the current citizenship amendment bill has set Dec 2014 as the cutoff date.



- Hence, opponents of the bill feel that the amendment undermines the NRC update exercise, but the supporters have disputed this.
- Significantly, NRC Update has also polarised the state as many Bengalis of the Barak Valley fear that they might not find a place in it.

2. GOVERNMENT ACTS, POLICIES AND INTERVENTIONS

2.1 Amendments to “National Medical Commission Bill”

What is the issue?

- National Medical Commission (NMC) Bill proposes to overhaul the medical administration in the country.
- The government is hence said to be considering significant amendments to the Bill - based on the recommendations of the parliamentary committee.

What is NMC bill?

- NMC Bill intends to replace “Medical Council of India” (MCI) with “National Medical Commission” (NMC), as the chief regulator for medical education.
- The initial draft of the bill became highly controversial due to the sweeping changes that it proposed – which saw set of intense debates.
- Hence, it is said that the government is considering making changes to some significant provisions in the original bill.

What are the significant aspects of the bill?

Exit Exam

- It has been proposal to adapt the final MBBS examination into a National Exit Test (NEXT), in order to ensure a standardised potency for practice.
- The present MBBS curriculum is said to be more theoretical in its approach to learning and assessment, and breeds memory based studying.
- As there is little attention is paid to testing conceptual soundness and problem solving ability – a standardised exit exam might help in overcoming these.
- While the exact structure of the proposed NEXT isn't clear, it is expected to be a mix of “descriptive and multiple choice questions”.
- Such standardised and quality testing is likely to nudge universities to improve their quality of teaching and assessment.
- Significantly, the bill needs further clarity is the provisions for students to retake the exam in case of failure (or needing score improvement).

Integrating Medical Streams

- There are nearly 7,70,000 qualified AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy) doctors in the country.
- A bridge course was initially proposed for AYUSH practitioners to hand out allopathic medication – but this evoked the strongest protests.
- Including AYUSH doctors to the allopathic pool will enhance India's doctor-patient ratio to a decent 1:1000 – but there are inherent risks in such moves.
- A mere bridge course for AYUSH doctors to permit them practice modern medicine is a threat to the very integrity of our medical landscape.
- Hence, this idea is likely to be scrapped, although some AYUSH doctors serving in remote areas currently do provide for limited allopathic drugs.

Addressing Quackery

- Nearly 70% of primary care in rural India is provided by informal providers, and quackery is indeed rampant.
- Considering the pathetic shortage of medical practitioners, can be potentially useful resources if they are institutionalised with considerable safeguards.



- They can be trained under short-term courses to create medical assistants entrusted with primary curative, and preventive care.

2.2 Challenges to NHPS Scheme

What is the issue?

- Government had proposed its ambitious “National Health Protection Scheme” (Ayushman Bharat) to insure the masses of India for medical expenses.
- But various challenges in the sector need to be ideated upon prior to implementing the scheme for ensuring effectiveness.

What is NHPS?

- National Health Protection Scheme (NHPS – Ayushman Bharat), was announced in the 2018 union budget.
- While the initiative is clearly a hurried one for political reasons, it is nevertheless welcome as the crisis in the health sector is stark.
- NHPS has two objectives - to enhance the health of the population and reduce the financial risk for those accessing treatment.
- Success in the first is measured by a reduction in the disease burden and subsequent increase in people's longevity.
- The 2nd is to be measured by the extent of affordability of our health systems to the downtrodden and the most marginalised.
- The components of the scheme are
 - Upgrading the 150,000 sub-centres by enhancing their services.
 - Providing health security (5 lakh insurance) to 40% of the population.
- If implemented as integral components, these initiatives can help achieve the goals of equity, efficiency and quality in health services.

What are the challenges?

- **Supply Side** - There is a massive shortage of health services (human resources, hospitals and diagnostic centres in both private and public sector).
- This is made worse by gross inequalities between and within States.
- But significantly, even a well-placed State like Tamil Nadu has an over 30% shortage of medical and non-medical professionals in government facilities.
- Notably, the health budget has neither increased nor is there any policy to strengthen the public/private sector in deficit areas.
- While the NHPS provides portability, it will take time for private entities to register hospitals and expand their area of operations to deficit areas.
- **Demand Side** - The stark regional variations in health care infrastructure across states could cause patients to gravitate toward the southern States.
- Growth of medical tourism (foreign patients) as a government policy is another area that is already creating significant demand.
- The capacity of this infrastructure to take on the additional load of such insured patients from other States is very doubtful.
- **Pricing** - Pricing strategy for health services under the scheme needs to be spelt out clearly as this area had proved controversial in other health too.
- Notably, erratic profiteering by hospitals has been discovered under various state government sponsored insurance schemes thus far.
- Mechanisms are needed to put in place to gather market intelligence and arrive at accurate pricing for medicines and medical procedures.



- **Primary Care** - There is a proposal for upgrading primary care, but the claim seems hollow as no funding has been allocated for the same.
- In the northern States there are hardly any sub-centres and primary health centres are practically non-existent.
- It is estimated that Rs. 30,000 crore will have to be spent if this three-tier primary health-care system is to be brought to minimal health standards.

2.3 Leasing Out Heritage Monuments

What is the issue?

- The Red Fort has been leased out to the Dalmia Bharat Group recently.
- This has led to widespread criticism due to concerns in heritage conservation.

What is the Tourism Ministry's scheme?

- The tourism ministry last year launched the '**Adopt a Heritage**' scheme.
- **Objective** - This was an attempt to increase public-private partnership in conservation and maintenance of heritage sites.
- It invited private and public sector companies to become 'Monument Mitras'.
- **Services** - The '**friends of monuments**' will adopt heritage sites.
- The CSR arms of the Monument Mitras will fund the maintenance and upkeep work.
- They will develop basic and advanced amenities at the monuments.
- **Privileges** - The Monument Mitras will be given "visibility" on the monument premises.
- They will as well get visibility in the tourism ministry's Incredible India website.
- **Selection** - Monument Mitras have been selected through "Vision Bidding".
- It is the process where agency with the best vision for the heritage site gets selected.

What are the checks in place?

- The five-year contract can be terminated if the company does not comply with the ASI guidelines.
- The legal status of the monument will not change after adoption.
- The company will not collect any money from the public unless allowed by the government.
- Also, profits, if any, will be used to maintain and upgrade tourism facilities.
- An Oversight and Vision Committee will keep a watch.
- It is co-chaired by the secretaries of Tourism and Culture, and with the D-G, ASI, as member.
- Projects will be evaluated based on:
 - i. increase in tourist footfall
 - ii. improvement in overall tourism sector perception
 - iii. increase in employment generation

What are the notable adoptions?

- Government-owned NBCC has adopted Purana Qila.
- SBI Foundation, the CSR arm of state-owned SBI, has adopted the capital's Jantar Mantar.
- Yatra.com has Hampi, Qutub Minar, and Ajanta and Ellora caves.
- GMR and ITC have submitted proposals for the Taj Mahal.
- In all, 93 Archaeological Survey of India-ticketed monuments are open for bidding.
- 30 companies have been selected to "adopt" some of these sites.

What is the recent deal?

- As per the MoU, the Dalmia Group will spend Rs 25 crore over the next 5 years.
- It will be on the light and sound show, turnstile gates, app-based multi-lingual audio guide, free Wi-Fi.
- Besides, a cafeteria and construction of ramps for differently-abled visitors (Tactile Paths) would also be taken up.
- The Group will get the privilege of placing their name on signage inside the fort.

**What is the significance of Red Fort?**

- In old times, taking control of the fort was considered a symbolic control of the country.
- Thus, for long, the fort has been synonymous with the regime that ruled India.
- The Red Fort is seen as a symbol of the country's freedom struggle.
- The 1857 War of Independence was led by Bahadur Shah Zafar from the Red Fort.
- That is why every prime minister has addressed the nation from its ramparts every August 15.
- It is also a world heritage site, one of the three in Delhi.
- The other two being Humayun's Tomb and Qutab Minar.

What are the concerns with leasing out?

- Handing over a symbol of the freedom struggle to a corporate entity has raised concerns.
- Allowing corporates to become managers of heritage sites raises doubts on credibility in heritage conservation.
- Corporates will have only limited "access" to core areas.
- Also, there will be "no handing over of monuments".
- Nevertheless, at the sites where there is no ASI involved, the external parties may be allowed to touch the building as well.

What should be done?

- ASI has to be cautious in this regard.
- It must monitor the process and progress of the maintenance and upkeep work.
- India needs a uniform policy about heritage and heritage conservation.
- Experts in the field of conservation, senior historians and archaeologists should be involved in formulating a scheme.

2.4 Conserving Taj Mahal**What is the issue?**

- The iconic Taj Mahal is losing its shiny whiteness due to pollution.
- Despite about 3 decades of conservation efforts, there seems little improvement, which is worrying.

How is the case for Taj preservation proceeding?

- Petitions for the conservation of Taj has been hovering the corridors of Supreme Court for over 3 decades now.
- In a 1996 case, the SC ordered a slew of measures, including the closure of factories in the vicinity, to protect the monument.
- But successive government haven't implemented these in spirit, which has resulted in the monument turning from "Whitish to yellowish" and then to the current state of brownish-green.
- Recently, the SC criticised "Archaeological Survey of India" for its dismal performance in preserving the monument.
- The union government has recently stated that it is mulling options for getting international experts to aid the conservation effort.

What has led to the change of colour of the Taj Mahal's marble?

- Firstly, the polluting industries and the vehicular emissions in the Taj Trapezium Zone (TTZ) area are a major source of pollution.
- Notably, Agra (location of Taj) has been rated the world's eighth most polluted city in terms of PM 2.5 levels as per a recent WHO Report.
- Rampant construction and encroachments along with air pollution only compound the problem
- The second reason is that the Yamuna River, which flows behind the Taj, has become highly polluted (due to Agra's drains).
- The pollution has destroyed all aquatic life in the river, and has also proliferated insects around the river, which swarm the monument at night.
- Fishes that would've eaten water breeding insects and their larvae have now been wiped out, which has led to the increase in population of the latter.
- This insect swarming has led to algal growth on the surface of the monument.



3. SOCIAL ISSUES

3.1 Swachh Survekshan Rankings 2018

What is the issue?

- Union Ministry of Housing and Urban Affairs have released the Swachh Survekshan 2018 ranking, which ranks cities based on cleanliness.
- Indore as the cleanest among 4,203 urban local bodies (ULBs) in the country for the 2nd time in the row, which is followed by Bhopal.

How did Indore retain its prime position?

- **Statistics** - Indore Municipal Corporation (IMC) has been taking out a strong campaign through songs and outreach programs.
- The corporation also claims to have achieved 100% segregation of wet and dry garbage at source.
- Waste is collected once a day from residential areas and twice from commercial areas.
- The IMC has nearly 10,000 employees and officers and they are said to be aided by socially responsible citizenry.
- **Penalties** - Lately, the municipal body began to slap spot fines from Rs 250 to Rs 500 on those spitting on roads, urinating in the open, or littering.
- While efforts to deter habitual offenders haven't worked in the past, a public shaming campaign by naming them in media has been initiated recently.
- **Nudging Push** - IMC distributed free bottle shaped suitably sized dustbins to vehicle owners to encourage them to not throw waste out of windows.
- Innovative cleanliness products for sale are also plenty in the open markets.
- **Technology** - Initiatives to segregate dry waste, installing recycling units in gardens, outside hotels, and marriage halls have been taken up.
- Compost pits were built at fruit and vegetable and markets, and a bio-methanation plant has also been set up.
- **Administrative steps** - IMC replaced garbage bins that used to overflow with suitable containers of sufficient capacity.
- Swachhata Samitis were set up in schools and colleges, and participants in religious and other processions were encouraged to keep the streets clean.
- Public toilets were built in large numbers.

3.2 Challenges of Refugees due to Aadhaar

What is the issue?

Refugees in India are being denied access to essential services due to ambiguity in their eligibility for obtaining Aadhaar cards.

What is the present condition of refugees in India?

- The refugees in India are unable to gain access to essential services owing to lack of Aadhaar, as all services are now linked to the Aadhaar number.
- Even though they meet the UIDAI requirements of having both residence and identification documents, they are unable to apply for Aadhaar.

What are the provisions related to inclusiveness in UIDAI?

- Unique Identification Authority of India (UIDAI) formulated Aadhaar primarily as a tool for socio-economic inclusion and not as a proof of citizenship.
- In lines with this objective, a simple enrolment system was designed to accept wide range of documents as proof of identity and residence to easily procure an Aadhaar number.
- To enable people without any documents to get access to Aadhaar, UIDAI accepts a 'Letter of Introduction' from a wide set of people who are pre-designated as Introducers.

- The Aadhaar Act states that any individual who has resided in India for at least 182 days in the year immediately preceding the date of application is eligible for Aadhaar.
- The UIDAI has also clarified that foreigners fulfilling the above requirement can obtain an Aadhaar, subject to the submission of the prescribed documents.

What are the challenges for refugees in India?

- Refugees are unable to gain access to Aadhaar cards due the lack of clarity & knowledge of the provisions by the local centres where Aadhaar applications are processed.
- While the local centres sometimes recognise Sri Lankan and Tibetan proof of identity and residence, they fail to recognise the refugees holding refugee status documents authorised by UNHCR.
- Many eligible refugees are afraid to apply for Aadhaar due to fear of being wrongly prosecuted as local authorities often incorrectly equate them with illegal immigrants.
- With the increasing enforcement of Aadhaar as precondition to access any service, refugees are not even able to avail services once they had.
- If a solution is not derived sooner, then the refugees will face day to day difficulties like getting sim card, opening bank account, attending schools, renting accommodation, health services, etc.

3.3 Nokku Kooli Cease to Exist

Why in news?

Kerala state government has decided to cease the practice of paying Nokku Kooli (gawking charges) for doing nothing.

What is Nokku kooli?

- Nokku kooli is a type of wage meant for workers overseeing the work of fellow workers.
- This practice has been widespread among the head-load workers who are basically labourers involved in loading and unloading activities.
- A Registered head-load worker demands Nokku kooli for either doing the loading or unloading work himself or when he gets the job done through his own worker.
- Various laws were also enacted to ensure the rights of working to carry loads for loading and unloading were protected.

What was the reason behind Kerala's recent decision?

- Nokku kooli became a notorious practice of demanding wages for just simply seeing the work as it was easy to appoint a worker to do the job.
- Head-load workers also started exhorting huge sums from construction sites where machines move heavy objects, on the grounds of denying their right to work.
- In recent years, the growth of infrastructure and other reality projects has allowed head-load workers to earn huge amounts as Nokku kooli.
- But all this is due to decline in the actual work for head-load workers as markets and packaging methods have changed.

What are the implications of this move?

- The factory owners or builders will be free from the pressures by the trade unions to pay Nokku kooli to the workers and also from disruption in construction work.
- But for the head-load workers, this will affect them badly as they are dependent on Nokku kooli for their livelihood.
- They will suffer as they don't have any alternate ways to earn their livelihood.

3.4 Protests by SC/STs to revoke the SC Verdict on SC/ST Act

What is the issue?

- Recently, the Supreme Court altered some provisions of the SC/ST Prevention of Atrocities Act which triggered a controversy.
- This is seen as a retrospective move and protests are being held all over the country.

What was the SC verdict on SC/ST Act about?

- The SC in pretext of protecting innocent non-SC persons from being victimised by false complaints under the SC/ST Act laid down three guidelines that nullify key provisions of SC/ST law.
- It removed the bar on grant of anticipatory bail for public servants and when the accused is not a public servant, the police may make an arrest only after approval by a senior superintendent of police.
- The SC also held that before registering an FIR, the police may conduct a preliminary inquiry to ascertain the veracity of the complaint.

What are the implications for SC/STs due to this verdict?

- The SC/ST Act held enormous significance for those people not due to the protection it offered from caste injustice, but because its very existence is a testament to SC/STs in a dense casteist society.
- This original mandate was neatly reversed with those three changes made by SC in the SC/ST Act.
- By which, instead of immediately registering an FIR and investigating the accused, the police would doubt the victim and investigate the complaint for veracity.

What are the demands by these protestors?

- To address the concerns regarding the verdict and its future implications, dalits and Adivasis protested all over the country.
- They demanded the government to -
 1. Neutralise the Supreme Court order through an ordinance that would reinstate both the SC/ST Act and the SC/ST Amendment Act, 2015, in their original form
 2. Include both these laws in the Ninth Schedule to protect them from judicial review
 3. Release all the Dalits arrested when a 'Bharat Bandh' was observed to protest this Supreme Court order
- The future of justice for the SC/STs lies in steps of government to understand the complex setup of casteism and provide security for all sects of people.

3.5 Increased Lynching in Tamil Nadu

Why in news?

In recent times there is an increasing number of lynching incidents by mobs in Tamil Nadu.

What are the recent incidents by mobs?

- Mobs are amorphous units that confer anonymity on perpetrators, and emboldening them on the spur of the moment to collectively commit vile acts without a sense of individual guilt.
- Recently an old man, a women and a North Indian has been killed due to lynching by the mobs in Tamil Nadu.

What are the reasons for such incidents?

- The incidents of lynching in parts of Tamil Nadu are unrelated except for the mindless violence and brutality.
- Various reasons stated by the mobs who attack individuals including suspicion of strangers who might kidnap children and a general feeling of insecurity.
- These incidents are due to harsh xenophobic messages spread through social media warning north Indians as child kidnappers in Tamil Nadu.

What measures should be taken by the state government?

- The State police should issue strict warnings that forwarding such messages won't be tolerated and action would be taken on those found to circulate these messages.
- The IT wing of the state government has to analyse such incidents to understand the underlying anxieties of the people.
- Steps must be taken to ensure that people feel secure about their safety and especially their children's safety.
- Counter-information campaign needs to be publicly broadcast and confidence has to be fostered so that residents freely approach the authorities to verify the messages or seek protection.

3.6 Thoothukudi Sterlite Violence

What is the issue?

- The protest against Sterlite Copper Smelting plant in Thoothukudi (Tamil Nadu) had been intensifying in the past few months.



- Recently, amid government clampdown, the protests turned violent, and resulted in the death of more than 10 people.

How did the Sterlite struggle evolve?

- Sterlite stakes claim to be India's largest copper producer and is a major presence in Tamil Nadu's industrial mix.
- But the industry has been under the scanner for environmental violations since its inception in the 1990s.
- Significantly, the Supreme Court in 2013 had imposed an Rs.100-crore fine on Sterlite for pollution.
- As the nearby residencies started to face health and environmental issues, they had been protesting sporadically for many years now.
- But the proposal for the plant's expansion plan intensified protests about a couple of months ago and the situation has remained heated since then.
- TN government has claimed that the plant is currently not operational and that expansion has been stalled.
- But there was complete official apathy to convey this message unambiguously to the protesting masses, thereby attracting suspensions.

What led to the recent violence?

- To mark the 100th day of their protest, the people planned to take a massive rally to the district collector's office.
- Suspecting that the situation would go out of control, the Madras High Court directed the government to take sufficient precautions.
- The TN government has imposed prohibitory orders (sec.144) and stationed a strong police battalion on the ground.
- While the police battalion was indeed strong, the intensity of protesters seemed stronger and police barricades were repeatedly breached.
- Police resorted to lathi charge, which infuriated the mob, which in turn started pelting stones to wade off police actions.
- Subsequent police firing led to the death of at least 10 people, and the infuriated mob vandalised the collectorate.

What is the way ahead?

- **Immediate Response** - The public need to be compensated for their losses and a dialogue needs to be initiated with the affected communities.
- More importantly, the inquiry commission constituted to examine the killings needs to examine the chilling use of disproportionate lethal force.
- Notably, the use of snipers raises the suspension of selective and premeditated killing of protestors, and hardly seems to be a riot control measure.
- The basis on which firing orders were given and the failure of police to appropriately intervene to resolve the crisis needs to be probed.
- **Addressing Concerns** - Madras High Court has presently restrained Sterlite from its proposed capacity expansion plan till further orders.
- A credible environmental audit should be undertaken, without compromising on the 'polluter pays' principle.
- The TNPCB, which usually scores poorly on transparency, should commission credible experts to assess the quality of air and water in Thoothukudi.

What need to be understood from such tragedy?

- Tuticorin tragedy holds a critical lesson for the political leadership of all states that hope to bank on rapid industrialisation to create jobs and move up the development ladder.
- It is that people and politicians do not necessarily view industrial development through the same prism.
- For the former, it can spell dispossession of land or a deterioration of lifestyle, livelihood and health.



- The latter often fail to understand these deep-seated reservations in their quest for the glittering electoral prize of job creation.
- Thus the failure to address the genuine apprehensions of the people imaginatively harmonise corporate action with local concerns.

4. HEALTH

4.1 India's Malnutrition Problem

Why in news?

More than two-thirds of Indian districts in north and central India have high to very high levels of stunting.

What is stunting?

- Stunting is a complex problem which is related to the low height of the children with respect to their age.
- Stunting prevalence (percentage of under-5 children who have a low height for their age) is an important indicator of the nutritional status of children.
- The factors which are believed to implicate stunting are prenatal health, breastfeeding and diet.
- Children in richer South Asian countries are shorter on average than those in poorer Sub-Saharan African countries.
- Much of the height variation among those regions could be explained by various socio-economic factors.

What are recent findings on stunting in India?

- A study on stunting was conducted by the Washington-based agri think tank International Food Policy Research Institute (IFPRI).
- According to the study more than two-thirds of India's 640 districts, mainly in north and central India, have high to very high levels of stunting.
- The study has analysed and spatially mapped data from the National Family Health Survey (NFHS 2015-16) on India's high childhood stunting prevalence of 38.4%.
- A third of the global population of stunted pre-schoolers are in India.
- It concluded that very high-stunting districts could eliminate 71% of the gap with low-stunting districts if they are able to improve on specific issues of gender and inequality.
- These include differences in women's low body mass index, women's education, children's adequate diet, assets, open defecation, age at marriage, antenatal care, and household size.

What measures need to be taken?

- The study shows that only focusing on health- and nutrition-related factors under the existing Integrated Child Development Scheme (ICDS) isn't enough.
- There is need to address gender-related inequalities at the district level so as to reduce stunting.
- Factors concerning women across their life cycles, such as their education, nutrition, age at marriage, care during and after pregnancy, play a significant role, as do the overall socio-economic status of the household need to be addressed.
- Recently Union government has also launched National Nutrition Mission (POSHAN Abhiyaan) with a district-level focus to reduce stunting.

4.2 Suicides

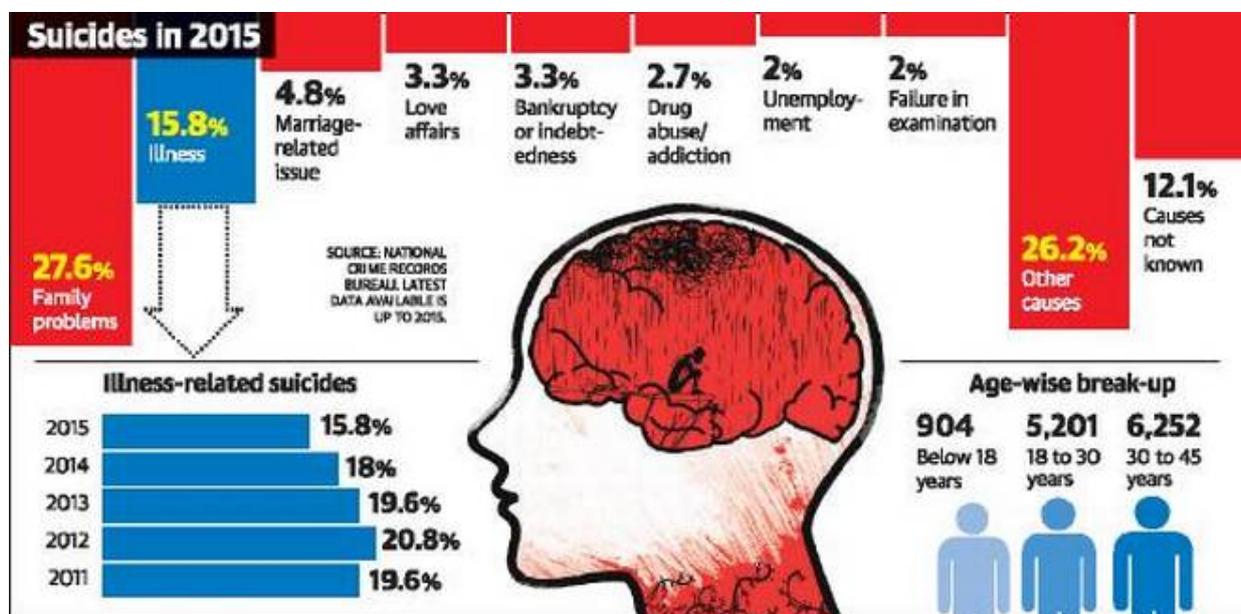
What is the issue?

- A senior IPS officer had recently committed suicide, due to depression caused by a prolonged chronic illness.
- Monitoring the mental health of patients is vital to avoid such episodes.

What is the state of patients committing suicide?

- Family problems account for the most number of suicides in India, accounting for 27.6% of all suicides.
- This is followed by illness driven suicides which stands at a whopping 15.8%.

- Hence, sad moods or odd behaviour should not be brushed aside as a “normal reaction” to being ill and should be seen as possible symptoms of depression.
- Doctors and family need to keep a close eye on symptoms of depression in the patients who happen suffer chronic or long lasting disorders/diseases.



What drives suicides?

- Most patients who commit suicide aren't at their terminal stage but the ones who can't mentally cope with the initial stages of the illness.
- Patients suffering from a prolonged illness are affected as they miss out on a lot in life, which is taken for granted by others.
- They have to make many lifestyle changes and simultaneously cope with the side effects of medication.
- These are highly stressful for a vast majority of the patients as they find it difficult to make peace with their new situation.
- In addition to this, some also have to go through eternal chronic pain, which is the main reason that drives them to suicide.

How do we address this problem?

- While illness is what causes depression usually, in considerable number of cases, it is the medication that creates depression.
- Continuous counselling and keeping a close eye on depressive symptoms in patients is the key to preventing illness driven suicides.
- Counselling should not be isolated as a psychiatric measure, but should rather be incorporated to an extent within the conventional treatment centres.
- All physicians and medical staff treating such patients need to be able to pick up depressive symptoms through a patient's mannerism.

4.3 Concerns of Hepatitis Virus

Why in news?

WHO has listed viral hepatitis as a major public health problem throughout the world and particularly in India.

What is Hepatitis?

- Hepatitis A virus and hepatitis E virus are responsible for sporadic infections and the epidemics of acute viral hepatitis.
- Hepatitis B virus and hepatitis C virus predominantly spread through the parental route and are notorious for causing chronic hepatitis.



- Hepatitis C is caused by a blood-borne virus, which affects the liver, it could spread through the use of injectable drugs, unsafe injection practices and transfusion of unscreened blood.
- However unlike hepatitis B, it is not sexually transmitted and there is no known vaccine for hepatitis C.

What is the findings of WHO report?

- According to WHO Hepatitis is preventable and treatable but remains an acute public health challenge globally and in the Southeast Asia region.
- Viral hepatitis kills approximately 4 lakh people every year in the Southeast Asia region and is responsible for more deaths than HIV and malaria put together.
- WHO says these high numbers are unacceptable as there is an effective vaccine and treatment for hepatitis B, and over 90% of the people with hepatitis C can be cured.

What is the status of Hepatitis in India?

- Water and blood-borne viral hepatitis is an important public health issue in India.
- In India viral hepatitis is causing premature death and disease with over 10 million people chronically infected with hepatitis B and C, this is six times the number of HIV/AIDS patients.
- The fact is that 95% of the people with chronic hepatitis do not know they have been infected and less than 1% have access to treatment.

What are measures needs to be taken?

- Union Health Ministry's National Programme for Control of Viral Hepatitis for 2018-19, with a budget of ₹ 600 crore for the next three years, hopes to screen the vulnerable population and provide free treatment where needed.
- The National Hepatitis Policy will translate into better surveillance and detection of water and blood-borne hepatitis viral infections in various regions.
- Availability of safe and potable water, early screening, vaccination and prevention of misuse of disposable needles and syringes will help to eliminate treatable viral hepatitis.
- Easy availability of the newly discovered drugs at a reasonable price will help to make India free of viral hepatitis by 2030

4.4 Nipah Virus Panic in Kerala

What is the issue?

- The lethal Nipah Virus has been spreading in northern Kerala, creating a health emergency and widespread panic.
- The Zoonotic virus is suspected to have spread to humans from infected bats, and actions to curtail the spread of infections are currently underway.

How is the current episode panning out?

- Nipah spreads from fruit bats to humans and other animals, mainly through bat droppings or bodily remains and then spreads laterally within a species.
- But less than 1% of the fruit bats are estimated to be infected with Nipah virus and it is even rarer for it to infect humans.
- It is indeed highly contagious within humans, and the current episode in Kerala even killed a nurse who was treating another Nipah patient.
- The outbreak has already cost the lives of 10 people out of 12 confirmed cases in Kozhikode and Malappuram of Kerala.
- Notably, the previous serious outbreak in India was in 2001, when the Siliguri district of West Bengal recorded 42 Nipah related deaths.
- The disease has a high mortality rate, but experts stress that there is no reason to panic because Nipah outbreaks have always been generally localised.

What are the symptoms of Nipah?

- The classical symptom is acute and rapidly progressive encephalitis (brain inflammation and pain) with or without respiratory involvement.
- Other more noticeable symptoms include non-productive cough during the early part of the disease.
- Nipah encephalitis comes with 3-14 days of fever and headache, followed by drowsiness, disorientation and mental confusion.
- Acute encephalitis progresses to coma within 24-48 hours.

How can the spread of Nipah be contained?

- Virologists working on the ground have asserted that early diagnosis has helped in containing the spread in the current case.
- Timely laboratory confirmation and aggressive tracing of those who came in contact with patient can contain spread of the virus.
- This is very important because there is no effective specific treatment for the infection and hospitalisation is only to support our bodily immune systems.
- Standard infection control practices (like washing and sanitising) and proper barrier nursing techniques are also critical for curtailing spread.

4.5 Price Controls in the Health Sector

What is the issue?

- Delhi government has proposed to limit profits margins of hospitals, which dealing in drugs, devices and services.
- While this appears to be a sensible way to protect consumers from profiteering, there are implicit challenges.

What is the proposal?

- The proposal is for capping profits for a range of medicines (and other devices) at 50% of the procurement price or manufacturing cost - whichever is lower.
- The recommendations are seen as a reaction to the recent public outrage that followed the exorbitant prices charged by a private hospital for dengue.
- The bulk of profiteering was found to be involving enormous mark-ups on drugs and such items as surgical gloves and syringes.
- But while these recommendations are electorally popular, it doesn't seem practicable under the current context.

What are the problems?

- **Administration** - It is unclear how costs can be computed with accuracy as manufacturers don't divulge manufacturing costs publicly for most products.
- Computing a "fair procurement cost" will be equally tough for the same reason.
- Hence, the basis of the 50% limit can be open to endless interpretation, which would result in numerous litigations being filed.
- Monitoring hospitals to ensure that they follow these pricing norms is a challenge as the state government doesn't have the resources for the same.
- It will also be difficult to stop hospitals from resorting to innovative ways to circumvent the cap on profits (ex: setting up of supply subsidiaries).
- **Supply Issues** – The proposed administered pricing for medical procedures ignores factors such as the – doctor reputation, and quality of service.
- If their earnings are capped, reputed doctors might migrate to other jurisdictions – which might cause shortage of doctors in Delhi.
- Also, it is to be noted that the previous attempt by the central government to cap medical stents (heart implant) had resulted in its supply shortages.
- Such a scenario might get created across medicines if Delhi's comprehensive profit caps are implemented.

What is the way ahead?

- It is indeed a fact that private hospitals had got many subsidies from governments to enable them provide their services at cheaper costs.
- But most hospitals are charging patients exorbitantly in their pursuit for money, a malice that needs to be addressed.

- But considering the multiple challenges, capping costs isn't a sustainable solution and the government needs to address the root cause of the problem.
- The acute shortage of public healthcare facilities is what is giving the private hospitals headroom to fleece the masses.
- Hence, it would be prudent for policymakers to increase healthcare infrastructure which is currently far short of international standards.
- Significantly, with about 2.71 hospital beds per 1000 people, Delhi fares far behind WHO recommended 5 beds per 1000 population.

5. GOVERNANCE

5.1 Reimagining Urban Governance

What is the issue?

- Migration from rural areas is leading to overcrowding of urban areas.
- Hence, a fresh look at urban governance is necessary.

What do the trends say?

- Cities are economically vibrant spaces around the world and draw a large number of rural migrants looking for better prospects.
- This is a sustained trend, particularly in developing countries now, as production, jobs and markets get concentrated.
- 'UN Department of Economic and Social Affairs' released its 2018 'World Urbanization Prospects', which forecasted future trends.
- India, China and Nigeria are expected to lead other countries and account for 35% of the projected growth in urban population by mid-century.
- It estimates 52.8% of Indians will live in cities by 2050, (presently 34%) and that Delhi would become the world's most populous city by 2018.
- This forecast frames the challenge before developing countries in general and India in particular.

What is the state of cities in India?

- Urbanisation in India is a complex process, as it is defined not by a constant migration of rural residents but by the flow of mostly male workers.
- Big cities expand geographically and engulf neighbouring towns, which is also another significant way in which populations are becoming urbanised.
- Even with only about a third of Indian population living in cities, civic anarchy is rampant in the country.
- Housing deficits have led to the proliferation of slums, and lack of enforcement of building norms has left the metros heavily congested.
- Also, poor investment in public transport has fuelled unsustainable levels of private vehicle use.

What are the challenges?

- **Policy Challenges** - There is a strong policy emphasis on improving facilities in rural areas, which is to stymie the migration to urban centres.
- But there is a natural economic magnetism to cities, which is proving too strong to resist, thereby mandating suitable village oriented economic policies.
- Also, designing cities in such a way to ensure that their high levels of productivity and efficiency are not compromised is a big policy challenge.
- Elected Mayors lack the stature and authority to introduce urgently needed reforms despite the 74th Amendment that gave them significant autonomy.
- **Pollution** - World Health Organisation (WHO) has noted that 14 Indian cities are among the top 20 worldwide with the worst air quality profiles.

- Most cities are also unable to collect and dispose of municipal waste scientifically, and simply dump them in the suburbs.
- Such a dismal scenario can only get worse with higher population concentrations, unless city governments come into their own.
- **Integrationist Approach** - While the Centre's goal of homes for all by 2022 is laudable, it is unlikely to be realised without a push from the States.
- Schemes driven by innovation and low-cost approaches and augmenting rental housing should be a priority within the plan.
- Integrating green spaces, open commons and wetlands will make cities cleaner and aesthetically richer.

5.2 Reflecting on Decentralised Governance

What is the issue?

- It's been a quarter century since the introduction of decentralised democratic governance in India.
- It is crucial at this juncture to look back and reflect on the not-so-encouraging performance.

How was decentralised governance established?

- Decentralised governance was established through the 73rd and 74th Constitution Amendments.
- Coming into force in 1993, these gave definite structure to decentralised democratic governance in India.
- They initiated a process with standardised features such as
 - i. elections every five years
 - ii. reservations for historically marginalised communities and women
 - iii. the creation of participatory institutions
 - iv. the establishment of State Finance Commissions (SFCs)
 - v. the creation of District Planning Committees (DPCs), etc

How was it perceived?

- The structural reforms that followed heralded an inclusive, responsive, and participatory democracy.
- It was tasked to deliver economic development and social justice at the grass-roots level.
- Lakhs of "self-governing" village panchayats and gram sabhas were created.
- Over three million elected representatives were mandated to manage local development.
- It was a unique democratic experiment in the contemporary world.

Is the outcome encouraging?

- The impact that this reform package had had on democratic practices in India is not that encouraging.
- Local democracy has not made much headway.
- The village panchayats have not succeeded in enhancing the well-being, capabilities and freedom of citizens.
- They have hardly ensured every citizen a comparable level of basic services irrespective of one's choice of residential jurisdiction.
- There is limited success in ensuring primary health care, access to drinking water supply, street lighting, education, food security, etc.
- There are several success stories but these largely remain as exceptions.
- All these indicate a social failure in local democracy.

What are the possible reasons?

- There seems to be a systemic failure with the third tier of the government.
- **Support** - The economic reforms (1991) were championed by the political class and received support from the bureaucracy.

- But there was no perceptible hand-holding and support by the States to foster decentralised governance.
- **Implementation** - States were able to violate the provisions of Parts IX and IXA (Local Self Governments) with impunity.
- It includes postponing elections, failing to constitute SFCs and DPCs, etc.
- But significantly, these are the provisions envisaging the delivery of social justice and economic development at the local level.
- It appears that the judiciary has been indifferent to the two momentous amendments and their potential.
- **Decentralisation** - There was no institutional decentralisation except in Kerala.
- The roles and responsibilities of local governments remain ill-defined despite activity mapping in several States.
- States continue to control funds, functions and functionaries.
- This makes autonomous governance almost impossible.
- **Interference** - Most States continue to create parallel bodies.
- These interfere with the functional domain of local governments.
- These are often spheres of ministers and senior bureaucrats.
- E.g. Haryana has created a Rural Development Agency, presided over by the Chief Minister.
- Legislative approval of these parallel bodies legitimises the process of weakening decentralised democracy.
- **DPCs** - DPC is tasked to draft a district development plan.
- The plan takes into account spatial planning, environmental conservation, rural-urban integration, etc.
- This is a potential instrument to reduce the growing regional imbalances.
- But there is no mandate to create a DPC.
- E.g. in States like Gujarat, the DPC has not been constituted.
- **Reservation** - The constitutional amendments provide for the reservation of seats for Adivasis, Dalits and women.
- However, even now, these categories remain on the periphery.
- They are still the victims of atrocities and caste oppression rather than being active agents of social change.
- **Expenditure** - The local government expenditure as a percentage of total public sector expenditure is only around 7%.
- This is way below 24% in Europe, 27% in North America and 55% in Denmark.
- The own source revenue of local governments as a share of total public sector own source revenue is only a little over 2%.
- If disaggregated, the Panchayat share is a negligible 0.3%.
- This speaks of the fiscal weakness of village panchayats.

How has financial devolution been?

- Article 280 established the Finance Commission to empower the third tier.
- **11th FC** - Following 11th Finance Commission recommendations, there were reforms in budget and accounting.
- There were efforts towards streamlining the financial reporting system at the local level.
- Yet, there is no credible fiscal data base and budget system among local governments still.
- The accountability arrangements remain very weak even after 25 years.
- **Further**, the 13th Finance Commission recommended linking the grants to local governments to the divisible pool via Article 275.

- Article 275 deals with grants from the Union to certain States.
- The 14th Finance Commission enhanced the grant substantially but did not take the change forward.
- The Terms of Reference of the 15th Finance Commission seeks to abolish Article 275.
- This would ignore an integrated public finance regime, and in no way would help decentralisation.
- Local democracy in India needs urgent attention in the interests of democracy, social inclusion and cooperative federalism.

5.3 Women in the Renewable Sector

What is the issue?

- Government has committed to installing 175 GW of renewable energy by 2022.
- This provides an immense opportunity for employing women and reducing poverty in rural areas.

What is the current state of women workforce in India?

- More than 270 million Indians live in poverty (World Bank Report) and India also ranks very poorly on female labour force participation.
- **Constraints** - Some estimates hold that India can increase its GDP by up to 60% by 2025 by enabling more women to participate in its workforce.
- But social and cultural constraints can prevent this from becoming a reality.
- Many women who work outside home still have primary household and parenting responsibilities that need to be balanced with their work life.
- **Opportunity** - The government has committed to installing 175 GW of Renewable Energy (RE) by 2022.
- This provides an immense opportunity for women and the rural poor.
- Notably, as many as 3.3 lakh jobs are expected to be created in the wind and solar energy sectors alone.

What is the situation in Renewable sector?

- India's RE industry presently has low participation of women, and even the few women engaged are mostly daily wage labourers.
- Moreover, the working conditions on many sites are not always suitable for women as they are devoid of safety and support systems.
- In the current situation, jobs requiring some skilling are completely closed for women as formal education and training largely continues to elude them.
- One has to pass 12th grade to get into technical training institutions and these institutions are largely concentrated in urban and semi-urban centres.
- These are significant entry barriers for rural women workforce participation, and this hurdle only enhances with the burden of household responsibilities.
- Consequently, there are very few women in production, facilities, and operations and maintenance roles in the RE sector.

Why is RE sector significant for women empowerment?

- A recent study has stated that some tweaks in the system might enable the RE sector to impact poverty by opening up opportunities for the poor.
- Particularly with the growth of the decentralised RE and off-grid energy sector, there is significant potential to include local women in the workforce.
- Hence, the government, enterprises, training institutes and civil society should work together to tap the potential of rural women for RE projects.

- Importantly, for such interventions to be successful, it needs to be designed with women at the centre and not as an afterthought.

5.4 Social Audit - Public Accountability

What is the issue?

Social audits can potentially become a powerful democratic tool to ensure a citizen-centric mode of accountability.

What is social audit?

- Social audit is where information is to be proactively shared amongst people.
- They can, in turn, “performance audit” a service or programme.
- It involves people in planning, implementation and evaluation phases.
- Sharing information, recording comments and acting on findings are the processes involved.

What is the current need?

- The breakdown of credibility in various public institutions in the recent past has become a concern.
- This has highlighted that democracy and especially public funds need eternal public vigilance.
- Democratic governance needs the citizen to be legally empowered.
- The Citizen should be able to ask questions, file complaints, and be a part of the corrective process.
- Social audit could be a solution towards this end.

How is Rajasthan's Jan Sunwai a model?

- It was conceptualised in the mid-1990s by the Mazdoor Kisan Shakti Sangathan (MKSS).
- Jan Sunwais are village-based public hearings on development expenditure.
- The Jan Sunwai campaign was organised in 5 different development blocks of central Rajasthan.
- It helped establish the Right to Information (RTI) as a potent, usable people’s issue.
- Public readings of informally accessed development records had dramatic outcomes.
- **Information** - The Jan Sunwai facilitated the reading of information and recorded the people’s response.
- Information and facts inconsistent with reality were exposed.
- E.g. Information about payments made to dead people and non-workers
- Unfinished buildings without doors, windows or a roof were shown as audited and ‘complete’.
- Local residents could immediately become aware of these and reacted to it sharply.

What was the outcome?

- The people made four sharply focussed demands and circulated them in a pamphlet:
 - i. full and open access to records of development expenditure
 - ii. presence and accountability of officials who are responsible to answer people’s questions
 - iii. immediate redress of grievances, including the return of misused money to its intended purpose
 - iv. mandatory ‘social audits’
- The effective institutionalisation of this platform gave people and communities real monitoring powers.

What is the concern?

- The RTI Act brought into effect the first prerequisite for social audits.
- Thus, information became the core of people's empowerment in Jan Sunwais.
- However, it became obvious that information itself is not enough.

- It gave access to government records and ordinary people were armed with information.
- But it led to frustration when they were unable to obtain any redress.

How do social audits address this?

- Social audits facilitate acting upon the inconsistent facts.
- It transfers the power of scrutiny and validation to the people.
- It thus essentially facilitates a citizen-centric mode of accountability.
- By this, transparency can be combined with an institutionalised form of accountability to the people.
- It shifts the relationship between the powerful and the powerless from patronage to rights.

What are the legal backings to social audit?

- Nationally, institutionalised social audits have begun to make real progress only recently.
- MGNREGA was the first law to mandate social audit as a statutory requirement.
- In 2017, Meghalaya became the first State to pass and roll out a social audit law to cover all departments.
- **CAG** - The Office of the CAG developed social audit rules for the MGNREGA in 2011.
- It conducted a performance audit in 2015.
- A year later, it formulated **social audit standards** in consultation with the Ministry of Rural Development.
- The standards could ensure that the social audit process is viable, credible and true to first principles of social accountability.
- **Supreme Court** - The SC has recently passed a series of orders, giving social audits the infrastructural framework they need.
- It has ordered that the CAG-formulated Social Audit Standards be applied.
- Accordingly, it ordered setting up truly independent state-supported State Social Audit units.
- It has also ordered that social audits be conducted of Building and other Construction Workers Cess.
- It is also required for the implementation of the Juvenile Justice Act.

5.5 Controversy in CLAT

Why in news?

Many cases have been filed in various High Courts due to controversy in conduct of national law entrance exam.

What is CLAT?

- The Common Law Admission Test (CLAT) is the biggest and most important of all law entrance examinations in India.
- It is conducted by India's 19 National Law Universities by rotation, in the order of their dates of establishment.
- CLAT was organised for the first time in 2008 which enabled more than 40,000 candidates to take exams and get enrolled in law institutions every year after their Class XII exam.
- It is an online exam which covers a wide range of topics including general knowledge and current affairs, numerical ability, legal aptitude, and logical reasoning for 200 marks in 120 minutes.
- This year, the organising university was the National University of Advanced Legal Studies (NUALS), Kochi.

What is the controversy about?

- The candidates appearing for the CLAT this year faced many challenges in completing the exam successfully due to technical glitches and mismanagement.
- Mismanagement was on part of the organising university NUALS, hence majority of the candidates were affected and now have lesser chances of clearing the exam with good scores.
- Many cases have been filed in various High Courts as these issues would be directly upsetting the candidates' careers.



What were the issues faced by the candidates?

- There was technical error in the computers, which increased the time taken to navigate between questions.
- Many of the students didn't receive computers which weren't functioning properly and that was the case with almost all computers in many centres.
- Some students complained that they had to keep entering passwords for every answer and this reduced the time which they had to answer other questions.
- Air conditioners weren't functioning in many centres which affected the servers which had to hold the load of so many computers.
- Even signing attendance sheets caused much trouble, as students were interrupted between exams to fill the sheets.
- There were no invigilators in some labs to oversee such issues as and when they arise.

6. INDIA AND IT'S NEIGHBORHOOD

6.1 CPEC - The Way Ahead

What is the issue?

- China-Pakistan Economic Corridor (CPEC) is a thorn in India-Pakistan relations, and needs to be resolved soon.
- Beyond mere symbolic opposition, India needs to evolve a concrete counter narrative to garner the deserved International support for its view.

What is the problem with CPEC?

- The Belt and Road Initiative (BRI) is China's ambitious project for increasing connectivity and economic cooperation within Eurasia.
- Since its announcement in 2013, the BRI has been positively received by many countries covered within its ambit.
- But India has been averse to the idea on multiple grounds of which, the CPEC (which is within BRI's ambit) is the primary factor.
- Notably, the even recent informal meet between the Indian PM and the Chinese President at Wuhan (China) failed to resolve this issue.
- As "CPEC passes through Pakistan-occupied Kashmir" (India claims PoK as its own territory), India sees this as an affront on its sovereignty.

What are the larger implications?

- PoK is an emotional issue for India, and China's push for CPEC is being seen as an act of deliberately disregarding its territorial claims.
- At a broader level, if China invests heavily in the region, it risks becoming another party to the troubling Indo-Pak bilateral dispute.
- Also, if CPEC gets functional, it will establish a fully functional China-Pakistan axis, which would hamper India's larger interests in South Asia.
- Additionally, if CPEC proves to be an economic success, Pakistan's claim over PoK might become more legitimate.

What is the way ahead?

- There is no clarity on whether India has any road map to take the conversation on PoK forward.
- But no country can afford to not register a protest against a project that is likely to undermine its sovereignty.
- CPEC will indeed remain a stress point not just in the India-Pakistan relationship but also in the India-China relationship.
- At this juncture, it is hence important for India to evolve a comprehensive outlook to confront CPEC.
- If such thinking hasn't caught up, then there is a risk that India's claims might become irrelevant amidst other nations.

6.2 Significance of Regional Connectivity in Asia

What is the issue?

- India recently declined to endorse China's Belt and Road Initiative (BRI).
- But Regional connectivity projects between India and China will benefit south Asian region.

What are regional connectivity developments in Asia?

- **Indo-Myanmar- Thailand Trilateral Highway** - India, Thailand and Myanmar are working on about 1,400km long highway that would link India with Southeast Asia by land.
- This highway will give a boost to trade, business, health, education and tourism ties among the three countries.
- **China Pakistan Economic Corridor (CPEC)** - It is a collection of infrastructure projects that are currently under construction throughout Pakistan.
- **Belt and Road Initiative (BRI)** – It is a development strategy proposed by China, focuses on connectivity and cooperation between Eurasian countries.
- **Bangladesh-Bhutan-India-Nepal (BBIN)** – It is a motor vehicles agreement which has seen a positive development recently.
- It proved the ambition of establishing physical connectivity among the smaller states of South Asia through India can eventually be realised.

What is the significance of regional connectivity in Asia?

- Poor connectivity is the major reason why intra-regional trade is among the lowest in South Asia.
- South Asia, with its 1.8 billion population, is only capable of conducting around 5% intraregional trade as connectivity remains a constant barrier.
- Non-tariff barriers (NTBs) continue to plague the region and addressing infrastructure deficits can do away with 80% of the NTBs.
- Thus Connectivity can significantly improve people-to-people interaction leading to better understanding, greater tolerance and closer diplomatic relations in the region.

What are the concerns with regional connectivity in Asia?

- States in South and Southeast Asia are involved in multiple regional initiatives led by India and China but are unable to get the benefit due to their slow progress.
- The South Asian Association for Regional Cooperation remains moribund with little hope of it becoming functional in the near future.
- The Bay of Bengal too remains among the least integrated regions in spite of having immense potential of enhancing trade through utilisation of its ports and waterways.
- The India-led Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) involving Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand, has made little progress.
- Thus many smaller states are losing out and having to pay the price of missed economic opportunities due to the actions of the two Asian giants.

What measures need to be taken to address such issues?

- If the BRI, BIMSTEC and BBIN were developed through coordination and consultation led by the two Asian giants, the projects under the schemes could have been implemented more efficiently.
- With the minimum required cooperation in pursuing regional initiatives, India and China can significantly enhance trade, investment and connectivity in the region.
- India-China has an opportunity to forge a pragmatic understanding on the efficacy of regional initiatives through greater communication, enhanced cooperation and better coordination.



7. BILATERAL RELATIONS

7.1 Indo-Russia Sochi Bilateral

What is the issue?

- Recently, the Indian PM and the Russian President met for an extended bilateral in Sochi in Russia.
- This is seen as an appropriate recalibration to arrest the degradation of diplomatic ties in recent years.

What issues are likely to have been discussed at Sochi?

- The Sochi visit was aimed at resetting and rebalancing bilateral ties that have weakened over the past few years.
- The special understanding between India and Russia has frayed, with India drifting closer to the U.S. and Russia to China.
- **Defence** - India currently has orders of over \$12 billion for Russian military hardware, which is pending delivery.
- A new US law (Countering America's Adversaries Through Sanctions Act) seeks to curtail trade with countries engaging its adversaries.
- Hence, Modi's visit was significant to assure Mr. Putin that India is committed to the purchases and won't be deterred by US pressure.
- **Regional** - Russia's recent military exercises and arms sales to Pakistan has got India cautious on Russia's changing outlook towards South Asia.
- Also, the increasing engagement of Russians with the Afghani Taliban is another point of concern from the Indian perspective.
- An outreach like Sochi would hence be beneficial to know each other's political foresight and extract concession in some areas to address stress points.
- **Global** - The global instability caused due to the US president Trump is another issue that necessitated increased Indo-Russia engagements.
- An outreach to Russia in the backdrop of such inconsistencies emanating from the US would also help in correcting the westward tilt in India's diplomacy.

What are the outcomes?

- The Sochi meet with Russia and the previously held Wuhan meet with China were both said to be informal in nature.
- These might have helped in dispelling apprehensions between countries, the post meet conferences have largely been devoid of significance.
- While such meets are needed to break the ice, a noticeable shift in foreign policy can't happen without sufficient transparency.
- Importantly, Indian and Russia have planned for greater cooperation in the Indo-Pacific region, a region where India is already involved with US.
- Notably, Quad (India, US, Japan, and Australia) is also envisioned as a security grouping for the Indo-Pacific region.

7.2 Rationale for the Wuhan Summit (India-China)

What is the issue?

- Indian PM Modi and Chinese President Xi Jinping had an informal meet recently in the Chinese city of Wuhan.
- China's assent to going for an informal summit with India needs a deeper analysis in the prevailing geo-political scenario.

What was China's possible motive?

- India by itself may not be a serious problem for China.



- But China regards India as a potential ally of the US and Japan against China.
- The border is in control of the Chinese if they wish to exercise it.
- It's because they are on higher slopes and have more troops there.
- But arresting India's potential drift towards the US and its allies is in China's interest.
- Being informal, no documentary evidence was required for any agreements of great significance.
- So an informal summit was a low-cost, high-benefit option for China.

What do post summit statements suggest?

- Statements made by Xi Jinping after the summit, clearly indicate the above motives.
- **Strategic perspective** - He emphasised that India and China should look at their relations from a strategic perspective.
- This is clearly in mention of India's increasingly closer ties with the US.
- Further, compared to India, China takes Japan more seriously.
- There is possibility for a clash in the East China and South China Seas.
- Japan and India, by themselves would not worry China.
- But the combined might of the US and Japan would be a serious blow to the Chinese.
- **Economy** - Economic development also appeared in the post-summit statements.
- The Chinese do not think they need India for its development.
- However, deeper economic relations with India could be viewed as a means to an end.
- A means to ensure that India does not drift off into a US-Japan-India strategic triangle.
- **Civilisation** - Xi also stressed on a deeper and wider exchange between the two great civilisations.
- Generally, to talk about India's civilisation is a good diplomacy.

How does it benefit India?

- Until the 2019 elections, the government in power would prefer to avoid any border threats.
- This is particularly in relation with problems with Pakistan.
- India used the summit as a kind of assurance from the Chinese.
- It is to ensure that China, as Pakistan's benefactor, did not interfere on the border.

What does the summit mean for Pakistan?

- Post-summit statements suggested that India and China should pursue "a joint economic project" in Afghanistan.
- India cannot take up its Afghanistan projects all alone.
- This would invite attacks from the Taliban, supported by Pakistani military.
- But the Taliban would not attack joint China-India projects.
- This is because the Pakistanis would not allow that to happen.
- Pakistan is too indebted to China, and China has its own interests in Pakistan.
- China is building a port there, and there is a China-Pakistan economic corridor, serving Chinese interests.

Quick Fact

Wuhan

- Wuhan is the capital city of Hubei Province in central China.
- It has been a major industrial city for a long time.
- The 1911 Republican revolution started there.

- An informal summit would normally take place in a place other than Beijing or Shanghai, and Wuhan was a natural choice.



7.3 Policy Lessons for India from Argentina

Why in news?

- The Argentinian currency has hit a record low against the US dollar raising concerns on the economy of the country.
- India which has relevance with global economic changes needs to acquire policy lessons from the Argentina.

What are the economic tensions in Argentina?

- Argentina is a small economy which is much dependant on Dollar economy with lack of economic fundamentals.
- The country is now in danger of defaults in terms of its external borrowings with numerous episodes of current-account instability.
- Prospect of higher interest rates in the United States has pushed Argentina to the brink of another crisis.
- Due to this Argentina will not be able to control inflation, reduce the fiscal deficit and keep the growth revival going all at the same time.

What is the relevance of global economic conditions for India?

- When global conditions are positive, the Indian macro-fundamentals appear strong.
- A global low-interest rate regime would aid fund flows into the Indian economy and finance the Current Account Deficit (CAD)
- Low crude oil prices will keep the trade deficit under control as well as moderated inflation and the fiscal deficit.
- Since the recent global interest rates and crude oil prices are high due to global economic condition India might face the scenario of external borrowing and might become default if measures are not taken.

What are the concerns for Indian economy?

- The new global macroeconomic headwinds will expose the basic inadequacy of the Indian economy on the external account.
- The combination of returning inflation and the government's loosening of its self-imposed fiscal consolidation targets proves this scenario.

- As of now India is not in any danger of default, and has indeed been remarkably responsible in terms of its external borrowing.
- But India faces a danger of losing control of its macroeconomic policy because of a past unwillingness to undertake structural reform.
- India has more foreign exchange reserves than it needs during such crisis, but even so an episode of capital flight will drain reserves and stress the rupee.
- If this happens Reserve Bank of India will not be able to manage the rupee, preserve foreign exchange reserves, and operate an independent monetary policy.

What policy lessons India needs to learn from Argentina?

- India to stabilize its external account and to restore the ability to conduct macroeconomic policy needs microeconomic reforms that make Indian products competitive.
- It will cause a reduction in imports as well as an increase in exports, allowing India to survive the sort of adverse conditions which already claimed Argentina as a victim.
- India does not need to approach an Argentina-style crisis to discover the negative effects on its domestic economy of a failure to address underlying external weaknesses.
- But Argentina is an important reminder to India that structural weaknesses on the external account are always capable of reducing the set of policies available to decision makers.

7.4 Contours of the India - China Bonhomie

What is the issue?

- International geo-political situation demands for greater engagement between Indian and China.
- Wuhan summit has set the tone for the same, which needs to be sustained.

How has the relationship evolved?

- Early 1950s saw brotherly friendship blossoming between India and China.
- This led some to even speculate that Indian and China would pilot the post-colonial Renaissance in the developing world.
- But the 1962 war annulled all such hopes and the border dispute that caused the war continues to linger even today.
- While the current governments on both sides expressed desires to work together in their initial years, thing withered eventually.
- Also, border tensions reached a new high in the Doklam Standoff in early 2017.
- But subsequently, there has been a course reversal as the rhetoric got milder on both sides and positivity grew through sustained engagements.

What are the geo-political aspects of the relationship?

- Recently, Indian PM Modi and Chinese Premier Xi met for an informal summit at Wuhan.
- They are said to have discussed various bilateral and international issues in detail to get a better understanding on each other's perspective.
- Notably, this comes in the backdrop of USA's increasing trade hostility with China, and Mr.Trump's temporal approach to international relations.
- Hence, it is clear that Beijing sees India as a strategic partner to counter Trump's inward looking anti-globalisation plank.
- Additionally, Beijing is also re-engaging with Japan, South Korea and ASEAN to facilitate the emergence of a strong Asian block that furthers globalisation.

- China is also pushing for the “Regional Comprehensive Economic Partnership” (RCEP), which seeks to enhance economic ties in the Asia Pacific region.
- Notably, RCEP has – ASEAN, India, Australia, New Zealand, Japan, South Korea and China as members (ASEAN + 6).

What will the domestic political implications for the leaders?

- Mr. Xi has also emerged as a very popular leader within China.
- Getting India on board to support China’s multiple international initiatives will add to the polarity of Xi domestically.
- Such support is also very critical for China if it intends to dictate the global order by replacing the US dominance.
- For Mr. Modi too, a good equation with China would be domestically positive as investments from China would help in boosting Indian economy.

7.5 India’s Role in Korean War (1950-53)

What is the issue?

- The relationship between “North and South Korea” has evolved drastically past months from “complete hostility to strong cooperation”.
- At this juncture, it is important to note that India did play a vital role in effectuating the “Armistice Agreement, 1953”, that ended the Korean War.

What is the historic context?

- The beginning of the cold war saw the Soviet dispensation backing a communist regime in Korean peninsula’s Northern region.
- But the US faction was backing a liberal government that eventually took control of the southern part of the peninsula.
- The inter-Korean war lasted for three years between 1950 and 1953, which was a proxy war between USSR and the US.
- Although a truce was reached in 1953 through the “Armistice Agreement”, both Korean regimes never officially ended the war till recently.
- The agreement divided the Korean peninsula into two along the 38th Parallel (latitude) and also provided for neutral international peace patrol.

What was India’s Role?

- India under Nehru was actively involved in negotiating peace in the Korean peninsula by engaging all the major stakeholders – US, USSR and China.
- **Diplomacy** - In late 1952, the Indian resolution on Korea was adopted at the UN with unanimous non-Soviet support.
- But India rightly recognized any deal without the Soviets will fail and immediately flung into action to get them on board, which happened in 1953.
- Ultimately, despite the rough international political climate, India succeeded in building consensus – which precipitated in the “Armistice Agreement”.
- **Effectuation** - One of the follow-up actions to the Armistice Agreement was the establishment of a Neutral Nations Repatriation Commission (NNRC).
- NNRC was to decide on the fate of over 20,000 prisoners of war from both sides and India was chosen as the Chair of the NNRC.
- NNRC also had “Poland and Czechoslovakia” representing the Communist bloc, and “Sweden and Switzerland” represented the Western world.

- A UN Command led by an Englishman and a Custodian Force from India (headed by Lt.Gen Thimayya) was also deployed in the inter-Korean border.
- NNRC's tenure ended in early 1954, and the Indian forces were praised internationally for executing the tough stabilising operations successfully.
- **Indian Abode** - At the end of its work, the NNRC was left with over 80 prisoners of war who didn't want to go to either of the Koreas.
- As an interim arrangement, Nehru decided to grant them abode in India until the UN directive on their request is pronounced.
- Although most settled in foreign destination like Latin America, some did stay back in India and lived their entire lives here.

8. INTERNATIONAL ISSUES

8.1 Implications of Trade War between US and China

What is the issue?

Global trade war is brewing between the US and China, which will have huge implications world-wide.

What is the bold strategy of China to reign over the trade war?

- China has created an ambitious Made in China 2025 plan to make the country self-sufficient in 10 key fields including artificial intelligence, robotics, biotechnology and aviation.
- It has planned to domestically produce 40% of the equipments and machinery in these sectors.
- This will help the country to transition from a manufacturing chain to high value crucial technology producer.
- For which Chinese government offers a cheap land and tax breaks as incentives to bring more thrust into its grand vision.
- The Chinese are also offering some smaller concessions to the global traders such as allowing foreign companies to invest solo in its rapidly growing electric vehicles sector.
- In addition, the government is allowing foreign automakers to manufacture in China, without a Chinese partner in around five years.
- For the Chinese, these relatively minor give-aways will smoothen its journey to global hold in other crucial sectors.

What are the tactics adopted by the US to regulate China?

- The US has begun this trade war by slapping a huge fine and 7 year ban on a Chinese smartphone maker for breaking the Iran sanctions.
- American government also landed another huge blow by halting the merger comprising chipmakers of both the countries.
- The US government has demanded China to reduce a part of its huge trade deficit with the US.
- It is also pressurising China to halt the government assistance plan to calibrate their hi-tech industries as those are dominated by US tech firms.
- US will utilise the WTO regulations to ensure China is not out-growing its peers, atleast in the near future.

What are the global implications due to this trade war?

- The China is annoyed with the activities of the US and is planning for a retaliation.
- The conflict between these 2 major economies to establish their dominance in the world market will have repercussions all over the world.
- Major trading companies and developing nations' dependant on either US or China will be hugely affected.
- China's buying spree of all major investments in all developing countries is colossal to be regulated individually by the developing nation.
- Also, Industries specifically related to these crucial hi-tech sectors, as China's mass entry will disrupt the existing market.

8.2 US and Iran nuclear deal - Implications

What is the issue?

- The United States has pulled out of the Iran nuclear deal.
- It is imperative at this juncture to look at the possible global implications and for India in particular.

What is the deal about?

- It is officially called the Joint Comprehensive Plan of Action (JCPOA).
- It was signed between Iran and the P5, plus Germany and the EU in 2015.
- P5 is the 5 permanent members of the UNSC (US, China, France, Russia, and UK).
- The deal aimed at curbing Iran's nuclear programme.
- Under the deal:
 - i. most of Iran's enriched uranium was shipped out of the country
 - ii. a heavy water facility was rendered inoperable
 - iii. operational nuclear facilities were brought under international inspection
- In return, the deal involved lifting of international sanctions on Iran.

What are US's present concerns?

- Trump administration says the deal did not target Iran's ballistic missile programme.
- It does not focus on Iran's nuclear activities beyond 2025.
- It also leaves Iran's role in conflicts in Yemen and Syria.
- It is said that the 'one-sided deal' did not bring calm and peace to the region.

What are the strategic reasons behind?

- Iran has been compliant with the provisions of the deal.
- The deal is largely a successful one.
- So the actual concern for US is Iran's re-accommodation in the global economic mainstream.
- This is as well the concern for US's closest allies in West Asia, Israel and Saudi Arabia.
- Iran's rising economic profile would embolden it to increase its regional presence.
- This would pose a strategic threat to the interests of the U.S.-Saudi-Israel axis.

What are the global implications of the decision?

- The US has created a crisis in an already unstable region.
- It doesn't necessarily trigger an immediate collapse of the agreement.
- The UK, Germany, China, France and Russia still remain committed to the agreement.
- But it is to be seen if Europe and other powers will stick together or change under US pressure.
- If they deviate from their positions, West Asia will be a lot more dangerous.
- Iran is cautious, saying it would engage diplomatically with the remaining signatories.
- Notably, the challenges will emerge not only for Europe, once US sanctions are in place.
- Other nations with strong trade ties with Iran, including India, would also face the impact.

What is India's stance?

- India has been a proactive votary of the international rules-based order.
- It has been extremely supportive of the Iran nuclear deal.
- India recognises Iran's right to peaceful uses of nuclear energy.

- On the other hand, it also highlights the international community's interest.
- It has thus maintained that the Iranian nuclear issue should be resolved peacefully.

What are the implications for India?

- **Energy** - Until 2010-11, Iran was India's second-largest oil supplier after Saudi Arabia.
- But it slipped in subsequent years as international sanctions hit Iran.
- It is now India's third-largest supplier after Iraq and Saudi Arabia.
- But following the 2015 deal, the supplies rose considerably.
- A disruption to this trend may affect India's energy trade.
- India and Iran have strategic interests in keeping the relationship sustainable.
- But it should be insulated from the impact of sanctions.
- **Chabahar port** - Chabahar port is both a financial and a strategic investment for India.
- The engagement between India and Iran on Chabahar has gathered momentum.
- The work is expected to be completed soon.
- Possible American sanctions could hit infrastructure development in Chabahar.
- This could affect the pace of development and cause a delay.
- However, India may still have options if other signatories stick with the JCPOA.
- **West Asia** - Trump's move would mean US engaging with Iran's regional rivals Saudi Arabia and Israel.
- This could destabilise the region where over 8 million Indian migrants live and work.
- Military tensions in West Asia have forced India to evacuate its nationals in the past.
- However, India's capacity to do so is limited.
- **India-US relationship** - In Trump's administration, the US has been hard on Pakistan.
- But has asked India to be more proactive in the Indo-Pacific, with an eye on China.
- However, India has been wary of committing too much on the Indo-Pacific strategy.
- The India-US-Japan-Australia 'Quad' is also in the nascent stage.
- Moreover, uncertainties exist over the relationship with Russia.
- Amidst these, the Iran situation will test the durability of the "strategic partnership" between India and US.
- **NSG** - India is aspiring to join the Nuclear Suppliers Group (NSG).
- Given this, it has to make a clearer articulation of commitment to JCPOA.
- This will help with the Europeans, especially the French, who are backing India's NSG membership bid.

What lies ahead for India?

- **Chabahar** - India's goal of helping Afghanistan's reconstruction may be affected if Chabahar is slowed down.
- Notably, India is engaged in Afghanistan at the request of the Trump administration through \$ 1 billion assistance.
- India may likely argue with its interlocutors in Washington.
- It could stress that access to Afghanistan is a shared objective of both countries.
- **India-Iran** - The government should look at options like the rupee-rial trading mechanism.
- Opening of Iranian banks in India and Indian banks in Iran could be considered.
- This would facilitate movement of money and income between the two countries.
- It is a moment for India and Iran to plan for similar crises in future.

8.3 Windrush Saga – Britain’s Crackdown on Immigrants

What is the issue?

- The UK government has now started a crackdown on Windrush Britons (Caribbean Natives), in their campaign for tightening immigration.
- This episode has again highlighted the fallout of xenophobic attitudes that is catching up across the 1st world.

What are the Windrush Generation being subjected to?

- About half a million people (Windrush Generation) were shipped from the Caribbean islands to the U.K. since late 1940s, to meet the labour shortfall.
- The name “Windrush” has been coined after one the many vessels that ferried them to UK in the 1960s and 70s, to offset the shortage of labour in UK.
- Under pressure from Brexit hardliners, the UK is now hard pressed to meet stringent annual net immigration curbs and deportation of illegal migrants.
- The Windrush Caribbean Brits (and their children) have now fallen victims to this immigration curbs, and risk deportation despite have lived in UK for long.
- Notably, the Windrush Caribbeans aren’t illegal migrants but are now in the line of fire for lack of sufficient documentation indicating their legality.
- They are asked to provide proof of residence in UK that predates 1971 (which is the cut-off), which isn’t available with most of them.
- Inability to furnish such evidence is leading to job losses, threat of deportation, withdrawal of welfare benefits and even denial of critical medi-care.
- All these are proving to be enormously traumatic for the concerned families who are now being alienated in the country where they’ve lived for long.

What are the implications for UK?

- As the UK is exiting the EU, it currently is hoping to negotiate trade deals with the countries in the British Commonwealth to offset the loss of markets.
- But the “Windrush Saga” has created discomfort within the commonwealth, as the Caribbean Countries are a part of it (as they were British Colonies).
- While the current crackdown has targeted the Caribbeans, there is palpable fear that others across the commonwealth will follow suit.
- Notably, there are considerable populations of Indians, Pakistanis, Bangladeshis and West Africans in UK.
- The anxiety is high as the UK government’s approach doesn’t seem to differentiate between systemic shortcoming and real frivolous immigrations.
- British PM May’s cautious apology for the same (claiming that Windrush Saga was a mere aberration) amounted to too little too late.

What is the larger learning?

- Windrush controversy has typified the inability of governments to manage the political fallout from the current phase of globalisation and liberalisation.
- This is especially true of the EU, which has enshrined the free movement of people as a fundamental principle.
- Notably, EU’s 2004 expansion into the countries of the erstwhile Soviet Union afforded nations in Western Europe cheap immigrant labour.
- But the process gave a fillip to xenophobic parties of the extreme right across the region, threatening to halt immigration.



- It is this factor that precipitated Brexit in 2016, which narrowly won the vote despite the mainstream parties largely opposing a breakaway from EU.

8.4 Concerns in the Bonn Meet

Why in news?

A meeting was held in Bonn, Germany to finalise the operational guidelines for implementation of Paris Agreement.

What was the highlights of Bonn Meeting?

- The Bonn meeting was mainly held to decide on a consistent framework for countries to define and measure their own commitments.
- Proposals for monitoring actions, accountability and transparency of the framework were discussed.
- Another interim meeting has been proposed ahead of Conference of Parties (COP)-24 due to insufficient progress towards goals in the Bonn meet.

What were the concerns in the Bonn meeting?

- The main roadblock in the Bonn meeting were on the issue of Nationally Determined Contributions (NDCs) in the rulebook.
- While the developing countries wanted the rulebook to include mitigation targets, adaptation and means of implementing NDCs, The developed nations preferred it to be limited to mitigation and reduction of greenhouse gases.
- The means of implementation of NDCs for poor countries were about financial support and technology transfer.
- It became contentious as the funds has to be provided by developed nations.
- Previous agreements on funding were not taken up instead discussion on finance veered towards increasing number of donors, reducing number of beneficiaries, etc.
- Another concern was the issue related to loss and damage (L&D) for providing assistance to poor countries that experience severe impacts from climate change.
- There was no progress on the funds for supporting L&D, even though the suffering countries contributed very little to the greenhouse gases responsible for the warming and its effects.
- Disagreement between the participants on all significant issues led to the roadblock at Bonn meet and thus guidelines for implementation of PA was not concluded.

SCO's Upcoming Summit

What is the issue?

The upcoming SCO Summit in June is expected to open new vistas for India in terms of anti-terrorism and improving regional ties.

What is the SCO?

- The Shanghai Cooperation Organisation (SCO) is a multi-government organisation formed in 2001 by China, Russia, Tajikistan, Uzbekistan, Kyrgyzstan and Kazakhstan.
- It was launched as an expression of greater coordination among the major powers in the Eurasian region after the cold war.
- And it aimed to create a fair and rational new international political and economic order.
- Its agenda was shaped under the Shanghai Five Mechanism which included violent liberation movements and counter-terrorism efforts against the growing unilateral moves by the US.
- The Organisation served as a platform to facilitate warmer ties among its members by enhancing cooperation on various fronts.
- The SCO also played a major role in helping China resolve its border problems with the Central Asian region.

What is the significance of this upcoming summit to India?

- This is the first full-fledged summit after India's membership in 2017.



- India is expected to participate in all activities of SCO Secretariat in Beijing.
- It will also gain access to the Regional Anti-Terrorist Structure (RATS) which provides a rare platform for regional cooperation to counter-terrorism.
- India along with all the members including Pakistan will participate in counter-terrorism exercises.
- This summit is likely to push for Iran's formal entry into SCO as a signal against the US withdrawal from Iran nuclear deal.
- Hence it will be an opportunity for India to reset its regional ties with China and Russia as they navigate the adverse impacts of U.S. Treasury sanctions.

8.5 China – Japan Détente

What is the issue?

- After years of mistrust, China reaches out to Japan with high-level visits
- Lately, China has been extending olive branches to all its strained neighbours, in what could be seen as its effort to shape the new world order.

Why has tension been the default tone of the relationship?

- Japan and China have one of the most tense, yet economically intertwined relationships, which have moorings in their shared histories.
- Beijing also believes Japan is yet to properly atone for its brutal invasion of China in the run-up to and during the 2nd World War (1931 and 1937).
- Additionally, Japan has stood firm with the US camp in the post-War alignment, thereby pitting it as an adversary of China on several occasions.
- Territorial dispute over the Diaoyu/Senkaku islands in the East China Sea is another pressure point in the Sino-Japanese ties.

What are has Sino-Japanese cooperation panned till now?

- Nonetheless, Japan played a vital role in China's economic rise, which saw the country transform from an agrarian to a manufacturing powerhouse.
- Notably, China-Japan trade stands at about \$350 billion (by comparison, India-China trade is merely \$84.44 billion).
- China has overtaken Japan as the world's second largest economy and has also eclipsed it as a global geostrategic player.
- The two countries also are competitors in the South East Asian theatre, as the region has emerged as an economically and strategically significant one.

What are the recent developments in Sino-Japanese ties?

- Recently, Chinese Premier Li Keqiang was in Japan on a three-day state visit, which was his first since taking office 5 years ago.
- It was also the first top-level bilateral visit after the 2012 strain, which was caused over a chain of disputed islands that are claimed by both countries.
- This thaw in was in the making for several months now, through multiple bilateral political and cultural engagements.
- High level economic dialogue, which was stalled for over 8 years, has also been resumed, and a possible Beijing trip by the Japanese PM is on the cards.
- The leaders are also said have engaged each other over the evolving dynamics in the Korean peninsula.

What has changed now?

- An unpredictable U.S., North Korea and business interests are said to be driving the present bonhomie between the historical enemies.
- **Japan's Worry** - Trump's America First policy and the tariffs he has slapped on some \$60 billion worth of Chinese products have also impacted Japan.

- Notably, Japan hadn't managed to secure any concessions from US on the new duties on steel and aluminium imports despite being a strong ally.
- Japan also hopes to seek China's aid to influence North Korea's temporal leadership of Japanese concerns.
- Many Japanese businesses have also invested in China, which calls for bettering equations to ensure better economic prospects for all.
- **China's Case** - The idea of Japan's leader asking for support on North Korea plays well domestically as an example of Beijing's international clout.
- Moreover, given the simmering possibility of a trade war with the U.S., better ties with economic heavyweight Japan are also in China's interests.
- In addition, China is keen on getting Japan to play ball with its signature Belt and Road Initiative (BRI).

What are the significant outcomes of the current détente?

- Japan-backed Asian Development Bank (ADB) is exploring co-financing projects with the Beijing-led Asian Infrastructure Investment bank (AIIB).
- **BRI** - Although initially reluctant to participate in the BRI, Tokyo has presently signalled that it is not completely averse to the initiative.
- But Japan has stressed that projects must meet the criteria of being "open, transparent, fair and economically feasible" if it is to participate.
- In this way Japan can keep on the right side of China without necessarily committing to participation.
- **Uncertainty** - Despite all these, current China-Japan alignment can be seen only as a provisional affair that is rooted in the geo-political realities.
- While it is akin to a pause rather than a resolution of conflict, it is a positive development nevertheless, which needs to be welcomed.

8.6 Significance of GDPR Compliance

Why in news?

The European Union has declared the deadline for the compliance of General Data Protection Regulation (GDPR)

What is GDPR?

- The GDPR redefines the understanding of the individual's relationship with their personal data.
- It relates to an identifiable living individual and includes names, email IDs, ID card numbers, physical and IP addresses.
- This law grants the citizen substantial rights in his/her interaction with
 1. **Data controllers** - Those who determine why and how data is collected such as a government or private news website.
 2. **Data processors** - Those who process the data on behalf of controllers, such as an Indian IT firm to which an E.U. firm has outsourced its data analytics.

How GDPR works?

- **Definition of Data and Entities** - Any company offering back-end services to companies operating in the EU or elsewhere, if they are receiving EU resident data, may fall within the definition of a processor under the GDPR.
- Under GDPR a data controller will have to provide consent terms that are clearly distinguishable.
- The GDPR also requires data collectors to provide information on the 'who' and 'how.'
- Individuals will also have the right to have personal data deleted under certain conditions.
- **Stronger obligations** - Under GDPR, data breaches have to be reported within 72 hours and failure to comply with the new laws could result in a fine up to 4% of global turnover or maximum amount of fine 20 million Euros.
- It mandates the concept of 'privacy by design and default' and creates categories of data privacy compliance that never existed earlier.

- **Higher Autonomy** - The GDPR has global implications as it applies to those outside the E.U. who either monitor the behaviour of EU residents or sell goods and services to them.
- By which it empowers EU statutory authorities to impose heavy administrative fines and to impose bans on data processing, ordering rectification, restriction or erasure of data and suspending transfers to certain countries.

How GDPR differs from Indian IT laws?

- Under India's existing data protection regime, only one legislation, the Information Technology Act, 2000 (the IT Act) has attempted to deal with data protection in a comprehensive manner.
- The IT (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011 (The IT-RS Rules) under the IT Act seek to address data privacy issues.
- However, the granularity of detail at which the GDPR addresses data protection compliance is hard to compare to the approach taken by the IT-RS Rules.
- The GDPR commits five detailed provisions to the essentiality of lawful consent for processing data and factors to determine whether consent was lawfully obtained.
- The language of the GDPR indicates that consent is interwoven through most of its important provisions, making it a key foundation of GDPR compliance.
- Thus there are certain aspects of the GDPR which are not reflected anywhere in the IT-RS, such as the adoption of a rights-based approach to data privacy.

Why GDPR is relevant to India?

- The GDPR is being adopted at a time where SC recognised the concept of informational privacy and noted that legislation should be enacted to ensure enforceability against non-State actors (private entities).
- By this there are indications that a future data protection legislation in India will share several commonalities with the GDPR.
- From this perspective, GDPR compliance may be considered an opportunity for Indian companies to achieve early compliance with a potential Indian data privacy legislation.

8.7 The Contested Case of Jerusalem

What is the issue?

- Recently, the US recognized Jerusalem as the capital of Israel despite its keenly contested status in the Israeli-Palestine dispute.
- This resulted in intense protests by Palestinians at the Israel-Palestine border along Gaza Strip, which was crushed brutally by Israeli forces.

Why did the current situation arise?

- **Ground Situation** - Jerusalem has been completely under Israeli control since 1967, and Israelis consider that the city as their eternal capital.
- Notably, Israeli PM Benjamin Netanyahu has his office in the city, and it is the seat of Israel's Parliament and Supreme Court.
- But almost all other countries see Jerusalem as a disputed city, and its final status is to be decided based on the outcomes of Israel-palestine peace.
- **Change** - In December 2017, US President Trump broke away from the long standing US policy to recognise Jerusalem as the capital of Israel.
- Subsequently, the US embassy was shifted to Jerusalem on the 70th anniversary of Israel's founding in 1948.
- This change in status quo has angered Palestinians, which is what led to the current wave of protests and counter responses.



- **Crack Down** - Palestinian Protesters rushed en-masses towards the Gaza border and seemingly intended to cross over into Israel.
- They were advancing based on call by Islamic clerics to charge on Jerusalem or martyr in that endeavour.
- Sadly, the crack down on protests by Israeli border forces was particularly harsh and resulted in the death of over 60 people.
- In this backdrop, the Hamas Militia that currently wields power in Gaza has given a war cry against Israel and vouched aggression.
- **Map:** Palestine is presently confined to two disjoint landmasses namely “Gaza Strip and West Bank”. They are separated by Israeli Territory.

How did Jerusalem become a hotly contested territory?

- The city of Jerusalem is holy to Christians, Muslims and Jews.
- “The Temple Mount” in the city is the holiest site in Jewish religion and Jews from across the world come to pray Western Wall of the Biblical temple.
- “Al-Aqsa mosque”, which is Islam’s 3rd holiest site after Mecca and Medina is also located within the city.
- “Church of the Holy Sepulchre” in Jerusalem is thought to be the site of Jesus Christ’s Resurrection, thereby making it holy for Christians too.
- **Partition War** - In 1947, United Nations approved the division of British-ruled Palestine into separate Jewish and Arab states.
- Given the unique religious holiness of the city, Jerusalem was proposed as a territory that was to be governed by a ‘Special International Regime’.
- But the Arabs rejected the UN plan in its entirety and attacked Israel the day after it was created in 1948, but were defeated in the endeavour.
- Consequently, Israel took control of West Jerusalem, and Israelis declared Jerusalem as an inseparable part of the state of Israel.
- But in the conflict, East Jerusalem, which has the Old City and all the holy sites came under Jordanian occupation (Pro-Arab forces).

How did Israel take over the entire Jerusalem?

- Gamal Abdel Nasser of Egypt announced in 1967 that he would close the Strait of Tiran, which was critical for Israel’s access to Red Sea.
- Consequently, Israel attacked Egypt, which began the fiercely fought 1967 Arab-Israeli war, with entire Arab world on Egypt’s side.
- Despite Israel coming under attack on all sides from Syria, Jordan and Egypt, it took only 6 days for Israel to decimate its enemies comprehensively.
- At the end, Israel snatched the Gaza Strip and Sinai from Egypt, West Bank and East Jerusalem from Jordan, and Golan Heights from Syria.
- The victory fired the Israeli morale immensely and the takeover of east-Jerusalem facilitated Jews from praying at the Western Wall (Temple Mount).



What has been the situation since?

- Subsequent Jewish polity reinforced that the idea of Jerusalem is at the heart of the Israeli identity, through outreach programs to its citizenry.
- An Israeli law in 1980 declared the entire city of Jerusalem as the capital of Israel, thereby virtually annexing an occupied territory.



- Peace between Israel and Palestine were negotiated with Norwegian mediation and the Oslo Accords were signed in 1993.
- While these accords created a Palestinian Authority for the West Bank and Gaza Strip, it did not address the status of Jerusalem.
- **International status** - Palestinians see Jerusalem as their capital city, but the UN recognizes only East Jerusalem as Palestinian territory.
- Notably, this is according to the 1947 border that was proposed by the UN in the partition deed for British ruled Palestine.
- Contrarily, hardliner Jewish nationalists have vowed to retain their current occupation of the entire Jerusalem as Israel's capital forever.
- US president Trump's recognition of Israeli claim over Jerusalem will weaken the Palestinian perspective.
- But given the intense sentimental value associated with the city, it will nevertheless remain contested for the foreseeable future.

8.8 Ireland's Referendum Against Ban on Abortion

Why in news?

Ireland recently passed a referendum to remove the constitutional ban on abortion.

What is the significance of this referendum?

- The people of Ireland voted for this referendum even when a new law was proposed to be passed by the year end, when a women died after abortion was denied on grounds of constitutional ban.
- This referendum is seen as a continuation of the quiet revolution taking place for past 2 decades against the invincible Church.
- Ireland had a long stronghold of Catholic conservatism, and due to various issues, it is moving leftward.

What is the brief history of Ireland?

- After Ireland threw off Britain's yoke in 1922 and became a republic, Church became most influential and established its own quasi colonial hold over the state and the people.
- The President of Ireland in those early decades aligned closely with Archbishop of Dublin, who intervened aggressively in matters of law and policymaking.
- On issues of specific concern to women, the Irish constitution took a deeply conservative tone due to interferences from the Church.
- It recognised family as "a moral institution" and "fundamental unit of society", and said that without the woman's "life within the home... common good cannot be achieved".
- The contradictions between worldview of the Church and the ideals of a modern society appeared with the economic liberalisation of the 1960s, when women in large numbers joined the workforce.
- Over the next couple of decades, equal pay was introduced, and Ireland's traditional large families started to get smaller.
- An economic downturn in the 1980s triggered a wave of emigration, exposing communities to a range of social and sexual freedoms.
- Henceforth, quite a few resolutions, amendments have been made to instil more freedom to the people, which were initially against the rules made by the Church.

8.9 India's Concerns with CAATS

Why in news?

The CAATS (Countering America's Adversaries through Sanctions) Bill has been introduced in US congress

What is CAATS about?

- Countering America's Adversaries through Sanctions Act (CAATSA) aims to counter the aggression by Iran, Russia and North Korea through punitive measures.



- The Act primarily deals with sanctions on Russian interests such as its oil and gas industry, defence and security sector, and financial institutions.
- The Act empowers the US President to impose at least five of the 12 listed sanctions enumerated in the Act on persons engaged in a “significant transaction” with Russian defence and intelligence sectors.
- Two of the most stringent of these sanctions are the export licence restriction by which the US President is authorised to suspend export licences related to munitions, dual-use and nuclear related items.
- It extends to the ban on American investment in equity/debt of the sanctioned person.

Why India need to worry about CAATS?

- India has planned defence procurement from Russia which could potentially come under US sanctions under the Countering America’s Adversaries through Sanctions Act.
- India is reliable much on Russia to strengthen its defence preparedness by equipping the armed forces with state-of-the-art arms
- India since independence, followed a policy of diversification for arms import which has led it to source weapons from more than two dozen countries.
- Both in term of the number and value of contracts, the US is way ahead of other major suppliers, though Moscow still remains India’s predominant defence supplier.
- It is needless to say that the bulk of the potent weapons in India’s arsenal are of Soviet/Russian origin and that some of these are not available for purchase from any other source.

What are the implications of CAATS over India?

- CAATSA, if implemented in its stringent form, is likely to affect India’s arms procurement from Russia in a number of ways.
- CAATSA is likely to affect all the joint ventures (JVs) existing or planned between Indian and Russian defence companies.
- The Act will also affect India’s purchase of spare parts, components, raw materials and other assistance from Russia.
- Thus US authorities will try to influence their Indian counterparts to ignore the Russian platforms, though it is entirely up to India to make its own judgement.

G.S PAPER III

9. ECONOMY

9.1 Retail FDI Policy needs Review

What is the issue?

- The impending Walmart-Flipkart deal provides the government with a useful opportunity to realign its retail sector policies.
- Such realignment is critical for providing a better environment for retail “Foreign Direct Investment” (FDI).

Why is a policy rethink needed in retail FDI needed?

- 100% FDI is permitted in single-brand retail currently, whereas foreign investors can hold up to 51% FDI in multi-brand retail.
- But the realities of the emerging retail paradigms globally are rendering these definitional differences illogical.
- The world’s largest retailer (Walmart) and India’s largest online retailer (Flipkart) are expected to ink a deal for business collaboration in India.
- This has highlighted the need for the government to embrace an overarching approach for an integrated online and conventional retail policy.
- This is vital for maximising the value chain for investors and consumers.

What are the irrational elements in the current policy?

- **Single Brand** - The conditions like “Single-brand retailers have to source 30% of the value of their goods exclusively from India” are constraining.
- Significantly, the original proposal was for 30% of the purchases to be made from small and medium units (SMEs), but this was relaxed for 5 years.
- **Multi Brand** - FDI in multi-brand retail is even more restrictive through restrictions that stipulate a minimum investment of \$100 million.
- Further, at least half this has been mandated for invested in back-end infrastructure, and a 30% local sourcing requirement is also there.
- Multi-brand stores are also allowed only in cities with populations of over 1 million – which restricts their establishment to just about 20 cities in India.
- **E-commerce** - In the government’s first ever e-commerce policy that was released in 2016, the government allows FDI in only “Marketplace Models”.
- Notably, “Marketplace Models” are aggregator platforms that connect buyers and sellers and have restrictions the platform’s proprietors from directly involving in trade through the platform.
- The impact of these convoluted riders is visible in the poor response by global retail investment in one of the world’s largest markets.
- **Contradictions** - Sourcing restrictions apply only to investors like IKEA, Apple or H&M that choose to set up wholly-owned chains.
- But scores of brands from Marks & Spencer to Zara that opt to set up their chains via Indian joint ventures are free from all these conditions.
- These restrictions raise barriers for investors without offering consumers tangible benefits.

What is the status of companies that have tried to set shop in India?

- French retailer “Carrefour” was early entrant into the “cash-and-carry business” (bulk retailer), but is has all but exited in less than a decade.
- Tesco made an entry via a joint venture with the Tata group only in 2015 and currently has only back-offices in operations.
- Walmart is making a 2nd attempt to enter India after over a decade of trying –significantly, it had exited a joint venture with Bharti about 5 years ago.
- In food retailing, the government has permitted 100% FDI in 2017 but only 1 foreign entity (Amazon) has expressed interest thus far.
- All this is very little for a market that offers a \$650 billion opportunity.
- The multiplier effect of retail FDI for employment generation and re-energising the agri-market are obvious – which calls for a policy revamp.

9.2 RBI’s Decision to Revive Bond Market

Why in news?

Reserve Bank of India has announced to buy bonds worth Rs 100 billion to meet durable liquidity needs.

What is the status of bond market?

- Earlier benchmark yield on government debt was 6.35 per cent at the time of demonetisation in 2016.
- In 2017, the benchmark yield on government debt has shot up and now it is touching a very dangerous 7.8 per cent.
- Inflation looks set to return, driven not just by domestic factors but also the uncertainty about the path of crude oil prices.
- Recent months saw INR 90 billion flow out of the debt markets, the total outflow of Rs 155 billion was the highest in 16 months.



- Due to this the markets have been flooded with sovereign and quasi-sovereign paper increasing unwillingness to mop up government debt, which caused treasury losses.

What is the decision of RBI about?

- In its latest effort to cheer up the market, the Reserve Bank of India has announced that it will buy bonds worth Rs 100 billion.
- This decision is taken in order to meet durable liquidity needs going forward.
- There was some hope on the RBI's behalf that greater openness to foreign portfolio investors (FPIs) would help send down bond yields.
- As a result, the RBI after consultation with the Securities and Exchange Board of India announced a series of measures to liberalise the purchase of bonds by FPIs.
- These measures were an apparent relaxation of the minimum residual maturity period requirement and crucially an increase in the limit for FPI investment in central government securities.

What are the concerns with RBI's decision?

- The residual maturity requirement was replaced by a stringent requirement that investment in securities of any category with residual maturity less than a year must be 20 per cent or less than of the FPI's total investment in that category.
- RBI introduced "concentration" requirements, which have put off many investors, among other things an FPI could not buy a majority of any issue of a corporate bond.
- The market saw these and other requirements as detached from ground realities and counter-productive, they also judged the macroeconomic and fiscal situation and have not done so favourably.
- Thus RBI which is entitled to stabilise the currency's movements must avoid being seen as attempting and failing to fight the markets.

9.3 RBI's Measure on Bad Loan Divergence**Why in news?**

RBI has passed orders to resolve the practice of bad loan divergence by banks.

What is bad loan divergence?

- Bad loan divergence is depicting a false picture of the financial position of the banks.
- The banks do this by altering the numbers in its asset classification and bad loan provisions made as per RBI norms.
- By unfairly modifying the numbers, the banks seek to make good their bad loans, which in reality brings more complexity into the issue.

What are the concerns with bad loan divergences?

- The bad loan divergences by banks put off the crucial issues like bad loans crisis, financial stress of borrower as they present a false picture hoping all issues will solve with time.
- Unfair representation of restructured accounts increase the complexity of the RBI as it does not have a correct scenario to formulate policies accordingly.
- Such sharp divergences spell doom when banks carry insufficient capital to absorb sudden losses on account of increase in bad loan provisioning.

What are the steps taken by RBI to address this issue?

- The RBI has been taking a series of measures to completely clean up the banks' balance sheets and to resolve other issues sprouting from this bad debt crisis.
- It set up a committee to study the divergences and how these divergences are affecting its monetary policies.
- This committee identified the slippages occurring from restructured accounts wherein the original terms and conditions of loans are relaxed to provide a breather to borrowers facing financial stress.
- It then sent a circular stating the instances of divergences both in material and in provisioning and mandated the banks to provide true statements.

- The RBI also laid down specific conditions on when the disclosures have to be made and on what formulae the debts have to be calculated.

9.4 Measures to Improve Employment in India

What is the issue?

In spite of being the fastest growing economy in the world, India has failed to create jobs for its people.

What is the present employment scenario in India?

- Informal as well as formal employment in sectors like IT are facing a reduction in the number of jobs added annually.
- The most people in working age are employed in temporary jobs or jobs which are not sustainable in long term.
- Young generation who are annually added to the job market face problems in finding appropriate employment according to their expertise.

What measures should be taken to create jobs?

- Policies must be reviewed to understand why the globally highest growth rate has not translated into increased jobs in India.
- A stronger investment cycle has to supplement the consumption-led growth to create a sustainable basis for livelihood.
- Measures to lift people from underemployment and sustenance has to be followed through.
- Conditions have to be built up in the economy such as ease of doing business, investor friendly options to complement the large potential market to generate employment.
- All risks like regulatory and disruptive risks have to be mitigated for the attracting investments in the country.
- Also judicial resolution of issues and complexities have to be quickened.
- Changes in tax structures has to be made to end tax evasion and increase compliance.
- Laws and procedures to deal with insolvency and resolution of stressed assets has to be introduced.

9.5 GST Revenue Collections

Why in news?

Collections from the Goods and Services Tax crossed the Rs. 1 lakh crore mark in April, 2018.

What is the tax collection picture?

- Revenue from the GST has crossed the Rs.1 lakh crore threshold in April.
- This is the highest recorded in a single month, since the GST implementation in July 2017.
- The total Gross GST revenue collected is around Rs. 1,03,000 crore.
- Of this, CGST is around Rs. 18,000 crore and SGST is around Rs. 25,000 crore.
- IGST collected is nearly Rs. 50,000 crore, including close to Rs.21,000 crore on imports.
- Cess collected is nearly Rs. 8,500 crore, including roughly Rs. 700 crore on imports.

What is the significance?

- The average monthly collection has gone from around Rs. 89,000 crore in the first 8 months to over Rs. 91,300 crore.
- This is only by virtue of the April inflows.
- This is significant because the government's own limit was Rs. 91,000 crore a month.
- This was the amount projected to ensure that revenues lost by the Centre and the States under the earlier indirect tax system are covered.

What does it imply?

- The GST revenue collections in April show a phenomenal buoyancy as compared to previous months.



- It is seen as an indication of the increased economic activity in the country.
- It also implies a stabilising trend with the tax collections.
- It suggests the indirect tax regime is overcoming the initial problems.
- This would be complemented by e-way bill and improved GST compliance.
- All these are expected to make a positive trend in the GST collections.

What is the need for caution?

- **Trend** - Usually in the last month of the financial year, people try to pay arrears of some of the previous months also.
- So, April month's revenue cannot be taken as trend for the future.
- However, even delayed compliance is a welcome 'new normal'.
- **Compliance** - Tax compliance also still remains a problem.
- Out of around 87 lakh who were eligible to file GSTR 3B returns, only around 60 lakh had actually filed.
- Evidently, the compliance rate is just 69.5%.
- Also, out of around 19 lakh composition dealers, only around 11 lakh have filed their quarterly, which is just around 59%.
- The total tax paid by composition dealers is only Rs. 579 crores, which is very low.

9.6 GST Council - Outlook for May

What is the issue?

- Major decisions like – “introducing a monthly compliance regime, nationalising GSTN, and Sugar Cess” were taken in GST council's recent meet.
- These are likely to be perceived negatively by industries as it further complicates compliances and enhances tax burden.

What expectations were belied by the GST council?

- Collections from the GST reached over Rs. 1 lakh crore for April 2018.
- Hence, the industries hoped that the GST Council would make filings simpler as compliance is increasing.
- Indeed, the Council recently decided to introduce a new compliance system that mandates the filing for a monthly GST return (with minor exemptions).
- This new norm is to be introduced in a phased manner — with the first of three transition stages to begin six months from now.

How is the progress on simplifying returns filing?

- Discussions among stakeholders over simplifying GST returns have been under way for months, but a concrete solution hasn't emerged yet.
- For instance, in the second stage of the transition to simpler returns, buyers will get provisional input credit even if the seller doesn't upload the invoices.
- This could lead to disputes if “a seller defaults on GST dues and remains evasive” – as authorities might withdraw the credit availed by the buyer.
- Transition time to the GST regime is also proving long, and businesses that are yet to recover from the initial disruptions are facing further uncertainties.
- Also, firms will again have to cope with significant changes in accounting software in the middle of the financial year – which is another slog.

What are the other major decisions taken?

- **Cess** - A cess at the rate of Rs. 3 a kg is proposed to alleviate deep distresses among sugarcane farmers (over and above the 5% GST).

- Several States have opposed this as it would burden consumers while favouring larger sugarcane-growing States like U.P. and Maharashtra.
- In addition, a special sugar cess will signal a looming breakdown of the basic tenet of GST - the abolition of such cesses and surcharges.
- Notably, barring the “GST Compensation Cess” to help states to bridge their revenue shortfall for the next 5 years, all cesses have been abolished currently.
- **GSTN** - A decision has been made to make the GSTN a 100% government-owned firm, instead of the present structure with 51% private ownership.
- While “data security concerns” is said to be the reason for such a move, the implications of this on the “network’s functional efficiency” wasn’t discussed.

9.7 Reasons and Implications of Rising Oil Prices

Why in news?

The international benchmark for oil prices crossed \$80 a barrel touching the highest level since 2014.

What are the concerns with rising oil prices?

- Brent, the international benchmark for oil prices is almost three times the cost in early 2016 when it was \$29 a barrel.
- The trend may continue in the coming weeks and months, according to most reporting on oil.
- Rising oil prices could cause significant inflation, dampen economic growth and alter geopolitics in multiple ways.

What are the reasons behind increasing oil prices?

- **American Factor** - U.S. Administration’s decision to withdraw the country from the Iran nuclear deal.
- Sectors such as financial and banking, underwriting services, insurance, shipping and shipbuilding and port operation will come under US sanctions all of these will influence oil trade.
- US administration is also threatening unstable Venezuelan economy which is dependent on petroleum exports with new sanctions.
- **Russian Factor** - Oil prices are also driven up by coordinated action by Russia and Saudi Arabia to keep supply on a tight leash.
- The heightened instability in West Asia in the form of Saudi Arabia-Iran rivalry and the looming possibility of new military conflicts add to this.

What is the reaction for US decision among global economies?

- European countries, Russia and China, who are part of the Iran deal, have said they will not participate in American sanctions.
- It is unclear how far European companies could withstand American pressure and continue trade with Iran.
- French oil company Total has announced that it will halt a natural gas development project in Iran unless it receives a waiver from the U.S. government.
- China will continue to buy from Iran and so will India, even if in reduced quantities.

What will be the implications of this?

- India imports significant quantities of oil from Venezuela and Iran.
- The full impact of re-imposition of sanctions on Iran will have a serious impact on Chabahar port in Iran which was built with Indian aid.
- Instability in oil prices could help America’s strategic rivals Russia and China.
- Russia could benefit from higher prices in the international market.
- China could get better deals in buying crude cheap from Iran as it could insulate the trade from secondary American sanctions.
- Higher oil prices could have mixed impact domestically in America due to increasing demands.



9.8 Bringing Fuel Prices under GST

Why in news?

Union government is planning to bring petrol and diesel under GST to check prices.

What is the current taxation process for fuels?

- In the current structure, both the central and state governments levy a tax on petrol, diesel, crude, and natural gas.
- The Centre charges excise duty, while each state has its own Value Added Tax (VAT).
- Added to these are the dealer commissions, all of which inflates the price that consumers pay at the retail pumps.

What are the advantages of bringing fuel prices under GST?

- Bringing petroleum products under GST would mean a single rate (18% or 28%) in place of excise duty and state VAT, which will lower fuel prices at pumps.
- Reduced fuel prices will lead to lower transport costs for industries who benefit from increased production and competitiveness.
- Idea of a 'single nation, single tax', will be implanted firmly which is aimed at improving production and employment while taxing consumption.
- Disadvantages caused to firms due to exclusion of fuel prices under GST will be resolved and the firms can claim input tax credit.

What are the concerns with bringing fuel prices under GST?

- Since, petroleum products are huge revenue earners, the state and union government will be at a loss of revenue.
- Therefore, revenue considerations, will likely drive the decision on bringing petroleum products under GST.
- The decision will be taken by the GST Council, in which states have a major say.
- And if they agree to have petrol, diesel and other products under GST, they will still have the autonomy to levy an additional or top-up tax, which can vary across states.
- Even in this case, the union government would have to compensate states for any shortfall in revenues for five years.
- Thus, the governments must be well equipped to handle the consequences of bringing fuel prices under GST.

9.9 Property Buyers under IBC

What is the issue?

- Insolvency and Bankruptcy Code (IBC) 2016 was a disappointment for home buyers as they were rated below banks as unsecured lenders in order of priority.
- Considering that they are mere consumers, who didn't invest their money in the company, their status needs to be upgraded above the lenders.

What is the current situation?

- IBC came into force in November 2016 in order to help in speedy winding up of failed businesses and secure possible settlements to creditors.
- When real estate companies fail, they need to settle multiple creditors – banks, bond/stock market investors, suppliers, and property buyers.
- Notably, property buyers are neither investors nor lenders, but mere consumers who paid advances for the promised delivery of property.

- In the current scheme, property buyers are treated as non-secure lenders, and list them below other financial creditors in the order of priority.

What changes are expected?

- The Union Cabinet has recently cleared an ordinance for amending the IBC that came into force in November 2016.
- While the government hasn't divulged the specifics, the change to the law is expected to offer better treatment to property buyers.
- It is yet to be known whether homebuyers will be treated better or worse than banks and other financial lenders under the amended law.
- But there is a sound reason to treat them a step above these traditional lenders as they haven't offered money in expectation of better returns.
- Until now, homebuyers have had to knock on the doors of the courts to uphold their rights, while other stakeholders benefited significantly at their cost.

What are the possible implications?

- The amendment could help in reducing inconsistencies between the IBC and the Real Estate Regulation Act (RERA).
- Real Estate Regulation Act (RERA) was introduced with the goal of protecting the rights of buyers by ensuring the timely and honest delivery of homes.
- But the lower ranking of buyers in the bankruptcy proceedings contradicted the provisions in RERA, which calls for a review.
- Along with RERA, appropriate amendments to IBC can go a long way in stopping unscrupulous real estate developers from fleecing homebuyers.

9.10 Significance of Amendments in IBC

Why in news?

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

What was the significance of amendments made in the IBC?

- The Ordinance was passed to ameliorate the effect of IBC proceedings on the real estate sector and small and medium enterprises (SMEs).
- As both these sectors are major sources of growth in the Indian economy.
- This amendment will increase the stability and transparency in the real estate sector and it's a step towards government's aim of 'housing for all' by 2022.
- Another major amendment was done in the Real Estate (Regulation and Development) Act of 2016 to grow and modernise the real estate sector which will increase the security for home-buyers.
- The concerns of the SMEs' have been addressed by allowing promoters of companies with turnover up to Rs 2.5 billion to bid during the IBC process.
- Also restrictions on promoters' bids have been put in place in order to ensure that they do not game the system to their advantage.

What are the other challenges?

- After the amendment, Home buyers will be treated as financial creditors whose representatives must approve the resolution plans for the company that has been taken to the NCLT.
- This will affect the autonomy of the Banks as the home-buyers might seize control of the process, given their shares in investment.
- It is also unclear how the representative of home-buyers will be chosen, and what it means for the effectiveness and smooth functioning of the committee of creditors.
- But these restrictions might also affect the SMEs and force many companies to go into liquidation with a consequent loss in value.



9.11 Revitalising Public Sector Banks

What is the issue?

Making troubled public sector banks into narrow banks (these can't lend big) could be considered, with recent crises in PSBs.

What is the need?

- The RBI has put restrictions on all fresh lending by Dena Bank.
- It has restricted lending to risky assets and raising high-cost deposits for Allahabad Bank.
- This comes after further deterioration in their performance in 2017-18.
- Besides, many other banks under *prompt corrective action* (PCA) are witnessing a downfall.
- This became evident with recent declaration of their financial results for 2017-18.

What is the government's response?

- The government may ask the RBI to revise the PCA framework.
- This is to ensure that such specific lending restrictions are not put in place.
- This comes in the backdrop of the fears that more banks under PCA may face lending curbs.

What was the earlier approach?

- The idea of turning troubled public sector banks into narrow banks was not welcomed some time back.
- It was felt that it would squeeze the flow of fresh credit.
- This in turn was perceived to be dangerous for growth.
- But with the latest financial results, RBI has made lending restrictions on some banks.
- This effectively makes all of them narrow banks.

What is the changing scenario with banks?

- **Cash dispensing** - Banks no longer need to be primary dispensers of cash.
- There are "white label" ATMs which are owned not by banks but independent companies.
- Commercial establishments would dispense cash with the help of point of sale machines.
- This will be particularly useful in villages.
- The local all-purpose kirana shop can be the cash dispenser.
- **Payments system** - Banks no longer need to be the mainstay of the country's payments system.
- With digital payments, old big banks carry a far smaller part of the payments load.
- The National Payments Corporation of India (NPCI) is in place.
- They greatly facilitate the adoption of an electronic payments system.
- It has also introduced the RuPay card.
- Even cooperative and regional rural banks have issued these for their customers who normally do not use cards.
- Moreover, the "unified payments interface" is run by the NPCI.
- It has enabled instant payments across banks with the use of mobile phones.
- **Deposit taking** - One key role that PSBs have so far performed well is deposit taking.
- It offers a safe place for people to keep their deposits.
- PSBs were able to raise the national savings rate after bank nationalisation.
- This has in turn helped raise the rate of economic growth.
- But to continue this, government will have to sharply raise the level of deposit insurance.

- Periodic episodes of cash crunch following demonetisation point to an underlying fear about security of bank deposits.
- **Dealing with deposits** - What banks do with these deposits is an important task.
- They can continue to dispense personal loans.
- But their earlier major activity of lending to micro, small and medium businesses is being taken over.
- This is done far more efficiently by microfinance organisations and the new small finance banks.
- PSBs can participate in this sector by buying the securitised assets of small finance banks and MFIs.
- **Lending for corporates** - Non-banking finance companies with the ability to manage risk and lend in individual sectors are emerging.
- They are also hiring top banking talent.
- The NBFCs will seek to refinance themselves by securitising these loans.
- PSBs can invest in these NBFC issued securities with underlying loan assets which will be rated.
- This will enable PSBs to earn a higher return than offered by government bonds.
- This can also be taken up at a lower risk than lending directly.

Quick Fact

Prompt Corrective Action (PCA)

- PCA is primarily to take appropriate corrective action on weak and troubled banks.
- The RBI has put in place some trigger points to assess, monitor and control banks.
- The trigger points are on the basis of CRAR (a metric to measure balance sheet strength), NPA and ROA (return on assets).
- Based on each trigger point, the banks have to follow a mandatory action plan.
- It prohibits them from undertaking fresh business activities such as opening branches, recruiting talent or lending to risky companies.
- RBI could take discretionary action plans too apart from these.

9.12 15th Finance Commission: The Balancing Act

What is the issue?

- The union government recently constituted the 15th Finance Commission (FC) to take review the financial distribution between states and the centre.
- As the terms of reference given to the FC have already created a controversy, it will have to take a prudent call on the degree of equalisation that's feasible.

What are the Terms of Reference (ToR) given to the 15th FC?

- Finance Commission is constituted by the president every 5 years (or earlier) to take stock of distribution of proceeds from the central tax pool to states.
- The commission studies the fiscal situation of governments and makes its recommendations, which are only advisory in nature.
- ToR is a list of issues highlighted by the union government for the FC to consider on a priority basis in its brainstorming exercise.
- The key aspects of the ToR given to the 15th finance commission are
 - The mandate for using the 2011 population
 - The possible elimination of "Revenue Deficit Grants"
 - Impact of the GST on the finances of the Centre and States
 - Conditionality needed on State borrowing
 - Providing performance incentives to states on certain indicators



- Going back to 32% formula from the current 42% devolution to states

Why is the proposal to update to 2011 census data worrying some states?

- Distribution of tax proceeds to states is decided based on multiple factors and population of the state is one major factor.
- In order to promote family planning programs, it was decided in the 1970s to freeze the 1971 census as the bench mark for future the reference of FCs.
- Notably, this was done to eliminate the benefit of an expanding population to reflect upon the financial proceeds a state receives from the centre.
- Over the years population control mechanisms haven't been uniform throughout the country with some states doing much better than the rest.
- As southern states performed particularly well in population control, they now content that a shift to the 1971 census would affect their finances.
- Contrarily, some argue that we need to move to current figures instead of making our policies based on 50 year old archaic date (1971 census).
- Notably, major federations like Australia and Canada almost always use the latest information available for devolving funds to its provinces.
- "Fiscal Capacity Distance" (FCD) is the "difference of a state's per capita income from that of the state with the highest per capita income".
- FCD is another criterion for distributing proceeds, and here too, for calculating the per capita income, the 1971 census is used.

What are the other parameters in devolution of funds?

- Losses or gains for states depend on the relative weights attached to different criteria, and changes in other information including per capital GSDP.
- As some states have raised concerns, there is now a case to have a relook and lower the weights attached to the population and fiscal-distance criteria.
- Notably, weight attached to the population has varied from 25% to 10% and that attached to the distance from 62.5% to 50% from the 10th to the 14th FCs.
- **Grants** - Revenue Deficit Grants are given to states that weren't able to meet their fiscal deficit targets and have strained balance sheets.
- This has been under criticism for adversely affecting budgetary prudence as it provides leeway for incentivising states to spend recklessly.
- The government has hence rightly asked for considering its abolition, but this won't have any impact on the other grants for serving better purposes.
- Notably, Article 275(1) urges the Finance Commission to determine the principles that govern the grants-in-aid to be provided by centre to the states.
- **Equalisation** - Most federations follow an equalisation approach to determine fiscal transfers, for ensuring better support for poorer regions.
- Such an approach is key to ensure that all states are financially capable of providing services at comparable standards.
- Hence, if richer states are losing out a little, it's because they can sustain the same national standard with lesser share from the central pool.

What is the case of the poorer mineral rich states?

- Mineral rich States like "Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh and Assam" are an interesting grouping.
- These States carry a significant pollution load on behalf of the nation.

- These states had the potential to become industrialised early on by virtue of their proximity to resources.
- But they lost out due to the central government's policy of freight equalisation whereby the transport of coal was subsidised.
- Notably, freight equalisation was what led to many thermal power plants being set up in the southern States, which powered their industrial growth.
- Hence, these regions do possess a legitimate right to access more funds from the central pool in order to overcome its backwardness.

What are some technical concerns with ToRs given to the 15th FC?

- The Finance Commission should remain policy neutral as it has to come out with recommendations that accommodate conflicting claims.
- Hence, it is not the appropriate platform for promoting Central policy priorities – but some ToRs given to the 15th FC contravene this principle.
- ToR's points involving - Centre's flagship schemes, 'populist policies' of States, and conditionality on State borrowing could've been avoided.
- In any case, too long a list of ToRs, like the one given to the 15th FC, should've been avoided, as FCs deserves considerable independence in their approach.

9.13 Walmart - Flipkart Deal

What is the issue?

- U.S. retail giant Walmart planning to acquire India's leading e-commerce firm Flipkart for a whopping sum of \$16-billion.
- This is likely bolster the position of Flipkart in the ongoing neck-and-neck contest with Amazon in the Indian e-commerce market.

What is deal about?

- The deal which is expected to be sealed fully by December will lead to an immediate fund infusion of \$ 2 billion into Flipkart.
- **Flipkart's Gain** – As e-commerce market is dominated by thin margins and is worsening due to steep discounting policies, big funds are needed to sustain.
- Hence, the deal (new funds) will help Flipkart sustain its aggressive pricing against Amazon for now – thereby help in retaining competitiveness.
- Walmart brings with it experience in areas of traditional retail such as logistics, sourcing of goods and managing a physical supply chain.
- Significantly, while Flipkart lacks supply chain expertise currently, it is said to be a major strength of its competitor "Amazon".
- **Walmart's Gain** - Flipkart's prowess in technology and customer insights would complement Walmart's presence in India
- Notably, Flipkart has presence in 19 cities across nine states and runs 21 Best Price cash-and-carry stores and one fulfilment centre.
- Also, the deal is not just limited to just Flipkart, but also includes its sister concerns, which will now add to Walmart's diverse portfolio.
- Notably, the sister concerns are Digital Payment Firm "PhonePe", Fashion Marketers "e-tailers, Myntra and Jabong" and logistics arm "Ekart".
- Almost 70% of the e-market share in the fashion is currently held by Flipkart Group and Ekart has a presence in almost 800 cities (5 lakh deliveries/day).

What is the market scenario?

- India's e-commerce market is projected to grow 4 times faster than total retail over the next five years.



- Notably, consolidated retail segment is projected to grow only 9% between 2018 and 2023, whereas e-commerce segment is expected to grow by 36%.
- The e-commerce projections are based on increasing Smartphone penetration in India, which is estimated to be 58% by 2020, compared with 30% in 2017.
- India's e-retail market is still in its nascence, clocking just about \$ 27 billion sales in 2017-18, which is negligible in comparison to China's \$1.11 trillion.
- The entry of a promoter with deep pockets into the e-commerce space will accelerate the push towards e-tail adoption in the country.

What are the likely negative implications for small time retail?

- This growth of online retail is also expected to hit the unorganised retailers, who currently constitute about 90% of the \$650-billion retail sector in India.
- However, Walmart has asserted that it would support small businesses through direct procurement as it expands in India.
- Additionally, it also pledged that it would provide for increased opportunities for exports by establishing overseas supply chains.
- Walmart has also said that it will partner with small shop owners and help in modernising their retail practices and enable them adopt digital technologies.

9.14 Fugitive Economic Offenders Ordinance

What is the issue?

- Fugitive Economic Offenders are those who leave the country in the face of scandal and refuse to return to face trial.
- President has issued an ordinance on to make life difficult for "fugitive economic offenders", which is likely to be welcomed by the masses.
- But the ordinance is constitutionally inconsistent and its unintended consequences could potentially wreck havoc on innocents.

How does the ordinance affect non-offenders?

- Fugitive offender's ordinance provides a provision for "disentitlement", which could victimise an innocent on suspicion of being a fugitive offender.
- Under this provision, any court in India could issue a directive to disentitle any company related to the "fugitive offender" from defending any civil claims.
- For instance, let's say the MD or a promoter of a company is alleged to have committed a "scheduled offence" as listed in law.
- If the offender flees and refuses to come back to India, civil courts could bar the company from pursuing even legitimate dues owed to it.
- This provision goes beyond the person rejecting the rule of law in India and may affect people who are themselves affected by the fugitive.
- This line of thinking also loses sight of the fact that those who still remain in India continue to subscribe to Indian law and are legitimate entities.
- **Implications** - This could become an incentive for law enforcers to grab headlines by taking stringent actions that might hurt companies.
- As civil claims get barred, 3rd parties that owe money to companies whose "promoter (or manager) is a declared fugitives" might intentionally default.
- Also, despite being a solvent company, the company the fugitive leaves behind would face a potential prohibition on the sovereign assurance.

What are the other non-prudent provisions?

- To have any individual declared as a fugitive economic offender, an application has to be moved by the authorities asking the competent court for the same.

- However, even while moving the application, the authority has the power to attach any property listed in the application, for 180 days.
- The only ground needed for such attachment is the reasonable doubt that the property is a “proceed from crime”.
- Another clause states that a person (other than the fugitive), whose property is attached, would have to shoulder the burden of proof to reclaim it.
- Additionally, if criminally acquired property is outside the country, any other property equivalent in value held within the country would be attached.

9.15 New Payroll Report by Niti Aayog

Why in news?

A new payroll report to gauge the level of employment generation has been released by the Niti Aayog.

What is new payroll data report about?

- The report of payroll data is an important first step by the Union government to track job growth more closely.
- The payroll data collected by the Employees' Provident Fund Organisation (EPFO), Employees' State Insurance Corporation (ESIC) and the Pension fund Regulatory & Development Authority (PFRDA) has been consolidated by the Niti Aayog in the form of a report.
- This report will be released every month, to track the number of jobs added in the formal sector.
- The recently released report has measured the rate of employment addition for the period 2017 September to 2018 February.
- It highlights the new jobs generated in the 6 month period with the help of EPFO and PFRDA data.
- And the data collected by EPFO and PFRDA has suggested that jobs are being created in the country, which is seen as a positive growth indicator.

What are the limitations with the report?

- This report collects data only from the union and state government establishments and do not capture the jobs created in the professional jobs.
- Also, employment generation in the informal sector, especially in the agriculture and micro enterprises are not captured which hold more than half of the total employee population.
- There is no methods used in the report to filter duplicate data and data from inactive accounts in EPFO and PFRDA.
- It is also possible that many new jobs accounted were already existing in informal sector but newly moved to the formal sector.

What measures can be taken to address these limitations?

- The NITI Aayog can additionally source data from the ICAI, bar council, medical council and other professional bodies to account for other avenues of employment.
- Periodic surveys can be conducted to identify the job creation in the informal sectors.
- Collaboration with NSSO can be done to bring out annual and quarterly surveys to provide a holistic picture of the employment status in the country.

9.16 RBI Clamps down on Crypto-currencies

What is the issue?

- RBI has recently directed all agencies regulated by it to stop doing any business with persons (or entities) dealing with Virtual Currencies (VC).
- Notably, the government and the RBI had already been flagging the inherent risks in dealing with crypto-currencies.

What are the directions issued?

- In what is by far the most direct action taken thus far, the Indian central bank issued a circular to clamp the proliferation of crypto-currencies.



- The RBI circular mandates the stoppage of all services to those dealing in VCs, with regard to their purchase or sale of crypto-currencies.
- This covers - maintaining accounts, registering, trading, settling, clearing, giving loans against virtual tokens, and accepting VCs as collateral.
- In addition, the RBI stipulated a three month time from the date of the circular to exit any such relationship they might already be in.

Why was such an action taken?

- The RBI and the government have repeatedly issued warnings to people dealing in crypto-currencies as there are inherent financial risks.
- The Finance Ministry even referring to them as “Ponzi schemes” in which investors stand to lose all their money.
- The fear among policymakers is that crypto-currencies, being an alternative to fiat currency, could be misused to launder black money or finance terrorism.
- RBI is also said to have constituted a committee to look into the merits and demerits of it issuing a Rupee backed digital currency.
- Hence, some see that the current crackdown is ring-fencing of non-state crypto-currencies as a first step to make way for RBI’s virtual currency.

How have various crypto-dealers reacted?

- Several crypto-currency exchanges have said that though harsh, the RBI’s stance does not explicitly outlaw trade in crypto-currencies in India.
- They believe that this move only segregates crypto-currencies from fiat ones.
- Nevertheless, writ petitions challenging the RBI’s order have already been filed on the grounds that it violates Article 19 of the Constitution.

Quick Fact

Ponzi Scam

- This is an investment bubble, which is beneficial for investors till a tip off point is reached, when the bubble crashes and results in huge losses for investors.
- Here, investments (shares, bonds, property etc...) are sold to interested investors and they earn by reselling these for higher prices.
- In this model, value of investments increases only due to the availability of newer willing investors in the market.
- As there is no real revenue generation from the investments, once the new investors are exhausted, then the prices of investments crash.

10. INFRASTRUCTURE

10.1 India Electrified – The Fact and Exaggeration

What is the issue?

- Recently, the Union government had declared that all villages across India have been electrified.
- While all villages have been electrified, as much as 17% of the 18 crore rural households remain without power connections.

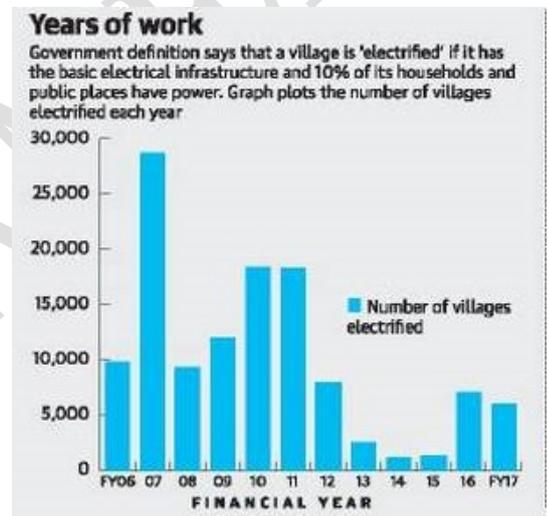
What is the current electrification scenario?

- **Village Electrification** - With electricity reaching Manipur Leisang village recently, every village in India is said have been successfully electrified.
- This hence completes the mission of the union government piloted “Deen Dayal Upadhyaya Gram Jyoti Yojana” (DDU-GJY).

- Significantly, more than 18,000 villages have been electrified since 2014.
- But this doesn't mean all rural houses have been provided with power connections, as merely 10% coverage is sufficient to call a village electrified.
- **Household Electrification** - As much as 17% of the 18 crore rural households remain without power connections.
- Hence, the government has already initiated its "PM Sahaj Bijli Har Ghar Yojana" (Saubhagya), which aims for universal household electrification.
- It is indeed a big achievement that every village has been electrified, but the task ahead for electrifying all houses is far bigger a challenge.
- Additionally, India's rural poverty is so striking that the poorer households may not be able to sustain an electric connection even under heavy subsidy.

What does the statistics say?

- **Progress over the years** -
- **Quality of supply** - As per government sources, as of December 2017, only six out of 30 states had 24 hour-power supply in rural areas.
- Over 50% of electrified rural households in UP, Bihar, Madhya Pradesh, Jharkhand, Odisha and West Bengal don't even get 12 hours of supply in a day.
- **Households without a connection** - UP tops the list with a striking 44% of the population living without electricity.



TOP 5

States with most unelectrified rural households

State	Households without power	Proportion in state
UP	133.42 lakh	44%
Bihar	32.03 lakh	26%
Odisha	30.91 lakh	36%
Jharkhand	28.69 lakh	52%
Assam	22.65 lakh	43%

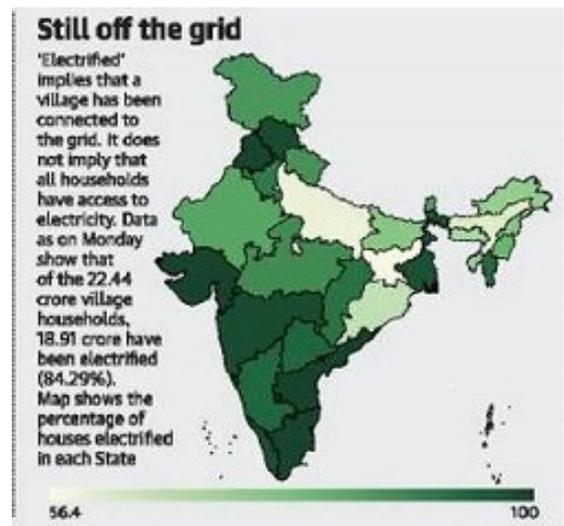
As of April 29, 2018

Source: Ministry of Power



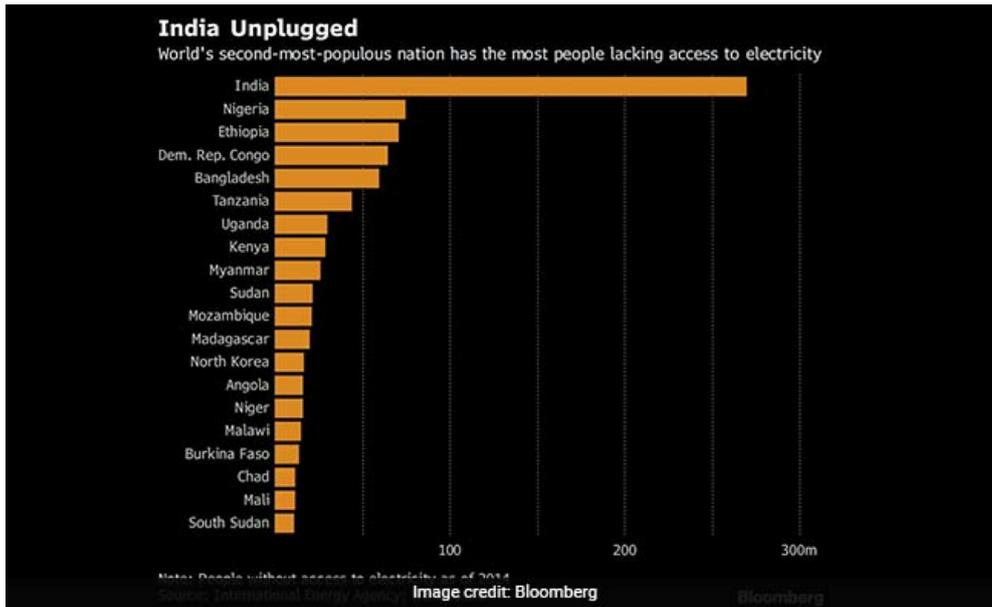
3.14 crore households without electricity

17.99 crore rural households



Variations among connections across states

- **Electrification across countries** -



10.2 Concerns in Kishanganga Dam Project

What is the issue?

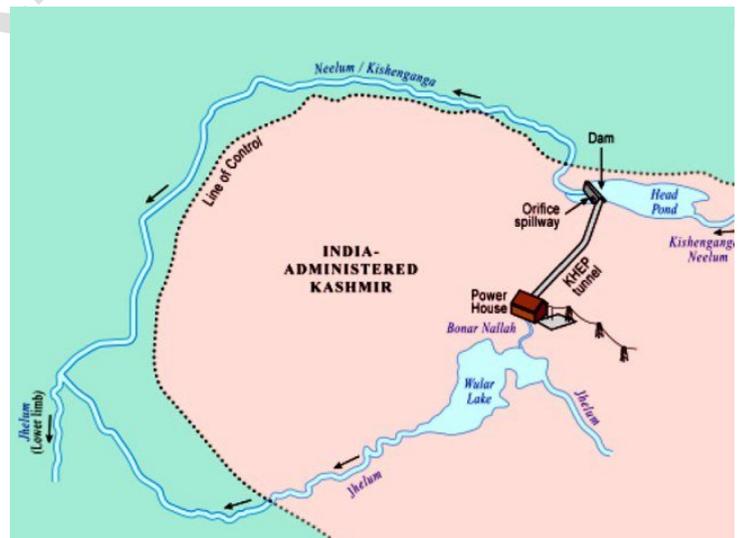
In providing security for the Kishanganga dam sabotage is a major concern rather than shelling by Pakistan.

What is the significance of Kishanganga dam?

- Kishanganga dam is located in the Gurez Valley of Bandipora district, north of Srinagar and lies to the north of Wular Lake.
- It is a 330 MW power project, and is expected to generate 1,713 million units per annum by diverting water from Kishanganga River to an underground powerhouse.
- The project is operated by National Hydroelectric Power Corporation (NHPC), will benefit several north Indian states and will provide 12% of its generated power to J&K.
- The presence of this dam in LOC shows India's confidence in handling any challenge posed by Pakistan.

Why India is confident about the security of the Dam?

- The biggest defence for the dam is its proximity to the villages in Pakistan occupied Kashmir which are located only 10kms downstream of the river, right after the LoC.
- Therefore, any act to destroy the dam would actually pose the greatest danger to Pakistan.
- And with the respect to the Indian villages downstream Kishanganga in Gurez, all six villages were shifted uphill while constructing the dam.
- However, even if the dam is targeted, shelling from across the LoC does not pose any real danger as the dam is located in a gorge and not in the direct line of fire.
- In the event that a shell does hit the dam, it can withstand shelling as it's a very heavy structure.





What are the concerns of security in the Kishanganga project?

- There is a serious concern of sabotage in the dam by individual or groups, which too would pose same dangers of flooding downstream.
- The river is wide enough to cause huge flooding at a discharge of about 2,000 cumec (cubic metres per second).
- But the extent of damage to the structures and how it will affect the region and consequent power supply are unclear now.

10.3 Copper Smelting Process & Mitigation Measures

What is the issue?

- The process of copper smelting has various effects on the environment and people.
- Hence proper mitigation mechanisms has to be followed to reduce the ill-effects of those pollutants.

How does copper smelting process pollute the environment?

- Copper smelting is the process through which the copper ore is purified through intense heating and melting to derive high quality copper or copper products.
- As most copper ores are sulphur-based, the smelting process releases sulphur dioxide, an air pollutant which has many harmful effects.
- When the concentration of sulphur dioxide is so high, the industries convert it into sulphuric acid, which is an irritant and water contaminant.
- The other by-product of smelting is slag, the waste matter containing metals separated from ore.
- This slag may leach heavy metals (arsenic, cadmium, lead or mercury depending on the composition of the ore) into groundwater reservoirs.
- Water which has a high heavy metal content is very toxic to humans.
- Slag may also increase the concentration of other, less harmful salts in water resources, which may change the taste of water.

How the ill-effects of smelting can be mitigated?

- To reduce the effects of smelting process in the environment and to the public, the location must be decided according to the specific rules given in the Environment Protection Act.
- A green zone surrounding the industry must be made with variety of trees, shrubs and grasses to absorb the excess pollutants which may be in the atmosphere.
- The by-products or pollutants has to be properly recycled or contained, and not be let out freely in the atmosphere.
- The slag or waste materials have to be stored and disposed of according to the specifications of the pollution board.
- Care must be taken to ensure nearby villages or towns are not affected and regular survey of the externalities have to be undertaken as part of the research by the industry.
- Transparency regarding the pollutants, their concentration and any necessary precautions have to be made aware to the public.
- By following the governments' rules and regulations, smelting plants or industries can be functional without much damage to the environment nor to the people.

National Bio-fuel Policy - 2018

What is the issue?

- The new biofuels policy was released by the Union Government recently.
- While it is high on ambition, its success will depend on how it is executed.



What is the current scenario?

- The government estimates that ethanol supply of around 150 crore litres in 2017-18 could save foreign exchange worth over Rs. 4,000 crore.
- Sugar industry is the key ethanol supplier for fuel blending at present, but prices offered to them for ethanol isn't attractive.
- Hence, they've preferred to sell off their stock to better remunerative alcohol and other industries, which has been constraining supply for blending.
- Currently, rising oil prices are putting increasing pressure on the economy.
- In this backdrop, the government has mooted the new "National Biofuel policy" for encouraging Ethanol use, which gives some solace.
- The policy's focus has been in addressing the supply side issues involving bio-fuels, which has long been a constraint in domain.

What does the new policy envision?

- The new policy explores a wider variety of raw materials to be used as inputs to produce ethanol (which is to be blended with petrol).
- Apart from sugarcane – government plans to include corn, damaged food grains, potato and even municipal solid waste as ethanol sources.
- These changes are likely to reduce the cost of producing bio-fuels and improve affordability for consumers, particularly during oil price hikes.
- The Centre hopes the new policy will also benefit farmers, who will be able to sell various types of agricultural waste to industry at remunerative prices.
- It will also serve as an incentive for farmers to not burn their stubble and other farmland waste, which has become a menace in the regions around Delhi.
- The policy also envisions a budget of 5,000 crores for supply chain infrastructure enhancement in the bio-fuel sector.

What is the way ahead?

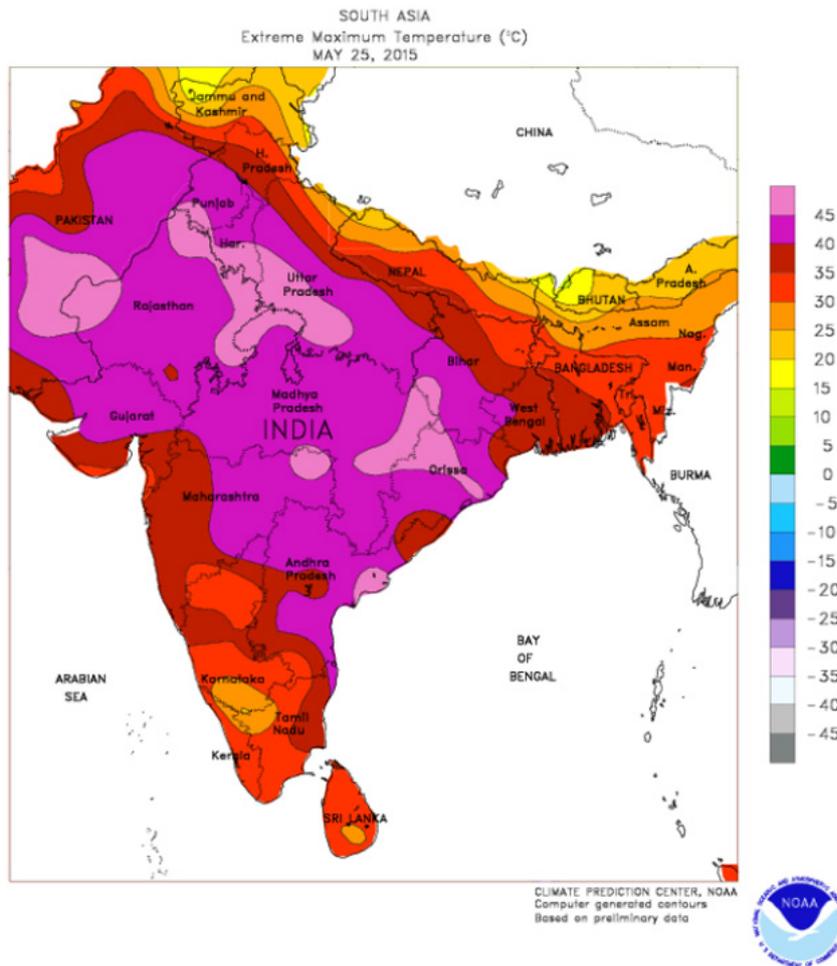
- Any bio-fuel policy must be strongly backed by sufficient technology and production scale in order to be financially feasible and implementable.
- Given the current market dynamics, sugar industry's share in the bio-fuel mix is unrivalled – thereby underscoring the need for better pricing for ethanol.
- The consideration for using food grains is a tricky one as food supply chains might get affected if there aren't proper checks.
- While source diversification is indeed a positive, proper enhancement of supply-chain infrastructure to reach the final consumer will prove vital.
- The government should also take steps to remove policy barriers that have discouraged private investment in building supply chains.

11. AGRICULTURE

11.1 India's 70 Year Temperature Pattern

What is the issue?

- A new study has crunched decades of IMD data to observe patterns of warming and some cooling across India's landscape.
- The focus of the study was on the impact of climate change on agriculture.



What is the key finding of the study?

- Surface temperature data across India over the past 7 decades has found “a consistent pattern of warming” over the north-western and southern parts.
- An unmistakable rapid rise, particularly since 1980, has been observed over - winter, pre-monsoon, monsoon and post-monsoon period depictions.
- The decade mean maximum surface temperatures over India in the pre-monsoon months in 1950s showed limited areas with values as high as 40°C.
- But in 2010s, area with values exceeding 40°C had expanded to the majority of the Indian peninsula, with peak values in south-central India reaching 42°C.
- **Anomaly** - The zone anchored over north-east that extends south-westward across central India saw a pattern of cooling during this period.
- These trends are explained by “the presence of a large region of anthropogenic brown haze over India and the adjacent ocean regions.
- This haze is especially in the winter and spring and is composed of aerosols that absorb solar radiation, and reduce insolation at the Earth’s surface.

And what do the data suggest?

- The researchers underline that India is more vulnerable to climate change because of the sheer size of its population and the stress on its land resources.
- Notably, Indians account for about 17.5% of the world’s population, but has merely 2.5% of the world’s land and 4% of fresh water resources.
- A mid-range projection of climate change for 2020-39 has indicated a reduction in crop yields of between 4.5% and 9%.



- The only comforting aspect is that the primary rice and sorghum growing areas lie predominantly in the regions that aren't seeing intense heating.

11.2 Rural Manufacturing Based Model to Double Farmers' Income

What is the issue?

- The present agri-production based model in India has various shortfalls.
- It has to be replaced with a rural manufacturing based model.

What are the concerns with the present agricultural model?

- Agricultural sector employs major portion of the workforce yet its current growth rate is merely 3%.
- The farmers are concentrating more on increasing the per acre productivity and not on getting sustainable income from the land.
- The explosion of service sector and stagnation of manufacturing sector are also contributing to the disguised employment and declining growth in agriculture.
- There are issues with the policies formulated as they concentrate more on remedying the immediate requirement so the farmers without analysing the consequence of their actions.

What is the rural manufacturing based model about?

- The rural manufacturing based model connects the individual households with the local markets in villages and these with domestic and global consumption markets.
- The goal of this model is to double income of agricultural households and to boost the agriculture & related manufacturing.
- Central to this approach is creating a market-place that supports a rural enterprise which is partly agricultural and partly non-agricultural.
- It will also involve the under-employed adults in rural households in low-skilled non-crop activities that integrate output from these activities into the existing or future markets.

What areas should be specifically developed under this model?

- **Menstrual hygiene market** – Assembly of sanitary napkins in small units should be localised so that women from the villages run it.
- This will create a rural-based production system that generates employment and creates basic industrial skills.
- **Goat rearing** – It has a potential for net annual income of Rs.1000- Rs.2000 per goat including milk, its value addition, meat and leather processing.
- Collecting goat milk from households and distribution through the milk co-operatives will create a large, broad-based collection, processing and storage infrastructure and generate employment.
- **Honey production** – Apiculture is a low-cost source of income for rural households.
- Apart from its revenue potential, bees help in pollinating the crops which is a viable solution to the declining natural bee population.
- **Value addition to crops** – Excessive production of crops like tomatoes, potatoes, and other vegetables can be processed into purees and dry flakes to reduce wastage and glut in the market.
- Policies can be formulated to extract the natural antibiotics present in herbs and roots such as tulsi and turmeric which will increase the income of the tribal farmers.
- **Bio-fuel market** – Biofuel crops like Jatropha should be encouraged to be planted by the farmers as it would serve both as fodder and also fuel required for running the equipments in the farm.
- Collection and processing units when set up in villages will generate additional employment for the people.
- Also, turning farm waste into fuel instead of burning will improve the health of people as well as the environmental conditions.

11.3 Crisis in the Cane Industry

What is the issue?

- The union government's has announced a financial assistance for sugarcane growers, but it is too little to beat the distress in the sector.
- Also, the government is pushing aggressively to increase exports of refined sugar at a time when external demand is not conducive.

How significant is the support that has been announced?

- Union government recently approved a financial assistance of Rs 5.50 per quintal (100 kg) of cane crushed by sugar mills for 2017-18.
- The Centre's FRP of cane for 2017-18 is around Rs 287 per quintal (average).
- **The Stress** - Centre's Sugarcane (Control) Order mandates mills to pay the FRP within 14 days of cane purchase from farmers.
- If payments deadlines aren't met, they'll have to pay about 15% annual interest on the due amount for the period of delay.
- But sugar mills have clearly stated that they cannot pay farmers beyond 75% of their realisations from sugar.
- Hence, at the prevailing ex-factory sugar prices of about Rs 26 per kg, the net value would amount to merely Rs. 217 per quintal.
- This leaves a shortfall of about than 70 rupees from the nationally mandated FRP, which will hardly be met with the Rs. 5.5 per quintal assistance.
- **Implication** - The move to provide Rs 5.5 per quintal as subsidy is an admission that FRP requirements are very high.
- This amount will get adjusted with FRP, thereby giving mills considerable leeway in paying even the amount mandated by law.

How have things come to this?

- Overproduction has been a persistent problem with sugarcane, and it has often messed up the calculation of millers, traders and governments.
- The country's sugar output in 2017-18 is expected at a record 31.7 million tonnes (mt), a 56% jump over the last season's level.
- Even more spectacular is the production rebound in Maharashtra, from a 12-year-low of 4.2 mt in 2016-17 to an all-time-high of 10.7 mt this year.
- These projects have led to the crash of ex-factory prices by Rs 9-10 per kg since the start of the season as immense surplus has been projected.
- Notably, the availability is projected at 35.5 mt (3.8 mt previous stock added), but the estimated domestic demand is just 25 mt.

How could the sugar subsidy influence markets?

- Cane arrears (to farmers) are currently Rs. 20,000 crores and the proposed Rs. 5.5 per quintal will account a pittance of just Rs. 1,630 crores.
- But notably, this assistance is to be provided only to those mills which will fulfil the eligibility conditions as decided by the Government.
- While there is no clarity on the "eligibility conditions", the expectation is that the payment would be linked to mills meeting export targets.
- The Centre has already fixed mill-wise "minimum indicative export quotas" totalling 2 mt for the current sugar season.
- Forcing mills to export could be a part solution to the domestic glut, with the Rs 5.50/quintal assistance acting as a performance incentive.

How does the export scenario look?

- At current international rates, white sugar will have to be shipped out from India at around Rs 20.50 per kg.
- That translates into an ex-factory price of Rs 18, which is way below what mills are realising from domestic sales.
- Also, internationally, there is limited demand for India sugar which usually has an ICUMSA value of over 100 (lower the ICUMSA, greater the purity).
- Global markets require a better refinement with ICUMSA values around 45.
- “National Federation of Cooperative Sugar Factories” has stated that exporting the mandated 2 mt of white sugar before September won’t be easy.
- They’ve rather asked the centre to target raw sugar exports of 4 mt before December 2018, which the mills would be able to meet.
- Indian raw brown sugar from fresh cane is said to be dextran-free and with very high polarisation of 800-1,200 ICUMSA.
- There is a good international demand for raw sugar, including refineries in West Asia, which currently sources Brazilian raw sugar.

What are the hopes for the future?

- Rising global oil prices may induce mills (particularly in Brazil) to divert cane juice for production of ethanol, as opposed to sugar.
- **International Market** - Brazil’s ethanol output (as blend for fuel) might go up from the currently 26.09 billion litres to 27.5 billion litres.
- Consequently, its projected sugar production in 2017-18 (36.05 mt) might fall to 30.5 mt in the next crushing season.
- This can open up the international market for Indian raw sugar.
- **Fuel Blending** - It is also the right time for India to aggressively push domestic ethanol blending in fuel to reduce our crude import bills.
- Notably, compared to Brazil’s 26 billion-plus litres, India plans to blend just about 1.4 billion litres of ethanol to oil in 2017-18.
- This is only 4.4% of the country’s annual petrol consumption of 32 billion litres, while 10% ethanol-blending has already been mandated by law.
- As petrol prices are touching Rs 75 per litre, there is headroom for enhancing the Rs 40.85/litre rate for ethanol.
- Hence, there is a scenario in the fuel market which can enhance the profitability for sugar mills and also absorb the excess cane supply.

12. SCIENCE AND TECHNOLOGY

12.1 Concerns with Data Protection

What is the issue?

In the recent times, growing data piracy threats require strong government regulation to protect citizens’ data rights.

What are the concerns with data protection?

- The privacy protection concerns in the digital databases along with data protection has emerged as major national concern, given the recent incidents of data as well as privacy threats.
- The long-term record keeping and data analysis are contradicting the privacy protection requirements.
- Mass surveillance by linking databases of unique identities is also results in fear of digitization.
- Mere existence of infrastructure disturb the balance of power between the citizens and the state.



- Thus data protection becomes central to privacy protection as far as databases are concerned.

What are the regulations needed to address this issue?

- Government has to formulate policies for building architecture of Data safety.
- The SC's judgement on right to privacy has given a push for individual autonomy and self-determination in controlling the usage of personal data.
- Stricter data security provisions are required as there are not only high identity theft rates, but world's largest corporates like google and facebook have grown unchecked.
- At the same time, India has to bring in more innovation friendly setup to cater to most of the population who are under-privileged.

12.2 Solution to Reduce Wastage of Pesticides**Why in news?**

CSIR has found a lipid compound to reduce the wastage of pesticides by slippage.

What is CSIR?

- The Council of Scientific & Industrial Research (CSIR) is India's contemporary R&D organization.
- It is known for its cutting edge R&D knowledgebase in diverse S&T areas.
- CSIR's R&D expertise and experience is embodied in about 4600 active scientists supported by about 8000 scientific and technical personnel.
- It provides significant technological intervention in many areas with regard to societal efforts which include environment, health, drinking water, food, housing, energy, Farm and non-farm sectors.

How CSIR's recent innovation will reduce pesticide wastage?

- The CSIR has identified a lipid compound known as Glyceryl-Mono-Oleate (GMO), a natural wax-like solid extracted from sunflower oil.
- The structure of this compound is that it's one end is hydrophilic (water-attracting) and the other end is hydrophobic (water-repelling).
- When this compound is mixed with pesticides, the liquid sticks to the leaves and doesn't fall off to the ground.
- When the solution was sprayed the lipid GMO nanoparticles rush to the leaf surface and quickly spread out to make a thin film on the leaves.
- This thin film is hydrophilic on the outside and hydrophobic on the inside resulting in the water-pesticide mix sticking strongly on the leaves.

What is the significance of this innovation?

- The pesticides are sprayed on to the crops which increases its slippage into the ground.
- This residue of pesticides then leeches to the ground, mixes with the water cycle and the food chain which has long term consequences for man.
- From economical point, large of amount of pesticides have to be sprayed to keep the plants away from insects and pests.
- Since, the pesticides don't stick to the leaf, farmers locally mix pesticides with soap water which is not a viable solution.
- This forced the scientists to work on finding a solution for this small yet significant problem and found an innovative solution which is safe for the whole ecosystem.

12.3 Sugar Waste to Fertilizer**Why in news?**

CSIR lab has developed a solution to separate hazardous pollutant from organic matter in sugarcane distillery process.

What are the concerns with sugarcane distillery process?

- For every litre of alcohol produced from fermentation of sugarcane molasses, distilleries generate 10-15 litres of wastewater effluent or "spent-wash".



- Molasses-based distilleries in India churning out 2.5-2.6 billion litres of alcohol discharge 30-35 billion litres of this hazardous residual liquid annually.
- This Spent-wash if disposed untreated can contaminate surface and ground water
- Distilleries in India currently manage their spent-wash mainly by converting it into manure by mixing the wastewater with press-mud, a residue from sugar mills.
- However, press-mud is available only during the 150-160 days when the mills are running, forcing the distilleries to limit their operations to the crushing season.

What is the recent development of CSIR lab?

- The Central Salt & Marine Chemicals Research Institute (CSMCRI) will recovery potash salts from the “lean” spent-wash, which then undergoes evaporation to yield recycled water and residues.
- The residues are further mixed with the organics recovered in the first stage.
- The technology separates complex organic compounds from spent-wash through a coagulation process.
- This generates valuable organic matter (which can be converted into animal feed formulations), potassium nitrate (fertiliser) and reclaimed water (reusable in the molasses fermentation process).
- The process yields 10 tonnes of complex organics, 2.5 tonnes of potassium nitrate and 75,000-80,000 litres of recycled water from every one lakh litres of spent-wash.

What is the significance of this development?

- The recent technology will help distilleries comply with the Central Pollution Control Board’s mandated zero liquid discharge (ZLD) action plans.
- It would also meet up to a tenth of India’s potassium-based fertiliser requirements, now entirely met through imports.
- This will encourage more distilleries to come up and produce ethanol for blending with petrol, cutting the country’s oil import bill and bringing sugarcane growers better returns.

12.4 Research on CMB Radiation**Why in news?**

Indian space scientists are conducting experiments on Cosmic Microwave Background (CMB) radiation in Timbaktu village.

What are CMB radiation?

- Indian scientists are conducting experiments to confirm occurrence of unusual space signals in the spectrum of Cosmic Microwave Background (CMB) radiation.
- CMB is an all-pervasive but weak electromagnetic radiation from the early universe when matter was still to be formed.
- This radiation does not come from any of the objects that are observed in the universe, like stars or galaxies, it comes from things that are not formed yet.
- CMB is a relic from an early universe when matter and radiation were still in thermodynamic equilibrium.
- Thus when it is observed it is similar to looking at the period in universe after the big bang and before the present objects were formed.

What is the significance of this research?

- Ever since its discovery, CMB has been an invaluable source of information on the early universe.
- From its properties, scientists have inferred that the early universe was filled with hot, dense and extremely uniform gas, mostly hydrogen.
- The first stars were formed when blobs of these gases fused under the influence of gravity emanating visible light commonly referred as cosmic dawn.



- The present theory of origin of universe has the probability of being proved practically with the findings derived by observing CMB radiation.

Why the scientists chose Timbaktu for their tests?

- Timbaktu is a small hamlet in Anantpur district of Andhra Pradesh, It is surrounded by hills with unusual rock formations.
- Its location has least contact with the outside world and minimal footprints of modern digital technology.
- Air present in this place is clean and the sky is clear, making it one of the very few places which practically has no noise.
- Due to these properties, this place is described as Radio Quiet by space scientists hunting for faint electromagnetic signals from the sky.

13. ENVIRONMENT

13.1 WHO Pollution Report - India

What is the issue?

- WHO report on most polluted cities highlights the worrying pollution scenario in Indian cities.
- It makes it imperative to analyse the reasons for the Indo-gangetic plain being polluted the most.

What is the case with India?

- 14 of the 15 cities with the highest levels of PM 2.5 pollutants in 2016 were in India.
- These 14 towns and cities are mostly part of northern India stretching from west to east.
- It covers from Jodhpur (No. 14) in Rajasthan to Gaya (No. 4), Patna (No. 5), and Muzaffarpur (No. 9) in Bihar.
- The report identifies the **Indo-Gangetic plain**, along with **Rajasthan and the Kashmir Valley**, as having the worst air in the world.

What is the anomaly?

- Delhi, Agra and Kanpur are evidently known to have very high levels of air pollution.
- But places like Varanasi, Muzaffarpur, Gaya, and Srinagar do not have a high concentration of polluting industries.
- They neither are notable for other common sources of pollution, such as vehicular emissions.
- But a steady rise in the particulate matter all over the Gangetic plains is being noticed for the last one decade or so.

What make the Indo-Gangetic plain vulnerable?

- **Trapped** - The Gangetic plains are like an enormous valley, trapped on both sides.
- It lies between the Himalayas in the north and the Vindhyas in the south.
- Resultantly, pollutants are unable to disperse very far.
- Also, this region is land-locked and does not have the advantage of the coast.
- So pollution cannot dissipate quickly as in, say, Mumbai or Chennai.
- **Populated** - The region is one of the most densely populated in the world.
- The demand for energy sources, and the consequent burning of fuels, is extremely high.
- This naturally releases a large number of pollutants and particulate matter.
- **Waste management** - A lot of the smaller cities have poor waste management.
- There is a lot of burning, solid fuel use, moving from non-motorised to motorised transport, etc.
- **Secondary sources** - Neither Gaya nor Muzaffarpur, not even Delhi and Kanpur, produce even half of the pollutants measured in these cities.
- Most of the particles at Gaya and Muzaffarpur are actually transported from “up-wind” states.



- It is shown that more than 60% of the particulate matter found in Kanpur has been generated elsewhere.
- **Humidity** - As they move along, these particles gain in size and mass.
- The high levels of humidity in this region is very conducive to the formation of secondary aerosols.
- Water facilitates the reaction between the emitted gases whose molecules form clusters and slowly nucleate into particles.
- Gases released from industries or vehicles, too, condense and are converted into particles.
- **Wind Direction** - In this region, wind predominantly blows from north-west to east for most part of the year.
- This is more so in the winter, carrying along with it pollutants generated elsewhere.
- But once the pollutants enter the Gangetic region, they get trapped, and remain suspended over the area.

How to address this?

- Air pollution does not recognise borders.
- Improving air quality demands sustained and coordinated government action at all levels.
- North India is not the only part of the world with these or similar geographical constraints.
- There are international models in such states/regions which have laws empowering governments to invoke stringent measures whenever required.
- E.g. California, a valley with a propensity for pollution to build up, was the first state in the US to enact an anti-pollution law back in the 1940s.

13.2 Dust Storm Proves Catastrophic

What is the issue?

- Dust-storms, thunderstorms, and lightning at many places in northern, central and eastern India killed as many as 100 people in 1 day.
- While the weather events are common around this time of the year, the number of casualties was unusually high in the current storm.

What had happened?

- Rainstorms and dust-storms arise from similar meteorological conditions.
- They are almost always preceded (caused) by a spell of intense heat – the affected areas indeed had heat-wave like conditions lately.
- Thunderstorms or hail occur when the atmosphere has moisture, and dust-storms occur when moisture is absent.
- Indian Meteorological Department (IMD) routinely issues alerts and the current weather events too, had been predicted, and warnings were issued.
- **The Factors** - Such storms occur due deviation from the normal temperature difference (locally) between the upper and lower atmosphere.
- Moist easterly winds from the Bay of Bengal reached up to Himachal Pradesh, which was also receiving dry winds from the north-westerly direction.
- These two systems destabilised the equilibrium between the upper and lower layers of atmosphere – making it conducive for the thunderstorm.
- The final trigger, however, is the development of a large scale air-circulation system that developed over Rajasthan a couple of days earlier.

Why so many death?

- While it seems odd, a large number of deaths over a few days have been reported earlier too, like in the June 2016 lightning – which killed over 300.
- Notably, lightning is the biggest killer in India among natural calamities and accounted for as much as 2641 casualties in 2015.



- Nevertheless, the recent storm was unusually catastrophic because it occurred over a large area over a short span of time.
- In most cases, storms (like lightning) do not kill by themselves— but they trigger incidents that result in deaths.
- Walls or homes collapse, and people are electrocuted after power lines snap, or after they are caught in fields filled with water.

How useful are the predictions?

- People in the poorest, most densely populated areas are the most vulnerable.
- Also, while meteorological predictions are for broad geographical areas and timeframes, events are however localised both in time and space.
- It is not yet possible to predict a thunderstorm or lightning at a precise location — say a village or a part of a city.
- As the exact times these events will hit can't be predicted, alerts and warnings usually merely telling people to expect these events, and to take precautions.

What are the mitigation measures needed?

- Public infrastructure needs to be upgraded and construction of huge structures must be regulated in the northern region by allowing for wind breakers.
- The Indian Meteorological Department (IMD) has to convey early warnings to centre, the states concerned as well as disaster management teams which helps in coordination and rescue work.
- Administrators and personnel has to be adequately qualified to handle rescue and rehabilitation to reduce the damage to the vulnerable lives.
- Awareness should be spread to people in the hotspot regions to take precautions against extreme weather and renovate old buildings which may not be safe in such weather conditions.

13.3 Concerns with Draft National Forest Policy, 2018

What is the issue?

The Draft National Forest Policy, 2018 published recently has omitted the diversion clause present in the National Forest Policy (NFP), 1988.

What are the important provisions in the NFP, 1988?

- The NFP required for most careful examination by specialists to decide upon the diversion of forest land for any non-forest purpose.
- The Policy mandated cost-benefit analyses with respect to social and environmental factors while diverting forest land for other activities.
- These two requirements were prerequisites before grant of any clearances for diversion of forest land.
- In addition, the policy directs the government to totally safeguard the tropical rain/moist forests, particularly in areas like Arunachal Pradesh, Kerala, and Andaman & Nicobar Islands.

What are the concerns due to omission of diversion clause?

- In the past years, many forest clearances were granted by the Ministry of Environment, Forest and Climate Change without considering the provisions of NFP.
- Cost benefit analyses and opinion of specialists were not sought while diverting the forest lands.
- Now with the omission of this clause in the new draft policy, it is highly likely that there will be no protection for the forests, especially in the rain forests and ecologically sensitive zones.
- The new draft policy has changed the requirement of cost benefit analysis after the diversion of land, which previously was before any sanctions for diversions.

- It has also altered the opinion of specialists to opinion of forest officers in the region.
- Thus, these concerns will surely affect the health and wealth of forests in India.

13.4 NASA's Report on Hydrological Change

Why in news?

NASA satellite observations of Earth has found that there is a serious decline in the availability of freshwater in India.

What are the findings of the study?

- NASA used data on human activities to map locations where freshwater is changing around the globe.
- This is the first time that observations from multiple satellites in a thorough assessment of how freshwater availability is changing everywhere on Earth.
- In some regions water supplies were found to be relatively stable, others experienced increases or decreases.
- The study found that Earth's wet land areas are getting wetter and dry areas are getting drier due to a variety of factors.

What is the reason behind this decline of fresh water?

- The factors for this phenomenon includes human water management, climate change and natural cycles.
- Distinctive pattern of the wet land areas of the world getting wetter those are the high latitudes and the tropics and the dry areas in between getting dryer.
- Pumping groundwater for agricultural uses is a significant contributor to freshwater depletion throughout the world.
- Groundwater levels are also sensitive to cycles of persistent drought or rainy conditions

What are the implications for India?

- Areas in northern and eastern India are among the hotspots where overuse of water resources has caused a serious decline in the availability of freshwater that is already causing problems.
- In northern India, groundwater extraction for irrigation of crops such as wheat and rice have caused a rapid decline in available water, despite rainfall being normal throughout the period studied.
- The extractions in these parts has already exceed recharge during normal precipitation and does not bode well for the availability of groundwater during future droughts.

13.5 Gujarat's Water Crisis

What is the issue?

- Climate change is touted to influence monsoon in the coming years.
- There is a serious call for mitigating actions from concerned governments.
- In India, arid states like Gujarat are of particular concern.

What is the situation in Gujarat?

- Drought in India is growing in severity, and it is being aggravated by heat waves and significant rain deficits in different regions.
- On the cusp of the southwest monsoon, several arid States are hoping to revive their rivers and reservoirs with bountiful rain.
- Gujarat government has embarked on a labour-intensive programme to desilt rivers and water-bodies ahead of the rains.
- Notably, fall in reservoir storage levels in the Sardar Sarovar Dam, and 27 other reservoirs, had severely affected the farmers of the state last year.



- Considering the dire situation, drinking water needs are being prioritized, and supply for irrigation from dams has already been suspended for now.
- This underscores the need for comprehensive reforms at the level of States, with the Centre helping to conserve hydrological resources.

What more can be done?

- Gujarat needs to improve rural water storage structures to ensure long-term prosperity for its drier regions - Saurashtra, Kutch and North Gujarat.
- This will ensure relief for farmers from the monsoon vagaries that affect the Narmada, whose waters are apportioned among four States.
- As studies have estimated that public irrigation efficiency to be as low 35%, work needs to be commenced to better this by usage of field technologies.
- Decentralised water storage too will help cities like Ahmedabad, Rajkot, Surat and Vadodara when supply from large dams and other sources dwindle.

14. INTERNAL SECURITY

14.1 Dangers of Politicising the Military

What is the issue?

- Karnataka campaign trail is witness to politicians hurling corrosive remarks against their opponents regarding treatment of military veterans.
- It is prudent for the political class to keep the armed forces out of electoral rhetoric in order to ensure that the institution remains apolitical.

What kicked off the electoral controversy involving defence personals?

- PM Modi recently criticised the Congress party for insulting two illustrious generals of the Indian Army.
- Both these military icons, Field Marshal K.M. Cariappa and General K.S. Thimayya, are from the local Coorgi community in Karnataka.
- Notably, this case of “disrespect” goes back many decades, to the 1947-48 war (Pakistan) and the 1962 war (China).
- The PM stated that Gen.Thimayya was insulted by the then Congress government despite having led the Indian forces to victory in 1948 Pak War.
- The PM additionally noted that Gen.Thimayya had to resign in order to maintain the sanctity of the position that he held.
- He also said that similar inappropriate treatment was met out to Field Marshal Cariappa after his campaign against the Chinese in 1962.
- The electoral subtext was to show the congress in bad light in relation to national security by fuelling the perception that Nehru mocked to veterans.

Are the allegations true?

- Indian Army had a British chief during the 1947-48 war for Kashmir and the army wasn't led by Gen. Thimmaya in Kashmir.
- Gen. Thimmaya was only a 2 star general in Kashmir operations (under Lt.Gen Cariappa's command) and he did not resign after the war as stated.
- Similarly, the reference to Cariappa was way off the mark, for he had retired in 1953 and was in no way involved with the 1962 war.
- Sadly, instead of countering the PM's assertions with hard facts, the Congress dispensation came with its own bogus claims.



- It is true that Krishna Menon had sought to politicise the Army top brass and that Nehru chided Thimmaya in parliament.
- But its relevance in the current electoral context and glaring factual distortions made by the PM was a clear overstretch for political gains.

What is the larger picture?

- Electoral campaigns in the past few years is becoming increasingly polarising as even frontline leaders getting vocally irresponsible.
- To gain electorally, even high constitutional offices (like president, ex-PMs) aren't being spared by politicians, which is degrading our institutional culture.
- The current episode has roped in the defence forces too into the mudslinging, which can potentially wreck havoc for the country's security apparatus.
- Hence, all these merit reflecting upon and frontline leaders should be better advised to keep off comments that could polarise our state institutions.
- There have been many institutional blunders since 1948, but these are better off by being discussed in a consensus environment on campaigns.

What is the way ahead?

- Indian democracy has ensured sufficient checks to ensure that army remains apolitical, and it has largely been so since independence.
- There is indeed resentment that Indian Military as an institution is being badly treated by Delhi's politico-bureaucratic dispensation for long.
- "Non-Functional Upgrade" (NFU) scheme of the UPA government, advantaged the profile of civil servants vis-à-vis military, thereby worsening the bitterness.
- While constructive criticism are needed to address these teething troubles, corrosive electioneering will only aggravate the issue in the long run.
- The democratic ecosystem is best nurtured by institutions that are "fire-walled from politics" and remain neutral.

14.2 Status of the Naga Accord**What is the issue?**

- "Naga Framework Agreement" was signed in 2015 between the Union Government and the "National Socialist Council of Nagalim (Isak-Muivah)".
- But despite the initial euphoria, little has moved ahead in the deal.

How has the framework agreement been received by the masses?

- The exact details of the agreement aren't public yet, but the agreement has received a mixed response from various sections in the Northeast.
- The agreement has raised expectations among the Naga people but also apprehension in neighbouring Assam, Arunachal and Manipur.
- The apprehension are well founded as states have been created after due consideration of a number of factors.
- Any alteration to state boundaries to satisfy Naga concerns might end up affecting the economy and finances of the neighbouring states.
- As the framework remains secretive, a section of articulate Nagas who have asked for its terms to be made public to enable discussion and debate.

What is the track record of NSCM-IM?

- NSCM-(IM) emerged as the principal Naga rebel group in the 1980s, and they entered into a peace accord with the union government in 1987.



- They've been running a parallel government across vast swaths of Naga territory in addition to the state government.
- Negotiations for reaching a sustained solution for the Naga problem has been going on since and the agreement reached in 2015 was a significant event.
- But the organisation has come under criticism from some sections of the Nagas on multiple fronts – particularly their violent suppression of detractors.
- It has also tried to sabotage platforms such as the Forum for Naga Reconciliation for alternative discourses on the peace process.
- But to be fair to the NSCN-IM, its leaders have remained steadfast to the goal of wresting an “honourable settlement” for the Naga people from the Union.

How has the Indian establishment reacted to the Naga cause?

- Jayaprakash Narayan (JP) was the most prominent leader to have taken efforts to understand the Naga cause in the early decades of independence.
- He traversed across Nagaland and his interactions with the Nagas, are said to have showed incredible empathy about their history and origin.
- Notably, JP spoke for the diverse cultural landscape that made up India and demanded a cultural union even before a political union.
- Even today the tribes of this region are not influenced by the typified “Indian culture” but proudly inheritors of a unique tribal affinity.
- But after JP, India has failed to produce a statesman of his stature to take forward the aspirations of culturally significant tribal communities.
- Currently, in Indian establishment, there are deep prejudices against Naga demands, with some being completely dismissive of Naga's unique history.

Are Naga demands constitutionally tenable?

- Currently, Naga civil society and political leaders are working to nudge the union government towards a more pragmatic policy towards the Naga cause.
- But multiple governments have repeatedly cited constitutional constraints for meeting the Naga aspirations for autonomy.
- Contrarily, the Nagas vouch that unlike the Maharajas of Manipur, Meghalaya and Tripura, they never signed a formal instrument of accession with India.

What is the way ahead?

- Despite the tense and violent past, Nagas have journeyed a long way with the rest of India for almost 70 years now.
- A level of comfort has indeed developed between the Naga people and the larger Indian masses, which needs to be capitalised on to resolve the conflict.
- Hence, it would be desirable for both sides to pause political egos and be open minded to make compromises for future of younger and aspiring Nagas.
- The Indian dispensation too needs to realise that pluralism is a cornerstone of our constitution as long as it doesn't affect the greater good.
- Hence, the possibility of a settlement beyond the present ambit of the constitution should be kept open if needed to resolve the longstanding dispute.

14.3 Ceasefire in Jammu and Kashmir

Why in news?

Anti-militancy operations in Jammu and Kashmir were halted recently after the request by the J&K Chief Minister.

Why was the ceasefire announced in J&K?

- Ceasefire was announced by the Union government after the request of J& K Chief Minister.
- This request was made to maintain peace in the valley during the holy month of Ramadan and peaceful conduct of Amarnath yatra.
- Usually, ceasefire is the period when the separatist forces have dialogue with the government or security forces.

What are the previous instances of ceasefire in J&K?

- There are many instances of ceasefire or temporary truce between the security forces and the militants.
- 1994 – Yasin Malik, the chief of J&K Liberation Front announced unilateral ceasefire and due to no response from government turned his militant outfit into a separatist political party.
- 2000 – Hizbul Mujahideen announced a halt in its operations and the government promptly reciprocated by halting anti-militancy operations, after which they entered into a dialogue.
- 2000 - Unilateral ceasefire was announced by the union government on the eve of Ramadan, but the militant outfits rejected it and kept attacking the security forces.

What was the reason for temporary nature of these ceasefires?

- These ceasefires are not aimed at bringing a permanent solution to the complex issues around J&K, but seen as a temporary truce in the region.
- Most of the instances where ceasefires are announced were due to political aspirations by the parties.
- The government used ceasefires as a tool to reduce the outburst of militancy outfits, by bringing them to the table for dialogues.
- When the militant or separatist organisations call for ceasefire, it is mostly due fulfil some demand from the government.
- Therefore, all stakeholders in this issue has to discuss for a permanent solution instead of temporary truces.

14.4 Status of Stone Pelting in Kashmir

What is the issue?

Stone-pelting in Kashmir has become a full-fledged industry systematically organized by Hurriyat group.

Who are Hurriyat?

- The All Parties Hurriyat Conference (APHC) was as a political platform of the separatist movement in 1993.
- It was an extension of the conglomerate parties of disparate ideologies, held together by their common position that Jammu & Kashmir was “under occupation of India”.
- At a time when militancy was at its peak, this conglomerate represented the political face of the militant movement, and claimed to “represent the wishes and aspirations of the people”.
- It had brought together two separate, but strong ideologies: those who sought J&K’s independence from both India and Pakistan, and those who wanted J&K to become part of Pakistan.
- Most of the groups that were part of the Hurriyat had their militant wings, or were linked to a militant outfit.

What is the status of stone pelting in Kashmir?

- The year 2016 witnessed 1,742 incidents of stone-pelting against CRPF personnel.
- January-April 2018 saw 245 incidents of stone-pelting on the CRPF alone, in which 71 personnel were injured.
- This would roughly translate to an over 55% spike over the 162 such incidents in January-April 2017.
- In 2018, the most incidents have occurred in Srinagar (145) followed by Baramulla (24), Pulwama (21), and Shopian (16).
- Recently the suspension of security operations in Jammu & Kashmir during Ramzan has significantly brought down stone-pelting.
- The first five days of the “ceasefire” had witnessed only five incidents of stone-pelting.



What are the reasons behind stone pelting in Kashmir?

- Stone pelting activity in Kashmir largely happens due to a spate of encounters of local militants with security forces.
- Stone-pelting was systematically organised by members of the Hurriyat through WhatsApp groups and Facebook pages, and was funded by money flowing in from Pakistan.
- Apart from Hurriyat, A large section of the youth in the Valley are spontaneously resorting to stone-pelting.
- Stone-pelting typically rises in summer, between May and August. Before April, the cold and the snow restrict movements in the open.
- With the melting of snow, Kashmir generally sees a spike in stone-pelting which continues until winter sets in again.

What were the actions taken by the government?

- In 2017, NIA had registered cases on various Hurriyat leaders and alleged that stone-pelting was organised by separatists at the behest of Pakistan.
- NIA's action against Hurriyat leaders in a terror-funding case had considerably brought down stone-pelting incidents.

14.5 CRPF's Bastariya Battalion

What is the issue?

- CRPF has constituted a new battalion of local recruits to deal with the Naxals.
- While some see this as an innovative approach to address the problem, other fear that the battalion might be a refurbishment of the violent Salwa Judum.

What is the Bastariya Battalion?

- Bastariya Warriors is a newly formed battalion of the CRPF that consists of 549 recruits, all of whom are exclusively from the 4 districts of Bastar region.
- Notably, several physical and educational relaxations were granted to aspirants to facilitate recruitment.
- Following the completion of the 44-week training programme, the battalion is expected to be deployed soon.
- According to the CRPF, the battalion will be immensely helpful in operations, as its recruits are familiar with the local terrain and language.
- This battalion is expected to act as a bridge between the local populations in the Red Corridor and other CRPF personnel (mostly from elsewhere in India).
- Nevertheless, this force has evoked the troubling memories of Salwa Judum.

What is Salwa Judum?

- Salwa Judum was an armed force that was mobilised in 2005 (informally by politicians) and deployed in parts of Chhattisgarh.
- Local tribal people were armed to counter Maoists in Bastar, and those who supported the idea stated that it was a spontaneous uprising of tribals.
- Hence, with tacit support of the government, Salwa Judum was an initiative that turned tribal youth into a vigilant but ill trained army.
- But as the force took ground, it established a reign of terror in the region, and was subsequently banned by the Supreme Court in 2011.
- Notably, allegations against Judum were numerous, with attacks against civilians ranging from –killings, torching of villages, sexual assaults etc...
- Also, as the face-off between the Maoists and Judum intensified, both sides showed little sensitivity to the locals caught in cross fire.

What are the views of detractors against the battalion?

- Activists argue that like the Judum, the Bastariya Battalion seeks to pit tribals against tribals and could again cleave tribal society.



- If a villager was to join the Battalion, then their families run the risk of attracting the ire of Maoists (recorded threats already aplenty).
- Data also indicates that during and immediately after the end of Judum's activities, there was an unusual spike in Maoist recruitments.
- This is probably a case of villagers seeking to safeguard themselves from crude government sponsored violent insurgents – a trend that could repeat itself.
- Notably, 'District Reserve Group' (DRG) of Chhattisgarh Police is also majorly constituted of former Maoists and Judum soldiers.
- Activists point out that DRG too has had a poor track record in human rights and anti-naxal operations.

What is the government's argument for raising the battalion?

- The government argues that the battalion will give the security forces an operational dimension, which is currently being provided by the state police.
- CRPF officials also vouch that the major difference between the Judum and Bastariya Battalion is in the intensity and holistic nature of CRPF training.
- The 44-week training is said to cover not just modules on jungle warfare and weapons training, but also civic responsibilities and human rights.
- Hence, it has been argued that Bastariya recruits are regular CRPF constables like a personnel from any other battalion.
- Officials also argue that the presence of locals will increase the sensitivity of the CRPF - especially with one-third of the recruits being women.
- While one has to wait to know if the battalion is a success, it is important for the warriors to realise that they will be rated for human rights too.

PRELIM BITS

HISTORY

Kangara fort

- The Kangara fort is located on a steep hill about 20 km from Dharamsala in Himachal Pradesh.
- It occupies a narrow strip of land between the the Banganga and Majhi river.
- The kot (fort) was earlier called Nagarkot or fort of the city or Kot Kangra.
- It was built by the royal **Rajput family of Kangra State** (the Katoch dynasty).
- The highest point in the fort is occupied by the palace courtyard.
- Below the palace courtyard there is a large courtyard containing the stone carved temples **of Laxmi Narayan, Ambika Devi and the Jain Temple.**

Raja Ram Mohan Roy

- India's most celebrated social reformer Raja Ram Mohan Roy, remembered best as the "father of the Indian Renaissance" was born on May 22 1772.
- He was born in Radhanagar village in Murshidabad district of West Bengal.
- He was a staunch supporter of monotheism.
- He also shunned the orthodox Hindu rituals and idol worship right from the childhood.
- In his first book "Tuhfat al-muwahhidin" he advocated for reason in religion and opposed ritualism.
- He opposed "Sati", the regressive practice that forced a widow to immolate herself on husband's pyre.
- In 1828, Raja Ram Mohan Roy founded the "Brahmo Samaj", which is said to be one of the first Indian socio-religious reform movements.

- Google search engine marked his birthday by a doodle.

Baduli Kurung

- Baduli Kurung is a bat cave in the Bamuni hill, 17 km south of Nagaon town in central Assam.
- It is home to a number of colonies of both fruit- and insect-eating bats.
- The people believe that the bats watch over the hills that provide them firewood and a life-saving spring (much of the groundwater in the area is contaminated with fluoride), which flows out of the cave.
- From 2001, locals began hosting the three-day Badulithaan Mela, starting 24 hours after Sivaratri.

POLITY

ART AND CULTURE

Tholu Bommalata

- It is Andhra Pradesh's shadow theatre which has a rich and strong tradition.
- The puppets are large in size and have jointed waist, shoulders, elbows and knees.
- They are colored on both sides and throw colored shadows on the screen.
- The music is dominantly influenced by the classical music of the region.
- The theme of the puppet plays are drawn from the Ramayana, Mahabharata and Puranas.
- The skin of wild animals including the antelope and the spotted deer was used to make puppet.
- Now the skin of Goats is used to make the puppets, as the hunting of deer is banned.



Channapatna toys

- Channapatna toys are a particular form of wooden toys and dolls.
- The toys are manufactured in the small town of Channapatna in the Ramnagar district of Karnataka.
- In Kannada, the place is known as Gombegala nagara which means “town of toys”.
- The work involved lacquering the wood of the Wrightia tinctoria tree or Aale mara (ivory-wood).
- It was given Geographical Indication Tag.

Ashtapadiyattam

- Vice-President relaunched the ancient dance drama 'Ashtapadiyattam' based on 'Gita Govindam' believed to be penned by 12th century poet Jayadeva, at a function in Kerala.
- It is called Ashtapadis (Ashta- 8) as the Gita Govinda has couplets grouped into eights.
- So the name Ashtapadi + attam (Dance), a dance –drama based on Ashtapadi
- Jayadeva's Gita Govindam classic encompasses a unique mix of classical literature, classical music and classical dance.
- Gita Govindam's unusually wide appeal comes from the story of Sri Krishna and his love for Radha.
- The performance of the Gita Govinda at Puri Jagannath by the Mahatis and later by the Goutipas was significant in the development of Odissi.

Chhatrapati Shivaji Maharaj Terminus building

- Chhatrapati Shivaji Maharaj Terminus, earlier known as Victoria Terminus has completed 130 years of its construction on 20th May 2018.
- It was designed by Frederick William Stevens, a consulting architect.
- It is designed in Gothic style adapted to suit Indian context.



- The dome of the terminus has been reported to be the first octagonal ribbed masonry dome that was adapted to an Italian Gothic style building.
- The crowning point of the whole building is the central main dome carrying up a colossal figure of lady pointing a flaming torch upwards in her right hand, and a spoked wheel low in the left hand, symbolizing 'Progress'.
- In 2004, UNESCO has enlisted this building as World Heritage Site for its architectural splendour.
- It is the headquarters building of Central Railway.
- It is the most photographed building after Taj Mahal

Jonbeel Mela

- The Jonbeel Mela, held from 18-20 January 2018, usually takes place a few days after Magh Bihu, the harvest festival, in Dayang Belguri in Morigaon district in Assam.
- A cluster of tribes celebrate this centuries-old 'mela' that still functions on the barter system.
- The Jonbeel lake that lends its name to the fair (jon is moon and beel is lake) also witnesses community-fishing during the fair.
- Jonbeel Mela is organized by the Tiwa community, with participants from the Tiwa, Karbi, Khasi and Jaintia communities, from the interiors of the state's Morigaon and Karbi Anglong districts, as well as some border villages of Meghalaya.
- No one knows exactly when the fair started but some of the medieval buronjis (historical chronicles maintained by Ahoms) refer to it as a venue for diplomacy.
- The Jonbeel Mela is organized under the patronage of the Gobha kingdom.

GEOGRAPHY

SAGAR

- The India Meteorological Department issued an advisory to Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra and the Lakshadweep archipelago over cyclonic storm 'Sagar'.
- Sagar is the name given by India, which is part of cyclone name list for the Northern Indian Ocean.
- WMO maintains rotating lists of names which are appropriate for each Tropical Cyclone basin.
- If a cyclone is particularly deadly or costly, then its name is retired and replaced by another one.
- Infamous storm names such as Haiyan (Philippines, 2013), Sandy (USA, 2012), Katrina (USA, 2005), Mitch (Honduras, 1998) and Tracy (Darwin, 1974) are examples for this.
- Tropical cyclone is a localized, very intense low-pressure wind system, forming over tropical oceans and with winds of hurricane force.

Katra forest fire

- The pilgrimage to the Mata Vaishno Devi Shrine resumed following a brief halt due to fire in Trikuta hills.
- Trikuta hills are the abode of Mata Vaishno Devi in Katra town of Jammu's Reasi district.
- The IAF choppers from the Snow Leopards and Daring Dragons units of the Western Air Command were deployed.
- The bambi buckets were suspended by a cable from the choppers.
- The 'Bambi buckets' carried approximately 2,500 litres of water from the nearby Reasi reservoir at a time.

HEALTH

Vaccine for leptospirosis

- Researchers from the Gujarat Biotechnology Research Centre, Gandhinagar have successfully identified a key peptide that can be used to develop a new preventive vaccine against leptospirosis.
- Currently there is no preventive vaccine for humans that are available in the market.
- Leptospirosis is a bacterial disease that affects humans and animals.
- It is caused by bacteria of the genus *Leptospira*.

- The bacteria can be transmitted via exposure to contaminated water or soil or direct contact with reservoirs hosts like wild or domestic animal.
- Without treatment, it can lead to kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, respiratory distress, and even death.

Hepatitis C

- In Uttar Pradesh, Bijnor district, Pahuli village has emerged as a hotspot of hepatitis C infection.
- Hepatitis C is caused by Hepatitis C virus (HCV) that affects the liver.
- It has the same mode of transmission as HIV, spreading through blood, injecting drugs, blood transfusion and sexual activity, and from mother to child during pregnancy.
- The Central government estimates that about 1.2 crore people are positive for hepatitis C in the country.
- The estimate is six times the number of people living with HIV/AIDS.
- Viral infections of the liver that are classified as hepatitis include hepatitis A, B, C, D, and E.

Nipah virus

- Recently, the presence of Nipah virus was confirmed in Kerala.
- Nipah virus (NiV) infection is a newly emerging zoonosis that causes severe disease in both animals and humans.
- The natural host of the virus is fruit bats of the Pteropodidae Family, Pteropus genus.
- NiV was first identified during an outbreak of disease that took place in Kampung Sungai Nipah, Malaysia in 1998.
- NiV infection in humans has a range of clinical presentations, from asymptomatic infection to acute respiratory syndrome and fatal encephalitis.
- NiV is also capable of causing disease in pigs and other domestic animals.
- There is no vaccine for either humans or animals.
- The primary treatment for human cases is intensive supportive care.

The obesity paradox

- Obese hospital patients are more likely to survive an infectious disease than people of normal weight.
- Overweight patients were 40% less likely to die compared to those of normal weight.
- The Patients those who were obese were 50% less likely to die than those of normal weight.
- Among patients with obesity, presence or absence of recent weight changes, cancer, or smoking had little effect on the association with decreased mortality.
- This research points to seemingly paradoxical benefits of a condition loaded with health risks.

Women's health crucial to combat stunting

- A first-of-its-kind study by International Food Policy Research Institute (IFPRI), analysing data from the National Family Health Survey (NHFS)- IV across all 640 districts of the country, highlights the impact of women's health on stunting of children.
- According to it the parameters related to women, including education and age at marriage, account for 50% of the difference between districts with high and low levels of stunting among children below the age of five.
- Across the country, in 239 districts more than 40% of the children are stunted, while 441 districts record between 30% and 40 % of stunting.
- The study reports that only 29 districts have levels between 10% and 20%, most of them in South India.
- India accounts for approximately a third of the world's stunted children at 63 million.
- Overall levels have improved in the country from 48% in 2006 to 38.4% in 2016 with wide variations among different districts ranging between 12.4% and 65.1%.
- The four crucial parameters in women that together contribute to a 44% reduction in stunting among children are

1. Levels of body mass index accounting for 19% of the difference between districts
2. Education accounting for 12% of the difference
3. Age at marriage contributing a 7% reduction
4. Ante-natal care adding 6%.

GOVERNMENT INITIATIVES

National Resource Centers

- Human Resource Development Ministry notifies 75 National Resource Centres (NRCs) for **online refresher programs** for Higher Education faculty through SWAYAM.
- It is a major and unique initiative of online professional development of 1.5 million higher education faculty using the MOOCs platform SWAYAM.
- Under this initiative, all in-service teachers, irrespective of their subject and seniority will have an enabling opportunity to keep abreast of the latest developments in their disciplines.
- The NRCs will revolutionize professional development of faculty by catering to massive numbers by leveraging ICT and online technology platform of SWAYAM.
- This initiative will benefit faculty can as it is highly flexible and can be done at one's own pace and time.

NABH (Nextgen Airports for Bharat) Nirman initiative

- Minister for Civil Aviation stated that the government is committed to the building of airport capacity as part of NABH (NextGen Airports for BHarat) Nirman initiative.
- The three key aspects of NABH Nirman are
 1. Fair and equitable land acquisition
 2. Long-term master plan for airport and regional development and
 3. Balanced economics for all stakeholders.
- The air traffic of the country is increasing, both at domestic and international level.
- India airlines flew highest-ever domestic passengers by flying about 117 passengers during 2017.

Green Skill Development Program

- The Union Environment Ministry launched its full fledged Green Skill Development Program (GSDP).
- The Ministry has taken up an initiative for skill development in the environment and forest sector.
- It is to enable India's youth to get gainful employment and/or self employment and the program is called the Green Skill Development Program (GSDP).
- It aims to train over 5.5 lakh workers in environment and forest sectors in the country through 30 courses by 2021.
- The pilot project of GSDP was launched in 2017 for skilling Biodiversity Conservationists and Para-taxonomists spread over 9 bio-geographic regions of the country.
- MoEF&CC is utilizing the vast network and expertise of Environmental Information System (ENVIS) hubs and Resource Partners (RPs).
- The program endeavors to develop green skilled workers having technical knowledge and commitment to sustainable development.
- It will help in the attainment of the Intended Nationally Determined Contributions (INDCs), Sustainable Development Goals (SDGs) and National Biodiversity Targets (NBTs).

National Policy on Biofuels – 2018

- The Union Cabinet has approved National Policy on Biofuels – 2018 recently.
- The Policy categorises biofuels as
 1. "Basic Biofuels" as First Generation (1G) bioethanol & biodiesel

2. "Advanced Biofuels"- Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels
3. Third Generation (3G) biofuels, bio-CNG etc.

- It is to enable extension of appropriate financial and fiscal incentives under each category.
- The Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.
- One of the expected benefits is that the Used Cooking Oil can be used as potential feedstock for biodiesel and its use for making biodiesel will prevent diversion of used cooking oil in the food industry.
- In order to promote biofuels in the country, a National Policy on Biofuels was made by Ministry of New and Renewable Energy during the year 2009.

Zojila tunnel

- Prime Minister inaugurated the Zojila tunnel project recently in New Delhi.
- It will provide all-weather connectivity to Srinagar, Kargil and Leh.
- The 14 km long Zojila tunnel will be India's longest road tunnel and Asia's longest bi-directional tunnel.
- The tunnel will have a transverse ventilation system, uninterrupted power supply, emergency lighting, CCTV monitoring, pedestrian cross passages at every 250 metres and emergency telephones and fire-fighting cabinets at every 125 metres.
- The Zoji la pass is situated at an altitude of 11,578 ft on the Srinagar-Kargil-Leh National Highway.
- The pass remains closed during winter because of heavy snowfall, cutting off the Ladakh region from Kashmir.



Model Agriculture Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018

- Union Agriculture Minister releases Model Agriculture Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018 recently.
- The Act will provide adequate confidence to farmers and incentives to the sponsors to enter into a contract.
- Union Finance Minister in the budget for 2017-18 announced preparation of a "Model Contract Farming Act" and circulation of the same to the States for its adoption.
- Farmer's producer organizations (FPO's) have a major role in promoting Contract Farming and Services Contract.
- In addition to contract farming, services contracts all along the value chain including pre-production, production and post-production have been included.
- Contract framing to be outside the ambit of APMC Act.
- Contracted produce is to be covered under crop / livestock insurance in operation.

PRAAPTI App and Web portal

- A Web portal and an App namely PRAAPTI (Payment Ratification And Analysis in Power procurement for bringing Transparency in Invoicing of generators), www.praapiti.in, has been officially launched by Hon'ble Minister of State (I/C) for Power.
- It has been developed to bring transparency in power purchase transactions between Generators and Discoms.
- It will capture the Invoicing and payment data for various long term PPAs from the Generators.



- This will help the stakeholders in getting month-wise and legacy data on outstanding amounts of Discoms against power purchase.
- The portal would facilitate relative assessment of various State DISCOMs on “Ease of making payments” to various Generation Companies, and will also help make transactions in the power Sector more transparent.

NATRIP

- Union Cabinet Minister of Heavy Industries & Public Enterprise (HI & PE) inaugurated the augmented facilities at the National Automotive Testing and RND Infrastructure Project (NATRIP) at the International Centre for Automotive Technology (ICAT) at Manesar in Haryana.
- ICAT has been rendering services of automotive testing & certification to the industry since 2006.
- NATRIP is the largest and most significant initiative in the automotive sector which represents a joining of hands between the Government of India, a number of State Governments and Indian Automotive Industry to create a state of the art testing, validation and R&D infrastructure in the country.
- The augmented facilities are of Noise, Vibration & Harshness Lab (NVH), Passive Safety Lab (PSL), Electromagnetic Compatibility (EMC) Lab and Tyre Test Lab (TTL) and have been completed at ICAT Centre-II at Manesar in Haryana.
- The centre already has fully functional facilities like Powertrain lab, Fatigue lab, Vehicle Evaluation lab, Component lab, CAD-CAE lab and Infotronics lab.

GOVERNMENT SCHEMES

Merchandise Export from India Scheme

- The Director General of Foreign Trade has said that the rates enhanced under the Merchandise Exports from India Scheme (MEIS) would continue.
- It seeks to promote export of notified goods manufactured/ produced in India.
- MEIS is a major export promotion scheme of GOI implemented by the Ministry of Commerce and Industry.
- The Five different schemes for rewarding merchandise exports with different kinds of duty scrip that were merged under this scheme are
 1. Focus Product Scheme (FPS)
 2. Focus Market Scheme (FMS)
 3. Market Linked Focus Product Scheme (MLFPS)
 4. Agri. Infrastructure incentive scheme
 5. Vishesh Krishi Gramin Upaj Yojna (VKGUY)
- MEIS under Foreign Trade Policy of India (FTP 2015-20) is one of the two schemes introduced in Foreign Trade Policy of India 2015-20.
- The other being the SEIS, Service Exports from India Scheme.

Samagra Siksha Scheme

- The Union Minister for Human Resource Development launched the ‘Samagra Shiksha’ - an integrated Scheme for school education extending support to States from pre-school to senior secondary levels for the first time.
- The Scheme is a paradigm shift in the conceptual design of school education by treating ‘school’ holistically as a continuum from pre-school, primary, upper primary, secondary and senior secondary levels.
- Samagra’ means a holistic approach to treat education as a whole and the Scheme is very aptly named as it sees school education holistically without segmenting it into various levels of education.
- The emphasis on Integration of two Ts - Teacher and Technology in the new scheme will help improve quality of education.

UGC (Online Courses) Regulations, 2018

- In a landmark reform in the field of Higher Education, University Grants Commission has approved UGC (Online Courses) Regulations, 2018 in its meeting.
- Higher Educational Institutions can offer Certificate, Diploma and Degree Programs in full-fledged online mode in only those disciplines in which it has already been offering the same or similar Programs /Courses at graduation level in regular mode (of classroom teaching) or in Open and Distance Learning mode.
- The online learning shall have minimum four quadrants: video lectures, e- content, and self-assessment and discussion forum to clarify doubts.
- The learners' engagement will be monitored via participation in asynchronous / synchronous discussions, assignment activity and Program involvement.
- These regulations will be made applicable from the academic session 2018-19.
- This initiative is a big step towards attaining the targeted GER of 30% by the year 2020.

NATIONAL INSTITUTES/BODIES IN NEWS

Indian Bureau of Mines

- The Union Cabinet chaired by Prime Minister has approved the Restructuring of the Indian Bureau of Mines (IBM).
- The restructuring would help in enabling the IBM to effectively discharge its function to help reform and transform the regulation of the mineral sector.
- IBM was set up by the Government of India on 1st March, 1948 under the Ministry of Works, Mines and Power.
- It was setup as an advisory body to help in formulation of policy and legal framework for mining sector and advising Central and State Governments on development and utilization of mineral resources.
- The objective of the IBM is to promote **systematic and scientific development and optimum utilization of mineral resources of the country** (both on-shore and off-shore).
- From a small beginning as a purely advisory body, the IBM has emerged into a premier national organization involved deeply into the various aspects of the mineral industry.

National Centre for Antarctic and Ocean Research

- The National Centre for Antarctic and Ocean Research (NCAOR) was established as an autonomous Research and Development Institution of the Ministry of Earth Sciences.
- It is designated as the nodal organization for the co-ordination and implementation of the Indian Antarctic Program.
- It is also responsible for the maintenance of India's permanent station in Antarctica.
- It is located in the state of Goa.
- It has the Governing Council comprising 12 members representing a cross section of the country's leadership in Polar and Ocean Sciences, research education and administration.
- Secretary, Ministry of Earth Sciences, is the Chairman (exofficio) of the Governing Council.

Directorate General of foreign Trade

- Directorate General of Foreign Trade (DGFT) organized a meeting of port officers recently.
- The organization is an attached office of the **Ministry of Commerce and Industry**.
- It is headed by Director General of Foreign Trade.
- It is essentially involved in the regulation and promotion of foreign trade through regulation.
- It is responsible for formulating and implementing the Foreign Trade Policy with the main objective of promoting India's exports.

National Institute of Oceanography

- National Institute of Oceanography (NIO) is one of the 37 constituent laboratories of the Council of Scientific & Industrial Research (CSIR), New Delhi.
- It is headquartered at Dona Paula, Goa with regional centres at Kochi, Mumbai and Visakhapatnam.
- The principal focus of research has been on observing and understanding special oceanographic characteristics of the Indian Ocean.
- It also operates two research vessels RV Sindhu Sankalp (56 m) and RV Sindhu Sadhana (80 m) that are equipped for multidisciplinary oceanographic observations.
- The institute also provides consultancy on a number of issues including marine environmental protection and coastal zone regulations.

Research and Information System for Developing Countries (RIS)

- (RIS) is a New Delhi-based autonomous policy research institute that specializes in issues relating to international economic development
- Its special focus is on trade, investment and technology.
- RIS is envisioned as a forum for fostering effective policy dialogue and capacity-building among developing countries on global and regional economic issues.
- The focus of the work program of RIS is to promote South-South Cooperation (SSC) and collaborate with developing countries in multilateral negotiations in various fora.
- RIS seeks to enhance policy coherence on international economic issues and the development partnership canvas.

National Institute of Mental Health Rehabilitation

- The Union Cabinet has approved the establishment of National Institute of Mental Health Rehabilitation (NIMHR) at Bhopal, Madhya Pradesh.
- It will be established as a Society under the Societies Registration Act, 1860 under the aegis of the Department of Empowerment of Persons with Disabilities.
- The main objectives of the NIMHR are
 1. to provide rehabilitation services to the persons with mental illness,
 2. **capacity development in the area of mental health rehabilitation,**
 3. policy framing and advanced research in mental health rehabilitation.
- NIMHR will be the first of its kind in the country in the area of mental health rehabilitation.

Commission for Scientific and Technical Terminology

- The Commission for Scientific & Technical Terminology (CSTT) was set up in 1960.
- It was by a resolution of Government of India under the proviso to Clause (4) of Article 344 of the Constitution.
- The objective is to evolve and define scientific and technical terms in Hindi and all Indian languages.
- It will also publish glossaries, definitional dictionaries and encyclopedia.
- It will ensure that the evolved terms and their definitions reach the students, teachers, scholars, scientists, officers etc.,
- The commission also coordinates with all States to ensure uniformity of terminology in Hindi and other Indian languages.
- The Commission carries out the following functions :-
 1. Preparation and Publication of National terminology.
 2. Identification and Publication of School Level Terminology and Departmental Glossaries.
 3. Identification of Pan Indian Terms.
 4. Preparation of University level textbooks, monographs and journals.

National Mineral Development Corporation (NDMC)

- NDMC is the largest iron ore mining company in India.
- The corporation was founded in 1958.
- With iron ore production of around 35 million tons per annum, it has a domestic market share of about 25%.
- It also extracts diamonds through its mine in Panna, Madhya Pradesh, which **is the only mechanized diamond mine in Asia**.
- Its vision is to emerge as a global Environment friendly Mining Organization and also as a quality Steel producer with a positive thrust on Social Development.
- It is headquartered at Hyderabad, Telegana.

Central Institute of Indian Languages

- The Central Institute of Indian Languages (CIIL) at Mysore is a subordinate office of the Ministry of Human Resource Development.
- It was set up in 1969 to help in evolving and implementing the language policy of Government of India.
- It was also to coordinate the development of Indian Languages by conducting research in the areas of language analysis, language pedagogy, language technology and language use in the society.
- For promotion of its objectives, CIIL organizes a number of programs, some of which are:
 1. Development of Indian Languages
 2. Regional Language Centers (RLCs)
 3. Grant in Aid Scheme
 4. National Testing Service

IPBES

- The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body.
- It was established by member States in 2012.
- It provides policymakers with objective scientific assessments about the state of knowledge regarding the planet's biodiversity, ecosystems and the benefits they provide to people, as well as the tools and methods to protect and sustainably use these vital natural assets.
- Its mission is to strengthen knowledge foundations for better policy through science, for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.
- To some extent IPBES does for biodiversity what the IPCC does for climate change.
- India is a member of the IPBES.

INTERNATIONAL ISSUES AND EVENTS

Strategy 2030

- Asian Development Bank is preparing Strategy 2030.
- Its new long-term strategy, to respond to the changes brought about by a rapidly evolving Asia and the Pacific.
- The new strategy builds on the 2014 midterm review of its current strategy—Strategy 2020.
- It outlines a vision and key directions for ADB's engagement with developing member countries until 2030.
- It aligns with the Sustainable Development Goals, the Paris Agreement on climate change, and other global commitments.
- It identifies institutional reforms necessary to sharpen ADB's efficiency and effectiveness.
- Under Strategy 2030, ADB will sustain its efforts to eradicate extreme poverty, given the region's unfinished poverty agenda, and expand its vision to achieve a prosperous, inclusive, resilient, and sustainable Asia and the Pacific.

United Nations Disarmament Commission

- The United Nations disarmament chief made a statement about disarming North Korea recently.
- The General Assembly created the United Nations Disarmament Commission (UNDC) under the Security Council in 1952.
- Its mandate is to prepare proposals for a treaty for the regulation, limitation and balanced reduction of all armed forces and all armaments, including the elimination of all weapons of mass destruction.
- The UNDC is serviced substantively by the Office for Disarmament Affairs and technically by the Department of General Assembly Affairs and Conference Services.

Mission Innovation

- Union Minister for Science & Technology, Earth Sciences, Environment, Forests and Climate Change will be leading an Indian delegation for participation in the Mission Innovation Ministerial being held at Malmö-Sweden.
- It is the third mission innovation ministerial meeting.
- Mission Innovation (MI) is a global initiative of 22 countries and the European Union to dramatically accelerate global clean energy innovation.
- India is founding member of Mission Innovation and part of the Steering Committee.
- It co-leads innovation challenges on smart grids, off grids and sustainable bio-fuels.
- The other innovation challenges are Carbon Capture, Converting sunlight, clean energy materials and Affordable heating and cooling of buildings.

Clean energy ministerial meeting (CEM)

- The 3rd Mission Innovation Ministerial (MI-3) takes place in Malmö, Sweden, back to back with the 9th Clean Energy Ministerial in Copenhagen, Denmark.
- The cities of Malmö and Copenhagen are famously linked by the Öresund Bridge, chosen for the event as a powerful symbol of joining forces to accelerate the clean energy revolution.
- CEM is a high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.

World Health Assembly

- In an urgent call for action, the 71st World Health Assembly delegates demanded more political will from heads of state to curb non-communicable diseases.
- The world may not be able to meet the Sustainable Development Goals (SDG) and reduce premature deaths caused by NCDs, including cardiovascular diseases, cancers, diabetes and chronic respiratory diseases, by one-third by 2030.
- WHO released its “Saving lives, spending less” report, during the World Health Assembly.
- It has for the first time measured the “health and economic benefits of implementing the most cost-effective and feasible interventions to prevent and control NCDs in low- and lower-middle-income countries.
- The report recommends, what is now known as the ‘Best Buys’ formula, that by spending on prevention.

UNWTO Executive council

- The Minister of State (Independent Charge) for Tourism attended the 108th session of UNWTO Executive Council from 23rd to 25th May 2018 held in San Sebastian, Spain.
- The World Tourism Organization (UNWTO) is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism.
- The UNWTO Executive Council represents the Organization’s governing body.
- The executive council’s task is to take all necessary measures in consultation with the Secretary-General, for implementation of its own decisions and recommendations of the Assembly and report thereupon to the Assembly.
- The Council meets at least twice a year, the next to be held in Bahrain.
- The council consists of 30 Full Members elected by the assembly.

ECONOMY

Microfinance Institutions

- Banks have restricted their lending to microfinance institutions (MFIs), especially mid-size and small-size ones.



- In general, about 60 per cent of funding for MFIs comes from banks.
- The rest was met through instruments such as securitisation and debentures, among others.
- Even securitization has been affected as the market for which had dried after demonetization.
- The goal of microfinance is to give impoverished people an opportunity to become self-sufficient and MFIs play a major role in it.
- Microfinance, also called microcredit, is a type of banking service that is provided to unemployed or low-income individuals or groups who otherwise have no other access to financial services.

Fisheries sector

- Union Minister of Agriculture and Farmers' Welfare addressed the Fisheries Ministers of Coastal states and Union Territories at National Conference of Fisheries Ministers of Coastal states.
- The Government has introduced a sub-component 'Assistance for Deep Sea Fishing' under the Blue Revolution to promote the same.
- The Government has made a budget provision of Rs 7,522.48 crore for the establishment of Fisheries and Aquaculture Infrastructure Development Fund (FAIDF).
- It has the potential to benefit 40 lakh marine and inland fishermen, especially women, self-help groups, weaker sections by making available modern infrastructure facilities and increased value of the produce.

Amravati Bonds

- The Andhra Pradesh Capital Region Development Authority (AP-CRDA) is all set to enter the capital markets with 'Amravati bonds' worth Rs. 2,000 crore.
- It is a significant development pertaining to mobilizing funds for the construction of the capital city, Amravati.
- The State government would stand as the guarantor for the bonds.
- London School of Economics (LSE) had come forward to help the CRDA in transforming Amravati into a world-class happy city.
- The Students of LSE will study the different facets of socio-economic development of the capital city.

StartUpLink

- The Indo-Dutch #StartUpLink is developed for Indian and Dutch startups that are exploring each other's markets and offers access to key information, relevant networks, pilot opportunities, and navigators for the respective startup ecosystems.
- Startup India Hub under Invest India and Netherlands Enterprise Agency under the Ministry of Economic Affairs and Climate Change would act as single points of contact and navigators for their respective countries.
- As a partner for the Indo Dutch #StartUpLink, Shell has come on board with the aim of accelerating India's transition to a sustainable energy future.

ENVIRONMENT

CONSERVATION RESERVES IN NEWS

Sloth Bear Sanctuaries

- Sloth bears have been distributed across India, Sri Lanka, Bangladesh, Nepal and Bhutan.
- The largest population in the world can be found in India.
- In the country, they are spread across several States, including Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chattisgarh, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Gujarat and Rajasthan.
- The animals have been declared "vulnerable" by the International Union for Conservation of Nature.
- **Ratanmahal Sloth Bear Sanctuary (1)**
 1. Located in the Dahod district of Gujarat.
 2. It lies on Gujarat's border with Madhya Pradesh and the actual habitat of the bear extends into this neighboring State.
 3. The tree called mahuda locally and a favourite of the sloth bears is found in abundance in the region.

- **Jessore Sloth Bear Sanctuary(2)**

1. Located in Banaskantha district of Gujarat
2. The sanctuary spans over 180 sq.km. Of forest tracts of Jessore hill and adjoining areas.
3. In addition to sloth bears, the region shelters a variety of rare and endangered species of flora and fauna

- **Daroji Sloth Bear Sanctuary(3)**

1. Daroji is located near Hampi in Karnataka's Ballari district.
2. it is situated within the Bilikallu reserve forest.

Wild Ass Sanctuary

- The sanctuary is in the **Little Rann of Kutch in Gujarat.**
- It spans the districts of Surendranagar, Rajkot, Patan, Banaskantha and Kutch.
- The sanctuary hosts more than 30 species of rare and endangered animals, including black buck and desert fox due to its proximity to the Rann of Kutch and the variety in the region's vegetation.
- The sanctuary is home to the 'near threatened' wild ass species.
- Asiatic wild asses are native to India, China, Iran, Mongolia and Turkmenistan.
- The Asiatic wild ass is the only one of its species and no sub-species exist.



Daranghati Wildlife Sanctuary

- The Sanctuary is located near Rampur Bushahr, in Shimla District, Himachal Pradesh.
- It was an erstwhile hunting reserve of the Rampur Bushahr royal family.
- The Sanctuary receives good amount of Snowfall in winters.
- Himalayan Black Bear, Brown Bear, Himalayan Palm Civet, Barking Deer, Musk Deer, Flying Fox, Goral, Indian Hare, Serow, Blue Sheep and Himalayan Weasel are the fauna.

Sanctuaries that conserve Great Indian Bustard

- The following are the sanctuaries that shelter or were set up to conserve a very unique species that's now critically endangered - the great Indian bustard.
- Desert National Park, Thar Desert, Rajasthan
 1. It is the State bird of Rajasthan.
 2. The Desert National Park is spread across Jaisalmer and Barmer districts of Rajasthan.
 3. The Park also welcomes the migrant Houbara Bustard and several other bird species
- Kutch Bustard Sanctuary, Gujarat
 1. The sanctuary is dominated by vast swathes of grasslands.
 2. It was declared a sanctuary in 1992
- Great Indian Bustard Sanctuary, Maharashtra
 1. It is also known as the Jawaharlal Nehru Bustard Sanctuary of Maharashtra.



2. This sanctuary is located in Ninnaj, over 20 km from the city of Solapur.
3. Unconfirmed reports suggest that today those sprawling grasslands are home to perhaps not a single bustard.

- The great Indian bustard (or simply Indian bustard) is a large, white-and-brown bird with wing markings and a black crown.
- A bird native to India and Pakistan, it has today lost almost 90 % of its original habitats.
- It is believed to have disappeared from States such as Haryana, Punjab, Uttar Pradesh and Madhya Pradesh.
- The largest population is found in Rajasthan, with a few birds in Gujarat and Maharashtra.
- Recently, officially confirmed reports stated that there have been no sightings of the bird for the last few years at both the Great Indian Bustard Sanctuary (and Ghatigaon Sanctuary) in Gwalior district and the Karera Sanctuary in Shivpuri district of Madhya Pradesh.



SPECIES IN NEWS

Glow-in-the-dark algae

- Scientists study bioluminescence phenomenon in northern Arabian Sea.
- The glow is caused by **Noctiluca algae**, commonly known as sea tinkle,
- It is a parasite and occurs in patches or 'blooms' in the northern Arabian Sea.
- Their bioluminescence has earned them the name 'sea sparkle'.
- These patches ring an alarm bell for ecologists because the algae compete with fish for food and choke their supply.
- Researchers from the Indian National Centre for Ocean Information Services (INCOIS) and the U.S.' National Oceanic and Atmospheric Administration say that "global warming conditions" may be responsible.
- INCOIS is a Ministry of Earth science body.

Uropeltis bhupathyi

- Uropeltis bhupathyi is the latest addition to the snake fauna of the Western Ghats.
- It has been named Uropeltis bhupathyi, after the late herpetologist S. Bhupathy, for his contributions to the field.
- They are non-venomous, burrowing and mostly earthworm-eating.
- They are called shieldtails after the large, flat tips of their tails, which make them appear almost sliced off.
- The discovery has taken the number of known species of shieldtails in India to 41.

Overfishing of hilsa

- Scientists have raised alarm over the exploitation of hilsa, *Tenulosa ilisha* in West Bengal.
- The publication by the scientists points out that the annual catch has decreased by 13 % over the past decade.
- The hilsa fishery in the northern Bay of Bengal is targeting smaller fish, which is unsustainable in the long run.
- Hilsa or ilish is intrinsically linked to the culture of the west bengal and makes 11% of the total fish catch of the State.
- The hilsa fishery in the northern Bay of Bengal is "being unsustainably exploited" and the over fishing about 38% over the past few years (2012-16) has been noticed after comparing the fishing mortality.

Invasive aphid

- The brown peach aphid has been recorded in the Kashmir valley for the first time.
- It is a small bug which feeds by sucking sap from plant.
- It attacks temperate fruit trees and it is bad for the fruit bowl of India.
- The brown peach aphid *Pterochloroides persicae* is a notorious pest of peach and almond trees in the Mediterranean regions.
- In India, the aphid was recorded for the first time in the 1970s from Himachal Pradesh and Punjab.
- Natural chemicals including neem **plant extracts and lavender oil** can help control aphid numbers.
- The pest could have come with plants imported from other countries.



Bengal florican

- The critically endangered Bengal florican use not just protected grasslands but agricultural fields, too.
- It is also called as Bengal Bustard.
- Bengal floricans which are fewer than 1,000 adult remain in the world in two very fragmented populations.
- One of them is in the grasslands of the terai, the fertile foothills of the Himalayas.
- The other area is around Cambodia and Vietnam.
- It inhabits lowland dry, or seasonally inundated natural and semi-natural grasslands.
- The grasslands are often interspersed with scattered scrub or patchy open forest.
- It is under the CITES appendix 1.

Pelican Festival

- Kolleru hosted Pelican Festival at the Atapaka bird sanctuary earlier this year.
- The Lake is one of the largest freshwater lakes in the country.
- More than 5,000 spot-billed pelicans, also known as grey-headed pelicans, visited the lake.
- The birds roost, breed and fly with their young ones during the winter season in the region.
- Kolleru is the nesting place for many migratory birds.
- It is located between the delta of Godavari and Krishna River.
- Similarly a three-day annual Flamingo Festival was held at Pulicat Lake and Nelapattu Bird Sanctuary in Andhra Pradesh.

Microhyla kodial

- M.kodial is the latest addition to India's frog fauna.
- It is also known as the Mangaluru narrow-mouthed frog.
- It is christened as *Microhyla kodial* after the city of Mangaluru (called kodial in the Konkani language).
- The frog is seen only in a small industrial region, a former timber dumping yard.
- It is surrounded by seaport, petrochemical, chemical and refinery industries.





- The yard is bounded by the rail line of the Mangalore Refinery and Petrochemicals Limited on one side and the busy National Highway 66 on another.

Himalayan trillium

- The Himalayan trillium is a common herb of the Himalayas.
- It is a natural source of steroidal saponins which are important components of steroidal drugs
- It could soon go locally extinct in many parts of its range in India due to its excessive harvest.
- It is found across India, Bhutan, Nepal and China.
- Increased demands over the last decade have made its illegal collection from the wild a rather lucrative business in India.
- Mature plants (which can live to 30 years or more) usually produce only one flower per year and vegetative reproduction through tubers occurs only in very old plants.

Bear cuscus

- For the first time the rare marsupial mammal, bear cuscus has born in captivity in south western Poland zoo.
- The Bear cuscuses live on the Indonesian island of Sulawesi and their population is shrinking rapidly.
- To preserve the species, 13 animals are held in four zoos around the world – but they have not reproduced there previously.
- The bear cuscuses are the members of the genus Ailurops
- They are marsupials of the family Phalangeridae.
- A distinctive characteristic common to marsupial species is that most of the young are carried in a pouch.

POLLUTION

Petcoke

- Government of India is planning to propose a ban over burning petroleum coke as a fuel nationwide to comply with a Supreme Court request.
- It is seen as a part of a long-running case to clean the country's air.
- Petroleum coke or petcoke is an oil refinery by-product.
- It is used as a fuel because of its higher energy content than coal.
- It releases larger amounts of carbon dioxide and sulphur dioxide, which can cause lung disease and acid rain.
- Government may allow petcoke to be used in the limestone and cement industries.
- More than half of India's petcoke demand of 27 million tones is imported, mostly from the United States.
- India is the world's biggest consumer of petcoke.

CLIMATE CHANGE

Agreement to reduce emissions

- The Members of the International Maritime Organization (IMO) recently reached an agreement on halving greenhouse gas emissions from shipping by 2050.
- This holds significance because the CO₂ emission from shipping industry is expected to rise dramatically by 2050 with progress in global trade.
- The sector contributes to about 3 % of total annual carbon dioxide emissions.
- Currently, ships rely heavily on carbon-rich fuels such as heavy diesel.
- When heavy oils are used by ships it emits black carbon, carbon monoxide, carbon dioxide, nitrogen oxide and hydrocarbons.
- IMO is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

Share of tourism in green house gas emission

- The team led by researchers at the University of Sydney in Australia found out that global comprehensive tourism footprint of tourism-related greenhouse gas emissions is larger than previously estimated.
- The world's domestic and international tourism industry contributes to 8% of the global greenhouse gas emissions.
- It is about four times greater than previously estimated.



- Small islands attract a disproportionate share of carbon emissions through international arrivals.
- The U.S. is responsible for the majority of tourism-generated emissions overall.
- It is growing faster than international trade and is already responsible for almost a tenth of global GHGs.

Tiny fossil shells- clue to ancient climate

- Scientists have discovered tiny fossil shells that unveil details about the Earth's climate over half a billion years ago.
- The hard-bodied fossils that the scientists used in their study belong to animal groups which were the first organisms to produce shells.
- The research suggests that early animals diversified within a climate similar to that in which the dinosaurs lived.
- The time interval to which this fossil belongs is known for the 'Cambrian explosion'.
- It is the time during which representatives of most of the major animal groups first appear in the fossil record.
- Analyses of the oxygen isotopes of these fossils suggested very warm temperatures for high latitude seas.

OTHERS**Lake Victoria species under threat**

- About 75 % of freshwater species endemic to East Africa's Lake Victoria basin face the threat of extinction.
- It includes freshwater species like fish, mollusks, dragonflies, crabs and aquatic plants native to Africa's largest lake.
- These freshwater species are important sources of food, medicine for the millions of people living in the area surrounding the lake.
- The lake stretches into Kenya, Tanzania and Uganda.
- Its catchment also touches Burundi and Rwanda and is known for its high-level of unique biodiversity.

Human-Animal Conflict

- Recently, Wildlife Society of Odisha (WSO), in collaboration with Wildlife Protection Society of India and Elephant Family has released a data about human animal conflict, especially Human-elephant conflicts.
- Since 1990, nearly 1,400 elephants have died because of human-animal conflict, of which 591 died in the last eight years.
- The number of human-elephant encounters has gone up from 107 in 2014 to 120 in 2017-18 in the state.
- Shortage of fodder in the natural forests is the main reason for elephants venturing into human habitations.
- The shortage happens primarily due to large-scale felling of trees for timber, forest fires, rampant harvesting of fruits in summer, and cutting off fodder creepers like Siali.

Cryoconite Holes

- National Centre for Antarctic and Ocean Research (NCAOR), Goa, scientists found a crowd of shallow circular puddles of water in Spiti's Chandra basin.
- The holes about 5-50 cm in diameter and up to 20 cm in depth—with dark brown sediments deposited at the bottom.
- The sediment is actually mineral dust which is alien to this place.
- In the presence of sunlight and water, chemical and biological processes are powered in the dust and are leading to the evolution of life.
- Alien dust carried and deposited on the glacier surfaces by winds absorb more solar radiation owing to their darker color.
- These dust holes are also called as cryoconite holes.
- The word "cryoconite" is derived from the combination of two Greek words—"kryos" meaning ice and "konis" meaning dust.
- Cryoconite holes were first observed by ships traversing the edges of the Arctic Circle in the 19th century.



- These holes might also be contributing to the problem of accelerated glacier melting.

Role of Western Ghats in monsoon

- Researchers have found that the dense vegetation in the Western Ghats determines the amount of rainfall that Tamil Nadu gets during the summer monsoon.
- The Western Ghats contribute as much as 40% of moisture to the southwest monsoon rainfall over Tamil Nadu during normal monsoon years.
- The average contribution is 25-30%, however during monsoon deficit years, the contribution increases to as high as 50%..
- It was also found that deforestation of the Ghats led to 0.25 degree C increase in surface temperature across the State.

International Day for Biodiversity

- The International Day for Biodiversity (IBD) 2018 was celebrated all over the country on May 22.
- The celebration of the IDB under the theme - "Celebrating 25 years of action on biodiversity" provides an opportunity to raise awareness about the importance of and threats to biodiversity.
- The celebrations have been organized to mark the 25 years of coming into force of the Convention on Biological Diversity.
- The IBD 2018 celebrations have been organized by the Ministry of Environment, Forest and Climate Change, in coordination with National Biodiversity Authority (NBA) and Telangana State Biodiversity Board.

Maravanthe Shoreline

- Maravanthe Beach is located 12 km from Kundapur, which is 50 km north of Udupi, Karnataka.
- The work on Asian Development Bank-funded Maravanthe Shoreline Protection and Management Project is under process.
- There is a constant threat of National Highway 66 getting eroded by massive waves.
- The NH66 is passing between the Arabian Sea and Souparnika River at Maravanthe.
- About 24 groynes, each about 110 meters long, are being built into the Arabian Sea abutting National Highway 66 to protect the seashore by facilitating proper sand distribution.

SCIENCE AND TECHNOLOGY

DEFENCE

Exercise Vijay Prahar

- South Western Command of Indian Army is carrying out Exercise VIJAY PRAHAR.
- It employs cutting edge equipment and state of the art force multipliers at Suratgarh in Rajasthan.
- It is essentially to practice the troops in penetrative manoeuvres across the obstacle ridden terrain under a nuclear umbrella
- It is aimed to orchestrate wide spectrum of threats which are planned to be tackled through high tempo joint air and land operation.
- In the immediate wake of Gagan Shakti, this exercise was being held for testing and refining jointmanship and maximising the impact of the joint operations.
- GaganShakti is an IAF exercise which was conducted earlier this year.

SURYA KIRAN-XIII

- Joint Military Exercise SURYA KIRAN-XIII between India and Nepal will be conducted soon.
- The exercise will comprise of nearly 300 soldiers from both Indian and Nepal Army who would be sharing their experiences gained during conduct of various counter insurgency and counter terrorism operations in the past.
- Exercise SURYA KIRAN is a biannual event which is conducted alternatively in Nepal and India.
- Notably in the series of military training exercises undertaken by India with various countries, Exercise SURYA KIRAN with Nepal is the largest in terms of troop participation.
- The aim of this exercise is to conduct battalion level joint training with emphasis on counter terrorism operations in mountainous terrain.
- During the exercise, aspects of disaster management and joint effort towards relief work have also been included.

INSV Tarini Team

- Minister for Women and Child Development presented the prestigious Nari Shakti Puraskar 2017 to the members of the INSV Tarini team.
- The crew of the Indian Navy Sailing Vessel 'Tarini' is a part of the Indian Navy's unique project 'Navika Sagar Parikrama'.
- It is an all-women team circumnavigating the globe, promoting ocean sailing activities in the Navy and depicting Government of India's commitment towards women empowerment.
- The Project aims to demonstrate the thrust of Nari Shakti on the world platform.
- The voyage also showcased the 'Make in India's initiative by sailing on-board the indigenously built INSV Tarini.
- All six members of the crew were trained for over three years under Captain Dilip Donde, who is also the first Indian to successfully carry out solo-circumnavigation of the globe between 2009 and 2010.

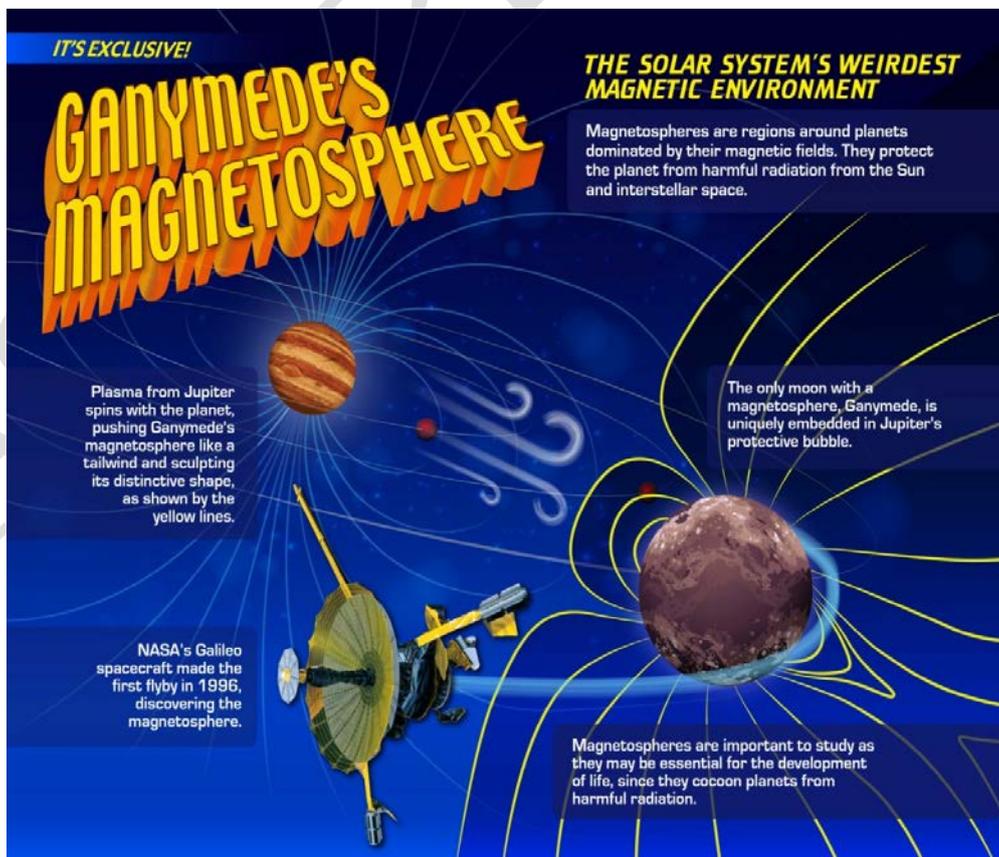
SPACE

Pink moon

- The full moon in April is called the 'pink moon' in north America.
- It is to represent ground phlox, which are ground-cover flowering plants and usually bloom around springtime.
- The April moon is also known as the Sprouting Grass moon, the Egg Moon and the Fish Moon.
- These names are all Native American names for the phenomenon.
- Every month's full moons are named by the tribes.
- As the early Native American tribes did not record time using either the Julian or the Gregorian calendars, they used the moons to keep track of seasons.

Ganymede

- The data from NASA's Galileo spacecraft shows that the Jupiter's moon Ganymede has a magnetic field unlike any other.
- Ganymede is a unique solar-system body because it's the only moon with an internally generated magnetosphere.
- This magnetic-field region surrounds Ganymede like a bubble and shelters it from cosmic radiation.





- Just like on Earth, the magnetosphere causes auroras near this moon's poles.
- Galileo mission was the first to enter orbit around the planet.
- Galileo data allowed the creation of the first detailed maps of Jupiter's major moons.

Carbon Monitoring System and Orbiting Carbon Monitoring 3 (OCO-3)

- A NASA program that cost \$10 million per year to track carbon and methane, key greenhouse gases that contribute to global warming, has been cancelled.
- The Carbon Monitoring System (CMS) tracked sources and sinks for carbon and made high-resolution models of the planet's flows of carbon.
- The Orbiting Carbon Observatory 3, or OCO-3, is a space instrument designed to investigate important questions about the distribution of carbon dioxide on Earth.
- OCO -3 is climate mission by NASA.

GRACE FO

- A SpaceX Falcon 9 rocket was scheduled to blast off from Vandenberg Air Force Base in California, hoisting into orbit the spacecraft known as GRACE-FO.
- It is follow-on to the prior, 15-year mission known as the Gravity Recovery and Climate Experiment (GRACE).
- The two satellites, each the size of a car, will circle the Earth at a distance of 220 km from each other.
- They will be flying about 490 km above the Earth for the next five years.
- The New satellites are to keep track of earth's water.
- The prior mission, GRACE, allowed scientists to gain an understanding of how much ice Greenland was losing.
- Renewing the mission will allow scientists to continue to track trends in sea level rise, glacial and ice melt, and the drying up of certain aquifers.

Queqiao

- China successfully launched a relay satellite to set up a communication link between the Earth and a planned Chinese lunar exploration mission to explore the Moon's mysterious far side.
- It is named as Queqiao (Magpie Bridge) which is a 400-kg satellite with a designed life of three years.
- It was carried by a Long March-4C rocket.
- Queqiao is expected to enter a halo orbit around the second Lagrangian (L2) point of the Earth-Moon system, about 455,000 kms from the Earth.
- It will be the world's first communication satellite operating in that orbit.
- The Queqiao satellite will form a communication bridge between controllers on the Earth and the far side of the Moon where the Chang'e-4 lunar probe is expected to touch down.
- Tidal forces of the Earth have slowed the Moon's rotation to the point where the same side always faces the Earth, a phenomenon called tidal locking.
- The other face, most of which is never visible from the Earth, is the far side or dark side of the Moon, not because it's dark, but because most of it remains unknown.

NASA Curiosity

- NASA's Curiosity Mars rover has successfully collected the first rock samples on the red planet in over a year, using a new way to drill rocks and extract powder from them.
- Curiosity tested percussive drilling penetrating about two inches into a target called "Duluth."
- This technique, called Feed Extended Drilling, keeps the drill's bit extended out past two stabiliser posts that were originally used to steady the drill against Martian rocks
- It lets Curiosity drill using the force of its robotic arm, a little more like the way a human would drill into a wall at home.

- Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL).

ENERGY

World's first floating nuclear plant

- Akademik Lomonosov is the world's first "floating" nuclear power plant (FNPP).
- It has headed out on its first sea voyage from the St. Peterburg, Baltic shipyard.
- At Murmansk, Russia, its reactors will be loaded with nuclear fuel.
- Russian state-run atomic energy corporation Rosatom is responsible for FNPP.
- The Lomonosov is expected to be put into service in early 2019

India- 3rd largest solar market

- India emerged as the third largest solar market in the world in 2017 behind China and the US.
- According to a report by Mercom Communications India set a new record with 9.6 GW of solar installations in 2017,
- It was more than double the 4.3 GW installed in 2016.
- The large-scale project development accounted for 92 per cent of the all-time cumulative solar installations in India.
- The Government has also recently released the National solar-wind hybrid policy to improve the share of renewable energy in the total energy mix.
- The policy provides for a comprehensive framework to promote large grid-connected wind-solar photovoltaic (PV) hybrid system.

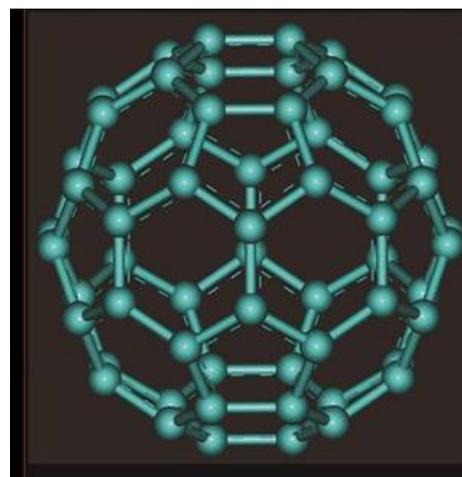
Patratu Super Thermal Power Project

- The Prime Minister of India laid the foundation stone today for the 2400MW first phase of NTPC's Patratu Super Thermal Power Project in Jharkhand.
- The project is a 74: 26 Joint Venture between Government of Jharkhand (GoJ) and Patratu Vidyut Utpadan Nigam Ltd. (PVUN), a subsidiary company of NTPC establishing a total capacity expansion of 4,000MW.
- The project has salient features of Dry Ash disposable system (second to NTPC Dadri), zero liquid discharge system, Air-cooled condenser technology (only second to North Karanpura STPP) and rail loading facility for transportation of ash.
- The Engineering, Procurement & Construction contract of the project has been awarded to BHEL.
- This project will allocate 85 per cent of the power to Jharkhand that will benefit the state in the long run and help in the economic growth of the region.
- Under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) scheme, this project will ensure providing 24x7 power availability to the households.

OTHERS

Buckyball

- Bucky ball or Buckminster fullerene is a spherical allotrope of carbon.
- Allotropes are various forms of the same element that differ from each other in terms of physical structure.
- Fullerene is a molecule which may be spherical or cylindrical in shape.





- The spherical fullerene was discovered first and its structure was found to resemble the geodesic dome built by the American architect Richard Buckminster Fuller, it was christened Buckminsterfullerene, 'buckyball' for short.
- The buckyball consists of 60 carbon atoms arranged spherically in hexagonal or pentagonal patterns.
- It is the most common naturally occurring fullerene and is found in soot.
- It is used in the fields of material sciences, nanotechnology and electronics.

Nuclear Winter

- Nuclear winter refers to the cooling and darkening of the globe that is expected to happen as a result of a severe nuclear explosion.
- It is also known as the nuclear twilight.
- It is believed that the smoke, dust and other byproducts of a huge nuclear explosion could form a thick layer of soot over earth's atmosphere and prevent the entry of sunlight to its surface.
- It is also hypothesized that nuclear explosions could release chemicals that damage the ozone layer.
- The term was coined by American scientist Carl Sagan.
- He used the term in a 1983 pamphlet warning about the devastating effects of a nuclear war between the U.S. and the Soviet Union.

SagarKanya

- Sagar Kanya is a ocean research vessel (ORV).
- The vessel is a versatile ocean observing platform equipped with technologically advanced scientific equipment and related facilities.
- It is owned and operated by National Centre for Antarctic and Ocean Research.
- The ship has helped in India's studies of the Arabian Sea, the Bay of Bengal, and the Indian Ocean.
- In 1983, under Indo-German collaboration, this multidisciplinary research vessel was built in Germany and delivered in India to Ministry of Earth Sciences (then Department of Ocean Development).

Blockchain Technology in banking, contracts

- A number of companies and banks are adopting blockchain technology to reduce documentation and increase operational efficiency.
- Blockchain technology allows all stages of transactions to be securely shared between network members, as opposed to each bank working independently, which is more expensive and increases the chance of error.
- Infosys created India Trade Connect, which is being used to run a pilot of a blockchain-based solution developed specifically to address the trade finance process requirements of banks.
- Cost reduction, risk mitigation, speed, traceability and security are among the multiple benefits the participants are experienced by participants in the pilot project.
- Blockchain technology can be used to digitize and authenticate currently complex records like land holdings.
- The best use case is Sweden, which is putting all its land records on blockchain and it will quite quickly move towards doing land transfers and ownership verification using blockchain.

REPORTS AND INDICES

UN report for social inclusion

- The UN Economic and Social Survey of Asia and the Pacific 2018 was launched recently.
- It urged countries to take advantage of high growth rate and share the benefits with the national society.
- The report on the Asia-Pacific region has also urged the regional powers to invest in inclusive and sustainable growth.
- The report described South and Southwest Asia as the fastest growing sub-region of the Asia-Pacific region.
- It also highlights the need to increase the social spending by the government.

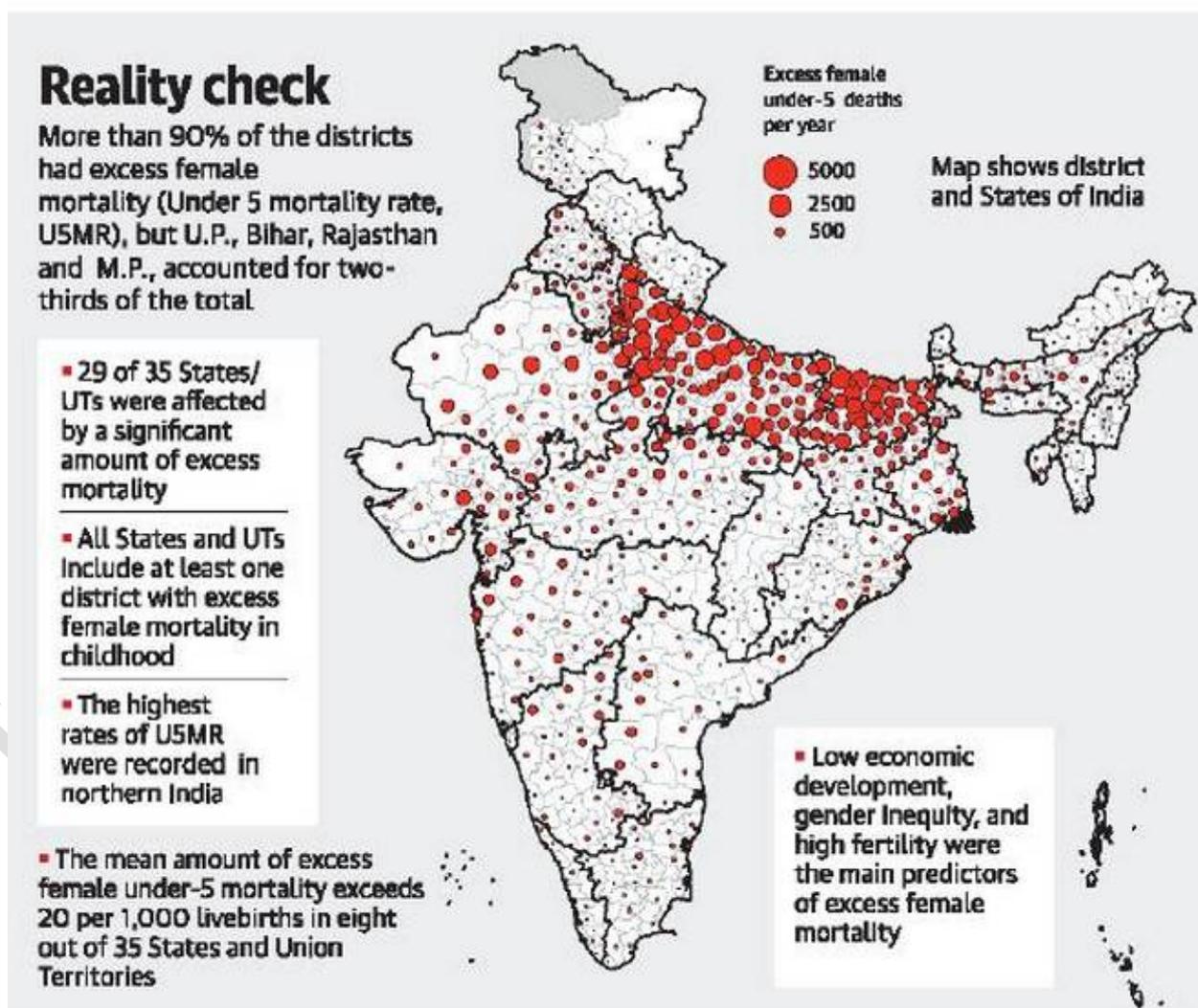
- It is released by the UNESCAP (Economic and social commission for Asia-Pacific).

World University Cities

- QS Higher education group publishes the annual World University Rankings.
- The ranking of 30 cities across the globe were released.
- London has been ranked as the best city in the world for university students.
- London ranked poorly on one factor — affordability.
- The ratings are based on factors such as the number of top universities in a city, the local jobs market, the diversity of the culture and the quality of life.
- There are no US cities in the top 10 student cities, compared with two in Germany, Berlin and Munich.

Gender bias caused 'excess' deaths of girls under 5

- A Lancet Study state that there have been 2, 39,000 “excess deaths” per year of girls under the age of five in India.
- Around 22% of the overall mortality burden of under-five females is therefore due to gender bias.
- Excess mortality is the difference between observed and expected mortality rates in both genders.
- This study focuses on mortality after birth whereas most of the studies of India's skewed sex ratios have focused on pre-natal mortality.



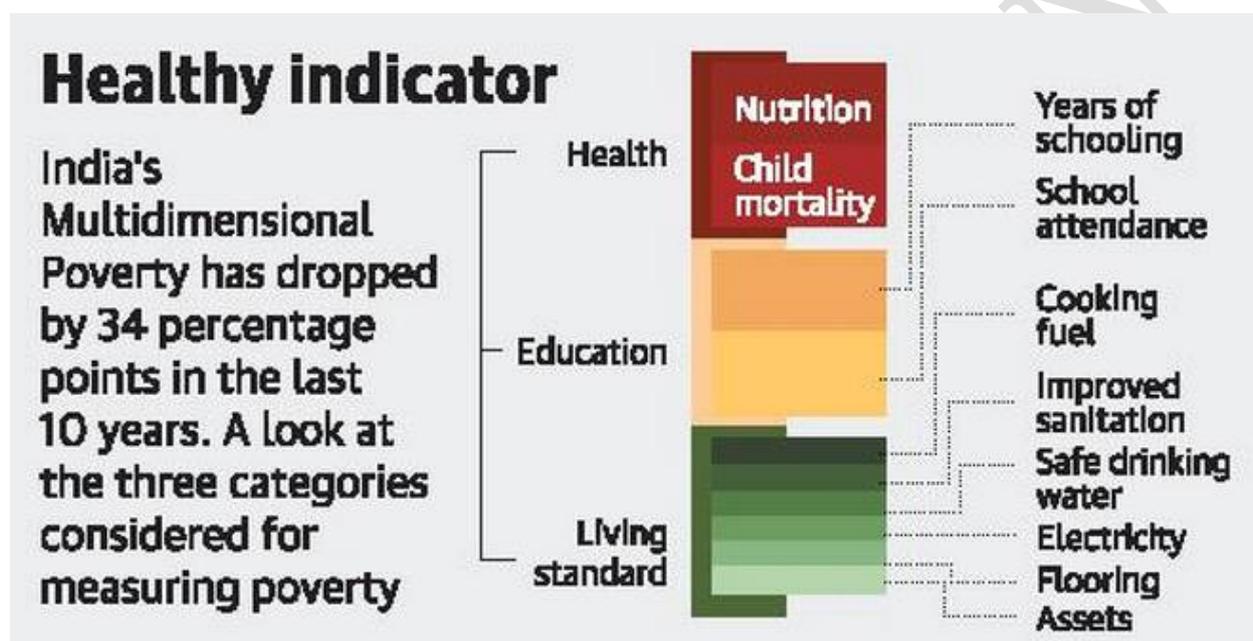
SOURCE: LANCET, DATA BASED ON CENSUS 2011

- The worst affected areas were all rural, agricultural areas with lower levels of education, high population densities, low socio-economic development and high levels of fertility.
- Many deaths of females under five were partly due to unwanted child bearing and subsequent neglect.

MISCELLANEOUS

Multidimensional Poverty

- A paper titled 'Estimates of Multidimensional Poverty in India: Evidence from National Family Health Survey-4 (2015-2016)' reveals the reason for significant reason for Multidimensional Poverty drop.
- The poverty levels fell from 55% to 21% in a decade and it is due to the lowered burden in the southern States.
- MDP is an international measure of acute poverty based on three key categories — health, education and living standards.



- The national average is 21% whereas in the five southern States (Kerala, Tamil Nadu, Karnataka, Telangana and Andhra Pradesh) the average MDP is 9%.
- Bihar is the poorest State with 43% incidence of poverty.
- Jharkhand, Uttar Pradesh, Rajasthan, Odisha, Madhya Pradesh and Assam are above the national average (21%).
- Chhattisgarh, which is affected by Left Wing insurgency, has done well, bringing down its poverty level from 71% to 22%.

Rare earth mineral

- A "semi-infinite" stores of rare earth minerals, crucial in the making of leading-edge technologies like smart phones, radar devices and hybrid vehicles, have been found.
- It is stashed in deep sea sediments near Japan's Minamitori Island.
- A study says that the reserve holds 16 million tones of rare earths, sufficient to meet the world's needs for hundreds of years.
- The discovery is significant given the current supply and demand of rare earth metals.
- The discovery could thus end the monopoly of China, which controls about 95 per cent of the rare earths production.
- Japan, the second largest consumer, started looking for its own reserves after China held back shipments in 2010 following a territorial dispute.
- However, extraction of the minerals from the depth of 6,000 metres is likely to pose challenges for resource-poor Japan.



Way to cut emissions in brick kilns

- The Brick Kiln Initiative, launched by the International Centre for Integrated Mountain Development (ICIMOD) in Nepal.
- It found a way to redesign the ovens and stack the bricks differently so that less toxic soot is produced.
- By stacking the bricks inside the kilns in a zig-zag pattern, the heat snakes through the gaps more efficiently, ensuring coal is completely burned so less soot is produced.
- There are more than 150,000 kilns in India, Bangladesh, Pakistan and Nepal belching out thousands of tons of soot — known as black carbon — a major air pollutant and the second largest contributor to global warming after carbon dioxide.
- The problem is acute, with industrial soot emissions from the region having a worldwide impact.
- The soot collects on the Arctic ice, decreasing the earth's ability to reflect the sun's rays and contributing to warming globally.

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