IAS PARLIAMENT
A Shankar IAS Academy initiative

CURRENT AFFAIRS
SEPTEMBER - 2017

I N D E X

SEPTEMBER 2017

G.S PAPER II

1. POLITY

1.1 Amending the RTI Act

What is the issue?

The government has proposed amendments to the RTI Act that would allow the withdrawal of an application in case of the applicant's death.

What has been the spread of RTI related violence?

- The richer states that otherwise have a better track record on crime have seen a larger number of RTI related casualties.

- Maharashtra, Gujarat and Karnataka have recorded the highest number of RTI related crimes.

- Such high number of cases of violence is indicative of the effectiveness of RTI that makes vested interests nervous.

What are its implications?

- The RTI activists are already exposed to violence, all the more so as the Whistle Blowers Protection Act (2011) is not implemented.

- 70 RTI activists have been killed thus far, besides other cases of assault & harassment.

- In most situations, cases aren't even filed and even when filed action has been insignificant.

- This impunity creates conditions conducive for more violence against the RTI activists.

- Allowing the withdrawal of an application in case of the applicant's death makes it even more risky for those who file RTIs.

- It would also send disturbing signals to the defenders of human rights.

What are the other issues plaguing RTI?

- **Pendency -** While it had already reached 7.55 lakh annually in 2015, it rose by 22.67% in 2016.

- The number of RTI applications continues to grow & pendency is increasingly becoming a major issue with UP crossing the 48,000 mark.

- The number of applications filed could easily decrease if the frequently asked questions are identified and other structural reforms taken up.

- Also, the job of Information Commissioner has become a post-retirement sinecure for former bureaucrats who do not necessarily feel the urge of idealism, thereby aggrevating the problem.

- **Opacity -** Some of the government agencies (like the PMO) are repeatedly refusing to disclose the required information.

- The Commission does not have enough power for getting responses to its questions and does not have the mechanisms for following up on whether its orders have been complied with.

- **Training -** Also, the Information Officers do not necessarily get the right training. This calls for streamlining the process.

- Universities could include the RTI Act in their training for making RTIs more proactive.

1.2 Mahanadi River Water Dispute

What is the issue?

- Sharing of Mahanadi river water has been a bone of contention between the states of Odisha and Chhattisgarh.

- Odisha is now increasingly showing its resentment to the centre for not intervening and resolving the water dispute.

What are Odisha's concerns?

- Odisha is arguing that **Chhattisgarh has been constructing dams and weirs (small dams)** upstream the Mahanadi river.

- This is being allegedly carried on by the Chhattisgarh government without consulting Odisha.

- Odisha says this would affect the flow of the river downstream and affect drinking water supply.

- Also, it would impact the irrigation facilities in Odisha and adversely affect the interests of the farmers.

- It is also alleged that Chhattisgarh would utilise water far in excess of the equitable share of the waters of Mahanadi.

- Moreover, the weirs and other projects would impact the flow of water in the Hirakud reservoir, a multipurpose river valley project, which is a lifeline for many in the state.

What is the way forward?

- Under the Inter-State River Water Disputes Act, 1956 a tribunal can be formed to resolve water disputes.

- A tribunal could be formed if a state government requests the Centre and the Centre is convinced of the need to form the tribunal.

- Odisha has long been demanding the formation of a tribunal for resolving the Mahanadi river water dispute.

- However, notably only three out of the eight existing tribunals have given awards accepted by the states concerned.

- The Centre has recently put forward the idea of a **permanent tribunal to adjudicate all inter-state river water disputes** for speedy resolution.

- Materialising this idea could be a solution to the Mahanadi River Water Dispute and many such water disputes among different states.

1.3 Disqualification of MLAs

Why in news?

18 MLAs in Tamil Nadu were disqualified by the Tamil Nadu Assembly Speaker.

What was the reason?

- The disqualified legislators belong to a faction of the AIADMK that opposes to the ruling dispensation.

- They gave a memorandum to the Governor expressing lack of confidence in the present Chief Minister.

- The Speaker interpreted it as amounting to "voluntarily giving up" their party membership.

What was the hidden agenda?

- It is seen as a partisan decision aimed at securing a majority, after a rebellion within its party reduced it to a minority.

- It reduced the total membership of the House from 233 to 215 and, thereby, the majority threshold from 117 to 108.

- The Speaker's ruling comes at a time when there is an increasingly indefensible reluctance on the part of the Governor to order a floor test.

Can there be a judicial review?

- Tenth Schedule of the Constitution prescribes two conditions under which a member of a political party may be disqualified –
    1. voluntarily giving up their membership
    2. when a whip is disobeyed

- The Speaker's decision under the Tenth Schedule of the Constitution is subject to judicial review.

- If it is challenged, the courts will have to decide whether legislators withdrawing support to their own party's government amounts to voluntarily giving up their membership.

- In Balchandra L. Jarkiholi & Others v. B.S. Yeddyurappa (2011), the Supreme Court, in similar circumstances, quashed the disqualification of 11 MLAs in Karnataka.

- While such legal and constitutional questions may be decided judicially, political morality has suffered a blow in the State.

What should be done?

- The constitution holds floor test as a significant means to ascertaining the confidence and majority of the elected government.

- The partisan element in anti-defection law and the adjudicatory power of the Speaker seem to be defeating this purpose.

- This creates the need for transferring the power to an independent body such as the Election Commission.

- Also, the Speaker's role should be reassessed and a law should be put in place to prevent manipulation while conducting a floor test.

1.4 End to Darjeeling Blockade

Why in news?

Gorkha Janmukti Morcha (GJM), which has been leading the separate statehood movement, has called off the indefinite strike in Darjeeling.

What led to this blockade?

- The people of the Darjeeling Hills and the people of Indian Gorkhas in the Northern part of West Bengal have long been demanding a separate state of Gorkhaland.

- The GTA (Gorkhaland Territorial Administration) was set up in 2012 as a semi-autonomous body to devolve some powers.

- However, substantial administrative and fiscal authority remained with the state government's district heads.

- There is a long pending standoff in Darjeeling as a result of failure of devolution of power to the GTA as promised.

- The immediate cause for the recent blockade is West Bengal CM's statement to make Bengali a compulsory language of study in the State.

- The stir started off with this and led to a revival of the demand for statehood.

- On an appeal from the Union Home Minister and his tentative offer of talks on the issue, the strike was called off.

What lies ahead?

- The tourism sector and the tea industry faced huge losses following the unrest in the region.

- The end to the blockade comes as a relief to the stalled economy of the region.

- Now that the strike has been called off, the Union and West Bengal governments and the GJM must urgently begin tripartite talks.

- An agreement on the empowerment of the GTA can only address the grievances of the residents of Darjeeling and prove to be a sustainable resolution of the issue.

1.5 Referendum

Why in news?

- Referendums are in the news, with demands over regional votes in Catalonia and Iraqi Kurdistan.

- Both in their own ways are a caution on how such instruments of direct democracy need to be used with care.

What is the problem with referendums?

- It is a powerful tool to deepen participation and reflect public opinion in a democracy.

- At the same time these instruments can reduce complicated issues into a vote on the narrower subject. e.g The Brexit referendum held last year reduced the question of the membership of a single market into a subject of immigration.

- Hence, it calls for an additional stress on mechanisms like questions framed for the vote, legitimacy of the institution calling for the vote and so on.

What should be done?

- The question of legitimacy of referendums is important.

- It is automatically provided if the Centre concedes this mechanism on such issues.

- This is not the case with the Catalonian and the Kurdish referendums.

- The recent Kurdistan referendum and the Catalonian referendum follow the Quebec model i.e without the approval or an agreement with national government.

- This means that a "yes" outcome would not necessarily push the envelope in the direction of secession in a peaceful manner.

- Catalan referendum only asks participants if they prefer independence through a yes/no vote.

- Choices such as greater federalisation are not provided on the ballot.

2. GOVERNMENT POLICIES AND INTERVENTIONS

2.1 Karnataka anti-superstition Bill

Why in news?

Karnataka Cabinet has recently cleared Prevention and Eradication of Inhuman Evil Practices and Black Magic Bill, 2017.

What is the Bill about?

- **The Proposal -** The Karnataka Cabinet has approved the "Prevention and Eradication of Inhuman Evil Practices and Black Magic Bill – 2017".

- It is likely to be tabled soon in the assembly for approval.

- The bill seeks to prohibit actions that - offend human dignity, exploit vulnerable people or cause harm to them.

- It intends to criminalise - organising displeasing rituals, offering magical cures and threatening people with divine consequences.

- **Validity -** The bill is argued to be a reasonable restriction on the right to practise and propagate one's religion under Article 25.

- As long as it serves the larger interests of public order, morality and health, it may withstand the test of constitutionality.

- **Balancing Religion -** The bill also seems conscious of hurting religious sentiments in its ambit.

- Hence it ironically exempts established religious practices and the propagation of spiritual learning, arts, astrology and vaastu.

- **Targets -** Among the rituals that become the main target of the Bill are urulu seve - in which devotees roll over food leftovers.

- The practice of walking on fire and piercing one's tongue or cheeks are other noticeable infamous rituals.

What are the implications?

- While denouncing acts that harm people in the pretext of ghosts charming, one can't criminalise the very idea of people claiming to be possessed by spirits.

- It would be an over-reach to argue that everything that appears irrational to the less believing should be prohibited by law.

- Designating a ritual as incompatible with civilised norms requires demonstrations to establish its inhuman or exploitative nature.

- Ultimately, only awareness can truly liberate a society from superstition and repulsive practices in the name of faith.

Acts and practices banned by the bill

- **Uruli seve -** Rolling over leaves of leftover food by other persons

- **Fire-walk -** During religious festivals causing physical injury

- **Baibiga practice -** Piercing from rods from one side of jaw to another side of the jaw, including tongue.

- **Banamathi -**Pelting stones in the name of mata-mantra on the residential houses during night or day.

- **Gandra-dora**- Prohibiting medical treatment for poisonous bite & instead giving superstitious 'treatment.

- **Gaavu -** Killing of an animal by biting its neck

- **Sidi -** Self-inflicted injuries such as hanging or pulling a chariot from a hook inserted into the body

- **Betthale seve -** Parading women naked in the name of worship.

Acts and practices not banned by the bill

- **Pradakshina or Parikrama -** Circumambulation of sacred places in Hindu, Jain or Buddhist context.

- **Yatra -** Holy pilgrimage performed to religious places.

- **Religious art forms like** Harikata, Keerthana, Bhajana, and Upassana

- Distribution of literature about miracles of the religious preachers which do not cause physical injury

- Performance of prayers, religious rituals at home, and other religious places that do not cause physical injury

- Piercing of ears and nose of children in accordance with rituals and performance of religious ritual.

- **Kesh Lochan -** Plucking of one's hair instead of shaving which is practiced by the Jains.

- Advice in regard to Vaastu Shasthra, and advice by Jyothishya and other Astrologers.

2.2 Central Road Fund (Amendment) Bill

Why in news?

The government has proposed to make amendments to the Central Road Fund Act, 2000.

What are the provisions?

- The Central Road Fund Act pertains to the CR Fund which is made up of cess on petrol and high speed diesel.

- The cess is at present in the rate of Rs 6 per litre.

- The amendment seeks to allocate a part of this cess to fund the National Waterways (NWs) project.

- Under the provisions of the bill, an allocation of 2.5% of CRF proceeds would go for funding the waterways project.

What are the benefits?

- The National Waterways (NWs) Act, 2016 aimed at developing and maintaining the existing five NWs and 106 new NWs across the country.

- However, the implementation is not in full swing with challenges in funding for the infrastructure such as jetties, terminals, and navigational channels.

- An allocation of 2.5% of CRF proceeds would provide approximately Rs2,000 crore per annum for the development and maintenance of NWs.

- It ensures a sustainable source of funding, as current budgetary support and funds from multilateral institutions are inadequate.

- It also offers incentives and certainty for the private sector to invest in the inland waterways transport sector.

- The move comes along with all the benefits of transportation through the waterways that include -

    1. Environment friendly and cleaner mode of transportation.

    2. Lower logistics cost as cargo transportation through water is much cheaper.

    3. Diversion of traffic from over-congested roads and railways.

2.3 Gratuity Amendment Bill

Why in news?

The Union Cabinet has given approval to the introduction of the Payment of Gratuity (Amendment) Bill, 2017.

What is gratuity bill?

- Gratuity is a sum of money paid to an employee at the end of a period of employment.

- The Payment of Gratuity Act, 1972 applies to establishments employing 10 or more persons.

- It considers the inflation and wage increase even in case of employees engaged in private sector.

- With implementation of 7th Central Pay Commission, in case of Government servants, the ceiling now is Rs. 20 Lakh, whereas the present upper ceiling on gratuity amount under the Act is Rs. 10 Lakh.

- There will be also an additional 1% dearness allowance that is from 4% to 5%, applicable from July 1, 2017, to all central government employees and pensioners.

- And it also seeks to double tax-free gratuity for private sector.

- The gratuity will be completely tax free if the bill approved by the cabinet gets passed in the parliament.

How does this benefit workers?

- Gratuity is not just paid to the employee on his retirement as commonly perceived.

- The gratuity rules are lenient, it can be paid at any of these cases if claimed

    1. If employee has tendered his resignation after serving the organisation for continuous five years,

    2. On his death, even if the employee hasn't served the organization for five years.

    3. If employee becomes disabled due to accident or disease.

- The main purpose for enacting this act is to provide social security to workmen after retirement.

- The amendment will increase the maximum limit of gratuity of employees, in the private sector and in Public Sector Undertakings/ Autonomous Organizations under Government, who are not covered under CCS (Pension) Rules, at par with Central Government employees.

What will be the financial impacts?

- The combined impact on the exchequer on this account would be ₹3,068.26 crore a year and ₹2,045.50 crore in 2017-18.

- Earlier, employers could limit their liability to the statutory cap of ₹10 lakh even if the calculation of gratuity for an eligible employee resulted in a higher figure but the limitation has been expanded.

- Many industries would be impacted if this proposal becomes the law, due to extra financial burden.

2.4 Monitoring Geographical Indications

Why in news?

Cell for IPR Promotion and Management (CIPAM) recently launched a social media campaign to promote Geographical Indications (GIs).

What is GI?

- GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.

- e.g Nagpur Orange, Toda Embroidery, Chanderi Fabric of MP, Kangra Tea of HP etc

- Goods branded as GIs can be made indigenously by local communities independently and in a self-sustaining manner.

- GIs are an integral part of India's rich culture and collective intellectual heritage.

- It can potentially promote rural development in a significant manner.

What was the purpose of the campaign?

- The ministry considers that their promotion is in line with the Government's 'Make in India' campaign.

- It adds that "GI tag" has accorded protection to several handmade and manufactured products, especially in the informal sector.

- It plans to promote by sharing interesting facts and stories of on social media.

What are the shortcomings of the move?

- Campaign is a wonderful idea to promote awareness.

- But there is more work that is required at the legislative level.

- A GI is supposed to convey to a consumer the assurance of a certain quality.

- European Community Regulation states that the added value of GIs is based on consumer trust and that it is only credible if accompanied by effective verification and controls.

- Further, GIs should be subject to a monitoring system that includes a system of checks at all stages of production, processing and distribution.

- In the Indian scenario, the word 'quality' itself appears in the Geographical Indications of Goods (Registration & Protection) Act only in two instances.

- GI Act does not provide for monitoring mechanisms at multiple levels.

- Currently, there is a proliferation of GI registrations in India without any legal provisions for quality control.

- This is detrimental because prolonged failure to meet consumer expectations would dilute the premium and credibility of GI-branded goods.

- A customer would not pay a premium to a GI branded product if there is no difference in quality.

Quick Fact

Cell for IPR Promotion and Management (CIPAM)

- It has been created as a professional body under the the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry.

- The purpose of it is to take forward the implementation of the National IPR Policy.

- It is also working towards creating public awareness about IPRs, promoting the filing of IPRs through facilitation and providing inventors with a platform to commercialize their IP assets.

2.5 Implementation of No-Fly List

Why in news?

The Civil Aviation Ministry has recently implemented India's first no-fly list.

How does it work?

- The rules impose certain obligations on airlines which include establishing Standard Operating Procedures and training their cabin crew, flight crew and ground staff.

- **Internal Committees** - Constituted by the airlines, the committee will be headed by a retired judge, a representative of another airline and a member of a passenger association.

- The airline can ban a passenger initially for 30 days, during which the committee will adjudicate.

- **DGCA** - The airline will send the decision of the committee to the aviation regulator Directorate General of Civil Aviation (DGCA).

- DGCA will maintain a list of these passengers on its website and it will be visible to the public.

- **Appellate committee** formed by the aviation ministry will be headed by a retired high court judge.

- Passengers can appeal within 60 days to this committee.

- If the committee is unable to give its verdict in thirty days, the passenger is free to fly.

- Also, during these 30 days the passenger can fly with other airlines if they do not ban him/her.

- Besides, there is a provision for the **Ministry of Home Affairs** to identify certain individuals as a national security threat.

> **No-Fly List**
>
> - The list specifies a list of passengers, who are banned from flying.
>
> - The behaviours has been categorised into three levels -
>
>   1. Level 1: Unruly Behaviour (physical gestures, verbal harassment, etc.) - Ban up to 3 months
>
>   2. Level 2: Physically Abusive Behaviour - Ban up to 6 months
>
>   3. Level 3: Life Threatening Behaviour - Minimum ban of 2 years with no upper limit.
>
> - It will be applicable to foreign carriers as well.
>
> - The pilot-in-command is the final authority to assess the situation.

What lies ahead?

- The measure empowers airlines to address the issues of misbehaviour, and check passenger angst and air rages.

- However, passenger associations are sceptical of the no fly list as it would give too many powers to the airlines.

- Also, the special provision with the MHA should be reconsidered as it gives no powers to the DGCA to differ.

- The imposition of the no-fly ban should only be used only as a last resort.

3. HEALTH

3.1 Addressing Malnutrition

What is the issue?

- Various findings suggest that measures to address the malnutrition problem are not paying the desired results.

- This raises the need for alternative measures to take the benefits to the targeted audience.

How serious is the malnutrition problem?

- The recent NFHS data has indicated that 1/3rd of our child population is being stunted.

- More than half the women in the reproductive age-group are anaemic.

- Besides, a recent World Bank Report has highlighted that India is paying about 9-10% income penalty, because of the fact that roughly 3/4th of the present workforce suffered from stunting in childhood.

- The adverse effect on lifelong learning capacities and lower adult productivity is the result of early onset of stunting.

What are the limitations in addressing this?

- Government brought in initiatives like the National Health Mission (NHM), Integrated Child Development Services (ICDS) and the Swachch Bharat Mission (SBM).

- However the pace of reduction of malnutrition has been suboptimal.

- This is partially explained by our narrow approach to food.

- Measures have largely relied on in-kind transfers such as in the foodgrains through PDS, meals or Take Home Rations (THR) through Anganwadi Centres (AWC).

- Besides, in many states these initiatives are marred by pilferage and leakages.

- Also, there is only around 50% enrolment because of lack of awareness of the programmes, seasonal migration and discrimination by field workers.
- The successful results of in-kind transfers and meal programmes in southern States are largely due to the underlying social capital in these States making it context-specific.

What is the way forward?

- An alternative to address this could be Conditional Cash Transfers (CCTs) that have emerged as an effective policy tool in driving developmental change globally.
- CCTs are preferred over the food transfers as they have been successful in:
    1. Reducing poverty.
    2. Bridging inequality.
    3. Inducing desired behavioural changes.
    4. Diversifying diets and increasing consumption of meat, milk, vegetables and sugar.
    5. Addressing nutritional deficits.
- Cash in the hands of the women, with the right kind of 'messaging' can make significant improvements in addressing the malnutrition crisis.

3.2 Eliminating MTCT of HIV

What is the issue?

Recent studies show that the complete elimination of mother-to-child transmission of HIV is possible.

How is HIV transmitted to a child?

- Mother-to-child transmission MTCT is the primary route of transmission of HIV among children.
- Babies are infected during pregnancy, labour, delivery or while breastfeeding.

What is the status of MTCT HIV in India?

- Currently 5% of babies born to those who are HIV-positive get infected.
- If transmission rate is below 2% it is considered as elimination.
- According to NACO, only about 52.7% of pregnant mothers seek skilled care out of an estimated 27 million pregnancies in a year.
- An estimated 35,200 pregnancies occur in HIV-positive women and more than 10,300 infected babies are born annually, without any intervention.

What are the methods to prevent MTCT?

- **Multidrug Therapy -** India is following the WHO recommended 'multidrug therapy', which is a combination of three drugs — tenofovir, lamivudine and efavirenz (TLE).
- Affected women need to take it all their lives and nevirapine syrup for six weeks.
- Multidrug therapy is usually adequate to drastically reduce a mother's viral load.
- **Caesarean -** During a baby's journey through the vaginal passage, contact with abrasions, secretions and blood, which contain the virus, increases the risk of transmission.
- Elective caesarean section and no breastfeeding will limit the transmission.

What are the challenges in India?

- For patients from underprivileged classes, replacing the nutrition for the baby without breastfeeding is difficult.
- The enormous population in India makes it challenging for health-care workers to reach out to every pregnant woman.
- On the other hand, pregnant women too often delay registering for antenatal care.

3.3 Encephalitis challenges

What is the issue?

- Acute encephalitis syndrome (AES) is more prevalent in parts of Uttar Pradesh.

- So strong measures are needed to contain the disease.

What is acute encephalitis syndrome (AES)?

- **Acute encephalitis syndrome (AES)** is characterized by serious onset of fever and clinical neurological manifestation that includes mental confusion, disorientation, delirium, or coma.

- Viruses have been mainly attributed to be the cause of AES in India although other sources such as bacteria, fungus, parasites, spirochetes, chemical, and toxins have been reported over the past few decades.

- The causative agent of AES varies with season and geographical location, and predominantly affects population below 15 years

- **Japanese encephalitis (JE)** is a disease spread through mosquito bites,it is a serious disease that may cause death.

- Symptoms usually take 5-15 days to develop and include fever, headache, vomiting, confusion, and difficulty moving.

- Encephalitis is a predictable disaster. Its transmission intensifies during the rainy season, during the pre-harvest period in paddy-cultivating regions, and in flood-prone districts.

Endemic Regions of Following Viruses
- JEV
- CHPV
- NiV
- Enterovirus
- Litchi Virus
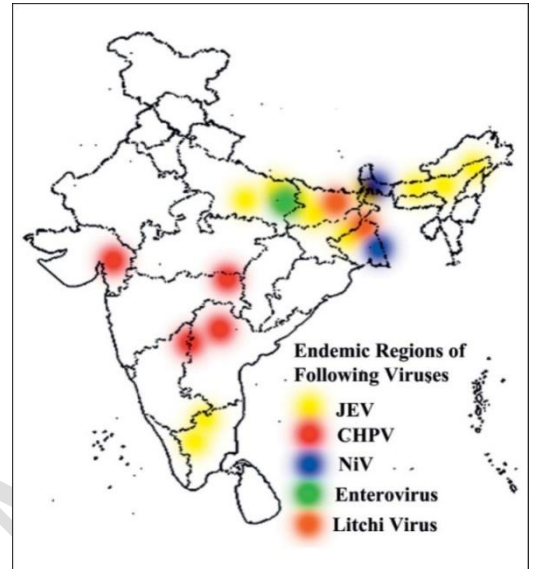
What is the status of JE in Uttar Pradesh?

- In four districts of U.P, an outbreak of JE has occurred almost every year between 1978 and 2007.

- The recent deaths in Gorakhpur is due JE-negative AES.

- This disease has remained relatively stable over the past five years.

- Failure to administer the vaccine simultaneously with other vaccines was the most common reason for the lack of coverage and has led to many deaths.

What are the issues with government actions?

- Central government released only 68% of budgeted funds for communicable diseases, and an even smaller percentage was utilised.

- The spending capacity of the health system has proven to be a major bottleneck in U.P, in 2015-16, U.P. could spend only 58% of the approved National Rural Health Mission budget.

- In 2011, the JE vaccine was included in the universal immunisation programme (UIP).

- Under the UIP, two doses of JE vaccine are administered to children, but only three out of four children in Gorakhpur had received at least one dose of JE vaccine.

What measures can be taken?

- Mass awareness and door-to-door campaigns about the causes of the disease and ways of prevention, should be a priority.

- Sanitation, mosquito control, prevention of open defecation, and ensuring clean drinking water can help prevent an outbreak.

- The State government needs to allot maximum funds to those districts most affected by encephalitis.

3.4 Challenges in the Nursing Sector

What is the issue?

Nurses in Kerala were on a 2 month long agitation demanding the implementation of the 2016 Supreme Court order that fixed their minimum wage at Rs.20,000 per month.

Why was the problem?

- Low pay and lax rules have impacted the well-being of India's nursing community

- The agitation put the spotlight on the working conditions of nurses and the huge disparities in the remuneration of healthcare workers, particularly in the dominant private sector.

- Subsequently, the Kerala government responded positively, thereby settling the minimum salary question.

What challenges do nurses face?

- Nurses are, even in high-end private hospitals, paid a tiny fraction of doctors' salaries.

- This is the case even in progressive states, where nurses are often qualified to dispense elementary care, if not more.

- Besides, the work of nurses entails both physical and psychological stress, and coping with occupational hazards such as unsafe environments and dangerous diseases.

- Also, there is the risk of gender and sexual abuse, both by staff and patients.

- According to nurse unions, the annual increment of a full-time nurse in some hospitals is hardly 100-150.

What needs to be done?

- **Salary -** The job of nursing needs to become both respectable and attractive for youngsters in order to bring in more people.

- Hence, as a first step, the 2016 Supreme Court ruling on minimum wages needs to be implemented strictly in its totality.

- **Quality -** India needs nurses not just in larger numbers, but also with higher levels of competence.

- Hence, the government needs to check its recent moves to dilute the training process and standards for nursing.

- Rather, it needs to invest more in hospitals and nursing colleges.

- **Institutionalisation -** A health regulator to check malpractices and protect both consumer and producer interests is needed.

- Erring hospitals should be penalised and a robust performance-linked appraisal system needs to be developed.

- **Community Nursing -** Enabling nurses to perform community health services under the supervision of doctors can help restore the lost esteem for the profession.

- **Higher Budgeting -** Public health spending needs to go up a lot more than the current 1.5% of GDP to rejuvenate the entire eco-system.

4. SOCIAL JUSTICE

4.1 Murder of a Journalist

Why in news?

Gauri Lankesh, a journalist-activist, was recently murdered in her residence in Benagluru.

Why was she murdered?

- Her killers caught her outside her home and fired at point-blank range, hitting her on the chest and the temple.

- This shows that it is a pre-meditated assassination.

- The manner in which she was brutally murdered raises extremely worrying questions.

- It was very similar to the cold-blooded murders of at least three other rationalist thinkers, Narendra Dabholkar, Govind Pansare and MM Kalburgi, over the past few years.

Gauri Lankesh

- Gauri Lankesh is the publisher and editor of the Kannada weekly Gauri Lankesh Patrike.

- She is also an activist and came up against the establishment in multiple ways.

- She was known for taking on right-wing Hindu fundamentalists with her sharp and stinging pieces.

- She sought to bring naxalites to the mainstream, take up the cause of Dalits and farmers, raised consciousness on the creeping influence of Hindutva groups, gave moral support to progressive campaigns.

- Kalburgi was killed for his interpretation of Basavanna's teachings.

- Dabholkar and Pansare lost their lives for encouraging rationalism, and challenging casteism and dogma.

- These brutal attacks have the power to potentially scare off others from asking too many questions.

What are the implications?

- The death along with that of the journalist who exposed the Dera Sacha Sauda chief present a sobering picture about the status of free speech and the robustness of the free press.

- The journalists working away from the metros and often working in language publications are harassed and abused by local power interests.

- This is also a sign of growing strain of intolerance in the country, especially religious intolerance.

- e.g Many in the social media claimed that Lankesh deserved this end for her anti-Hindu views.

- As a result, India was ranked 136 out of 180 countries and placed in the "least free" category in the 2017 World Press Freedom Index.

- The 2017 India Freedom Report, reports 54 reported attacks on journalists, and 45 sedition cases against individuals and groups between January 2016 and February 2017.

- Laws such as the Chhattisgarh Public Security Act and the Unlawful Activities Prevention Act are also often misused.

What should be done?

- A liberal society that values dissent and free speech is an essential component of a vibrant democracy.

- Speedy action on prosecuting the previous assassins would have deterred such an episode.

- It would have also bolstered the confidence of the common man in the police.

- So the state police should now move expeditiously to solve this murder and restore some semblance of order.

4.2 SC's Condemnation on Cow Vigilantism

Why in news?

Recently Supreme Court raised its concern to stop the attacks on innocents in the name of cow vigilantism.

What are the reported incidences of cow vigilantism?

- Cow vigilante violence involves mob attacks in the name of "cow protection," targeting mostly Muslims.

- It has swelled since 2014.

- **Rajasthan-**A dairy farmer from Haryana was beaten to death by a mob of alleged cow vigilantes.

- Cow vigilantes stopped and assaulted Tamil Nadu animal husbandry officials transporting Rajasthan's native Tharparkar breed.

- **Haryana-** 15 year old Muslim boy was stabbed on board train, who allegedly for a beef-eating.

- **Gujarat-**Cow vigilantes publicly flogged a Dalit family for skinning a dead cow.

- A Muslim man died after being assaulted by alleged cow vigilantes for transporting two animals.

- **Maharashtra -** Series of cases has been reported from various parts of the state, the state was silent in taking actions against the wrong doers.

What is the significance of SC's move?

- It ordered the States and the Union Territories to appoint nodal police officers in every district to crack down on such groups

- It has also asked states to file status reports on what they are doing to prevent vigilantism.

- The court exhorted the Centre to uphold its constitutional mandate under Article 256 of co-operative federalism and direct the States to act against the groups.

- It said the Centre could not remain silent, leaving everything to the States.

- The court also directed the Chief Secretaries and Directors General of Police to take steps to protect the highways from vigilante mobs.

- Haryana, Rajasthan, Maharashtra and Gujarat accepted the apex court's suggestion to appoint dedicated officers in the rank ofDeputy Superintendent of Police to prevent 'gau rakshaks'.

What is a need for such direction from SC?

- Cow-protection groups see themselves as preventing theft, protecting the cow or upholding the law in an Indian state which bans cow slaughter.

- So far no PIL had been filed against the carcasses of slaughtered animals found strewn on roads and public places but minorities are attacked in the name of cow protection.

- Dalits and Muslims have reportedly been at the receiving end of violence unleashed by lynch mobs, especially in the four northern States.

- The Centre has maintained that violence by 'gau rakshaks' was a 'State subject' and it had no role to play, though it condemned all forms of violence.

What is the conduct of state over this issue?

- In more than one State, cow 'protectors' have legal recognition as local laws provide immunity to them if they were acting in good faith.

- The validity of such provisions in laws aimed at banning or regulating slaughter of animals and protecting the cow may be decided in the course of these proceedings.

- In most cases, police register cases against the victims for slaughter or theft of cattle.

- Typically, the administration seems eager to determine if they were engaged in cow slaughter or transportation of bovine meat than in arresting the culprits involved in murder and violence.

- It is dubious that whether the Centre ought to take recourse to Article 256, which empowers it to issue directions to the States, to put an end to the activities of vigilantes.

- Instead of shirking its responsibility on the ground that this is essentially a law and order issue to be addressed by the States.

4.3 Politicization of Religious Identity

What is the issue?

In Jharkhand many political forces influence the religious identity of tribes and create distressing outcomes.

What is the religious identity of Jharkhand tribes?

- Tribals constitute around 27% of Jharkhand's population.

- Among them, 4.3% are Christians, about 13% Sarnas (animistic believers) and the rest are largely Hindus.

- These tribes have borrowed exotic elements from Hinduism and Christianity and follow their indigenous festivals, worship trees and believe in symbolic worship.

- Those who have converted to Christianity under the influence of Christian missionaries, also did not chang their cultural behaviours.

How do political forces influence the tribal identity?

- **Misinterpretaion -**The recently passed Jharkhand Freedom of Religion Bill, 2017 checks religious conversion.

- It defines "conversion" as "renouncing one's own religion and adopting another", and majoritarian view perceives all tribal as Hindus.

- **Re-conversion -** Many right wing extremist are "re-converting" tribals back to Hinduism and celebrating it.

- These outfits also make aggressive propagation of Hindutva sentiments, through the use of violence.

- **Cow slaughter law -**The draconian law has inadvertently tried to force an unwanted Hindu custom on the tribals, although beef has been traditionally a part of their diet.

- **Denial of identity -** Ruling government denies any difference between the Hindu religion and indigenous tribal religion.

- **Encouraging divisions -**The state law on socio-religious identity have aggravated communal and casteist divisions within the tribal community.

What are the outcomes?

- This kind of politicisation and communalisation of social relations has disrupted harmony by pitting one group against the other.
- It have also cultivated hatred towards Muslims, Christians, and Christian tribals.
- It weakens the collective and individual agency of tribals.

4.4 Children's Safety at School

What is the issue?

- Recently there were two incidents of attack on children inside their school premises in Delhi.
- This has drawn attention to the safety of children at schools.

What are the drawbacks in the approach?

- The perception of education and the hierarchy of "educational needs" places 'safety' well below many other **priorities**.
- Unlike other physical infrastructures, the safety measures are largely ignored.
- Audits and regular **inspections** of safety and security measures at schools by experienced security professionals are lacking in the country.
- Also, the present **norms** by the school boards are **poorly implemented** by the school managements.
- The school managements or the directorates of education **lack the requisite training** for handling the safety related issues.
- The responsibility is thus handed over to **private security agencies** who are under-paid and untrained, and thus **inefficient**.

What are the recent CBSE guidelines?

- Following the recent incident, CBSE has issued guidelines to all its affiliated schools failing to follow which would amount to losing their affiliation.
- The guidelines include -
    1. Conducting **safety/security audits** of school premises and employees from the respective local police station within the next two months.
    2. Installing **CCTV cameras** at all vulnerable points in the school premises and ensuring it is functional at all times.
    3. Conducting **psychometric evaluation** of all staff employees including the non-teaching staff like bus conductors, drivers, peon, and other support staffs.
    4. Ensuring support personnel are employed by authorised agencies and proper records are maintained of them as well.
    5. Providing **training** and development to staff to protect children from any form of abuse.
    6. Constituting **parent-teacher-students committee** to address security and safety needs of students and taking regular feedback from parents as well.
    7. Monitoring access to school buildings by outsiders and visitors.
    8. Besides, schools shall constitute a separate **committee for redressal** of public, staff, students, and parents grievances.
    9. An **internal complaint committee** on sexual harassment and a committee under Protection of Children from Sexual Offence (POCSO) Act should also be constituted.
- In all, CBSE has said that responsibility for the safety of children in schools 'shall solely lie' with the school authorities.

4.5 Remedies for Unnatural Jail Death

Why in news?

SC recently directed that the Chief Justices of all HC to register petitions suo motu to identify the kin of prisoners who died unnatural deaths and order the states to provide them compensation.

What was the need for this judgement?

- Normally, the National and States Human Rights Commissions decide and award compensations in cases of custodial torture and deaths.

- However, compliance by State governments is low as these commissions do not exercise any power of contempt.

- This judgment is significant as the high court will now directly award compensation and ensure compliance by the States.

- It also asked the Ministry of women and child development to formulate procedures for tabulating children who died unnatural deaths in custody or in child care institution by this year end.

What is the significance?

- Human rights in a welfare state are not dependent on the status of the person whether he is a criminal or a victim.

- There is no reason at all to exclude their kin from receiving compensation only because the victim is a criminal.

- It is also important to look into the unnatural deaths of children in child care institutions for providing the children of our country with a better future.

4.6 Women in Prison Administration

What is the issue?

- Percentage of women in police service in general and prison management in particular has steadily been raising over the years.

- While this is a healthy trend, there are also numerous challenges.

What are the wider implications?

- A larger percentage of women will increase the accessibility of the police to women.

- Women police are being involved almost all kinds of policing duties like regulating traffic, managing control rooms, PCR vans.

- In some cases they also conduct night rounds and investigating serious crimes and supervise large bandobasts.

- All this would have a large psychological impact that potentially would push the debate on women empowerment to a higher track.

What are the concerns?

- **Numbers -** Their presence in prisons is gradually increasing.

- Many states like Maharashtra now have 33% reservation for women in prison administration.

- Their increased number means that they are assigned duties in male prisons too.

- **Assimilation -** Most prison superintendents are however apprehensive of having women staff.

- Prison staffs are steeped in a male-dominated culture that has developed over time.

- The security of prisons and counting of prisoners is thought to be their main occupation.

- All this, compounded by the belief that prisons are places for criminals that pose an inherent threat to the society makes it an uphill task for women to assimilate into.

- **Training -** The Bureau of Police Research and Development has been tasked to revise the existing syllabi for the training of prison officers/staff.

- After basic training during induction, there is hardly any in-service training currently.

- Training at regular intervals, linking it with promotions and updating technical knowledge deserve attention.

- There is a strong need for reorientational training towards correctional administration.

- Besides, prison staff need to veer towards an attitude of reformation and rehabilitation shifting focus from the current punitive attitude.

What are other issues in prison administration?

- Prisons in most metros and district headquarters are overcrowded.

- This is bound to have an adverse effects on the hygiene and health of prisoners and the staff on duty, that is visible now.

- As security risks in such cases is also enormous, relieving even one staff member for in-service training appears to be a luxury.

- Thus, besides regular training, filling the around 34% vacancies in prisons currently needs immediate attention.

How can women specific issues be addressed?

- Prison administration needs to get its officers and staff in sync with the culture of gender equality, respect and cooperation.

- Women come with their certain specific strengths that is usually found to be lacking in men and this needs to be harnessed.

- Notably, they are intuitively found to herald a shift in favour of a correctional administration instead of the traditional punitive mindset which is a big plus with regard to prisons.

- Women officers working in the pathetic prison conditions have the extra burden of traditional family responsibilities their problems need to be studied further and acted upon.

- A continued dialogue about problems and possible solutions can greatly help women in prison administration reach their potential.

4.7 India and Global Slavery Index

Why in news?

Annual Global Slavery Index was recently released.

What is the position of India?

- India has been ranked 4th out of 167 countries.

- The top three countries were North Korea, Uzbekistan and Cambodia.

- In 2016, it was deemed to have some 18.3 million people trapped in slavery.

- Now about 1.4% of the population working under coercive conditions.

- There is an addition of 4 million slaves when compared with 2014 index.

- Indian policy-makers discount the ranking as a function of the size of the population, but most populous country China is ranked at 40th position.

What implication does this leave on India?

- The long-term structural weaknesses of India's economic reform has been the inability to expand the market for jobs in sync with its demographic growth.

- Many of these new-age slaves are women and children, the most vulnerable sections on the frontline of economic slowdown and poverty.

> **Global slavery Index**
>
> - It is published by the Australia-based human rights group Walk Free Foundation.
>
> - It includes data on three key variables-
>
>   1. Prevalence of modern slavery in each country,
>
>   2. Vulnerability,
>
>   3. Government responses to modern slavery.
>
> - Modern slavery refers to situations of exploitation that a person cannot leave because of threats, violence, coercion and abuse of power or deception.

- Increase in number of slaves every year is due to the rank failure of India's law enforcement institutions.
- Indian migrant labour has not been taken into account for this index, if they had been included India might have topped the list.
- According to UNDP India will see a severe job shortage in the next 35 years, the number of the country's modern slaves is likely to boom.

4.8 Widening Pension Coverage in India

What is the issue?

- The RBI committee on household finance i.e Ramadorai Committee has commented on the low pension participation of Indian households.
- This calls for an assessment of the pension schemes in India and adopting suitable options to increase the pension coverage.

What is low coverage?

- India provides for three main kinds of pension schemes:
    1. NPS(National Pension Scheme) which is mandatory for civil servants.
    2. EPFO (Employees' Provident Fund Organisation) which is mandatory for employees in firms of 20 or more people.
    3. IGNOAPS (Indira Gandhi National Old Age Pension Scheme) for the destitute elderly.
- Low pension coverage points to the citizens who do not have access to any of these programmes.
- They are left to themselves to find ways to finance consumption in old age.

How is India's savings culture?

- Addressing the low pension coverage problem should focus on two questions.
- One, are people not making any savings (or) two, are they not saving through the pension schemes.
- It is to be noted that absence of a pension account does not necessarily mean that a person has no savings to finance consumption in old age.
- However, in the Indian context the reality is that **people do not have enough savings** on the first hand.
- Besides, as per the Ramadorai Committee report, households that do have savings, **over-invest in physical assets** in general.

How to address this?

- Pension schemes that are compulsory or are universally provided by the state through tax revenues are **mandatory savings**.
- On the other hand pension coverage incentivised through tax breaks in addition to mandatory programmes are **voluntary savings.**
- Low financial savings and suboptimal investments are the reality with poor households in India.
- There is thus naturally an increased demand for mandatory savings in the NPS to increase pension participation.
- However, it is difficult to enforce this in a country like India where large informal sector is the large picture.
- Thus, promoting voluntary savings becomes the option best suited for India.
- The Ramadorai Committee as well as the PFRDA committees have suggested **increasing the incentives of distributors** (and fund managers).
- This is to incentivise people to join the National Pension System (NPS).
- However, this should be coupled with **state support** like state subsidies in the form of cash transfers for the really poor.
- Simultaneously, mandatory **NPS** can also be considered by providing for **lower contribution rate** than the present 20%.

- This could cover firms with less than 20 employees and the self-employed class.

- Also, addressing **funding issues** and providing **flexible options** to shift between schemes as per individual needs can help increase the pension coverage.

- Questions of **tax parity** between the various schemes need to be resolved so that one is not unfairly penalised.

- A comprehensive approach to the problem and co-ordinating the best options available could go a long way in streamlining the savings culture and pension coverage in India.

5. GOVERNANCE

5.1 Regulating the MCI

What is the issue?

The regulator of medical education MCI is itself in need of regulation.

What are the issues with MCI?

- Medical education scams continue persistent under the MCI's stewardship.

- Earlier, a colonel of the Army Medical Corps was arrested for passing on sensitive information about inspections to a medical college in Pondicherry.

- Recently, a former high court judge and his associates was arrested for agreeing to help an under-equipped college make the grade in court.

- The volume of litigation that the MCI faces concerning issues of policy, admission and examination suggest that the regulator is neither in command nor perceived to be so.

What are the recent problems with MCI decisions?

- It has rightly imposed a uniform benchmark for admissions at the undergraduate and postgraduate levels.

- But different syllabi set by states and the diverse languages they are taught in tilt the playing field.

- The MCI is standardising entrance tests, it is spectacularly failing to assure uniform, quality education for entrants who qualify.

- Due to this the implications for the health of the nation are sobering.

- The lucrative promise that India holds as a destination for medical tourism and education stands compromised.

How can the issues be addressed?

- The National Medical Commission Bill of 2016, trifurcate the functions of the MCI to reduce opportunities for corruption.

- Transparent accreditation process guided by checks and balances conferring credibility should be its priority.

- Medical education has been handed overto the regulation professionals instead of administrators, but only functional reform can strike at the root corruption.

- Merely replacing the MCI will not suffice, its successor must be armed with rules-based transparency.

5.2 Role of CAG

What is the issue?

- The Corruption Perception Index released by Transparency International ranks India at a lowly 79 out of 176 countries.

- As much of this corruption is linked to public funds, it calls for a relook at the role of the Comptroller and Auditor General (CAG).

What are the drawbacks with the role?

- CAG, over the years, has functioned as a routine auditor and has failed to proactively expand its role to meet the emerging challenges.

- **Control** - Though CAG reports are discussed by the public accounts committees of the respective legislatures, no one evaluates or questions what the CAG does.

- As a result, its functions are largely confined to itself and are not known to meet with experts, professionals or institutions.

- There is no Constitutional authority, including the judiciary, which is so secluded and unapproachable as the CAG is.

- **Precedence** - It does not disseminate its policies or practices for the benefit of public servants and the general public.

- The audit reports of CAG are short of issuing any guidelines, best practices or advisories that would restrict malpractices and set a precedent.

- **Post-Mortem** - CAG could well be called the "Post-Mortem Authority of India as it looks primarily at what is demised.

- Carrying on concurrent audit which is legally permissible could be a preventive and curative measure to at least restrict financial ineffectiveness.

- Scams have been occurring with increasing frequency, but the CAG is able to expose only a few and that too with minimal consequences.

- Ex: There are enormous cost overruns in public projects due to poor contract design coupled with corrupt practices.

- **Limitation** - The growing interventions of the CAG, CBI, CVC and the unpredictability with their actions, at times result in bureaucrats preferring to avoid decision-making.

- CAG reports is recent years seem to be going into sensationalism. Ex: the excessive numbers, of anticipated loss, put out by the CAG in the telecom spectrum and coal mine scams.

- This seems to be distracting the CAG from an objective and judicious examination of matters with the requisite expertise and diligence.

- A reassessment of the role and responsibilities of the CAG towards this end is the need of the hour for India to fare better in global transparency indicators.

5.3 Panchayat Staffing Rules

Why in news?

The Centre is expected to release a report, specifying the rules for recruitment of non-elected panchayat staff.

What are the issues in this regard?

- **Recruitment** - The Rajasthan government recently mandated minimum educational qualifications for candidates contesting elections for panchayati raj institutions.

- But no state has clear rules on how the non-elected staff at panchayats should be appointed.

- The system of patronage and nepotism or preferential treatment in recruitment is plaguing the outcomes of rural development initiatives.

- **Training and Performance**- The other problem is the large scale involvement of ill-organised cadres and temporary workers to manage programmes.

- It becomes hard to either monitor their role or make them obey disciplinary steps and this have an impact on services delivery.

- In the context of community workers engaged in rural development programmes, there is no connection between the their performance and the salaries they draw.

- Notably, the variation in their performance is mostly due to lack of trained human resource.

- **States** - Under the Fourteenth Finance Commission award, grants are being allocated to states to meet out Panchayati Raj Institutions' needs.

- However, the states are reluctant to furnish audited reports, statements of account and utilisation certificates in respect of this financial assistance.

What does the report aim for?

- The report primarily aims at putting in a place a well defined Panchayat staffing rules to improve service delivery.

- Some age-old practices that guide selection to posts in panchayats will now be eliminated.

- A regulated staffing in the Panchayats in the country can make them more inclusive.

- It can also ensure that the massive amount of funds that are devolved to them produce uniform and beneficious results.

- The report will also cover the administrative structure of various programmes that have a bearing on rural development.

5.4 Generalist vs Specialist

What is the issue?

- The debate on generalists and specialists is kick-started with rising demands for lateral entry into civil services.

- Also, the changing nature of government creates the need for a reassessment of the nature of civil servants involved in administration.

What is the need for specialisation?

- **Changing nature** - The Indian Administrative Service (IAS) was modelled on the colonial era Indian Civil Service as a generalist service.

- It was conceived primarily to deliver the core functions of the state such as tax collection and maintenance of law and order.

- But with the evolution of public administration and economic reforms changing the State's role, there is a higher demand for domain knowledge at policy level.

- **Drawbacks** - IAS, as generalists, tend to over-weigh their experience of the process and form over understanding of policy content.

- Generalists heading specialised areas seem to be an inefficient arrangement at times.

- There is also a misconception that only generalists who have a breadth of understanding and experience can provide best leadership.

- All these have raised questions about the role and relevance of the generalised IAS.

What could be done?

- The Constitution Review Commission 2002 suggested the "need to specialise some of the generalists and generalise some of the specialists".

- However the task of managing specialisation needs the consideration of many factors:

- **When** - From generalised field postings in the initial decade of service, an IAS gradually moves to policy formulating positions.

- This mid-career level transition provides the ideal marker for beginning to specialise.

- **How** - Possibly, complying to the demands of behavioural attributes and aptitudes, ministries could be broadly categorised into three groups - welfare, regulatory and economic ministries.

- Secondly, specialisation process needs to be flexible according to the preference of IAS officers.

- Given this flexibility, it is also essential that the government make the process more predictable and transparent to avoid favouritism.

- Thirdly, once allocated to specialist positions, officers should be provided study and training for deepening their domain knowledge.

- In addition to these, the specialised lateral entrants should be required to "generalise" through field postings.

- The nature of policy-making at present demands that specialist **expertise** has to go with generalist **experience**.

- Thus, proper cadre management that provides for a right proportion of generalisation and specialisation can improve the efficiency and relevance of civil services.

6. INDIA AND ITS NEIGHBOURHOOD

6.1 Indus Water Talks

Why in news?

The latest round of talks between India and Pakistan on the Indus Waters Treaty has ended without any agreement.

What is the significance of Indus water treaty?

- The Treaty was signed in 1960 between India and Pakistan and was brokered by the World Bank.

- The treaty administers how river Indus and its tributaries that flow in both the countries will be utilised.

- According to the treaty, Beas, Ravi and Sutlej are to be governed by India, while, Indus, Chenab and Jhelum are to be taken care by Pakistan.

- However, since Indus flows from India, the country is allowed to use 20% of its water for irrigation, power generation and transport purposes.

- A Permanent Indus Commission was set up as a bilateral commission to implement and manage the Treaty.

- The Commission solves disputes arising over water sharing.

- The Treaty also provides arbitration mechanism to solve disputes amicably.

What are the possible threats to water sharing?

- Though Indus originates from Tibet, China has been kept out of the Treaty.

- If China decides to stop or change the flow of the river, it will affect both India and Pakistan.

- Climate change is causing melting of ice in Tibetan plateau, which scientists believe will affect the river in future.
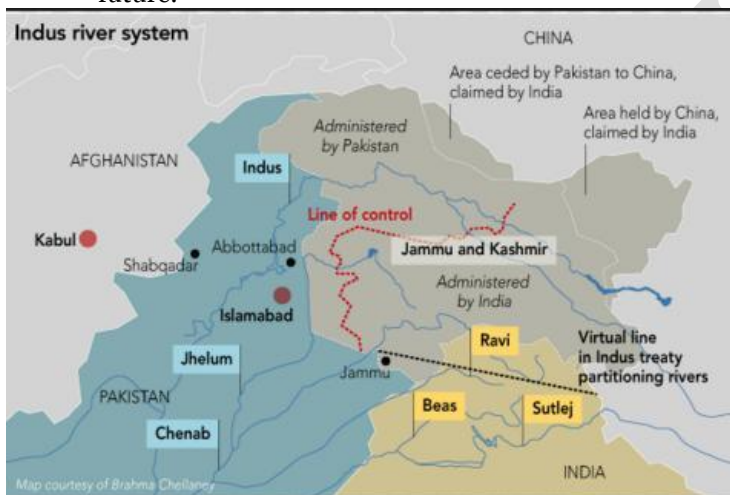
What is the recent talk about?

- The second round of discussions was held in World Bank headquarters.

- The talks were on the Ratle and Kishanganga hydroelectric projects.

- In August 2017, the World Bank allowed India to construct the dam.

- Pakistan alleged that the construction of the dam was not in line with the Indus Water Treaty.

- The agreement has not been reached at the conclusion of the meetings.

- The World Bank will continue to work with both countries to resolve the issues in an amicable manner and in line with the Treaty provisions.

- Both countries and the World Bank appreciated the discussions and reconfirmed their commitment to the preservation of the Treaty.

What is the role of World Bank in the treaty?

- The World Bank remains committed to act in good faith and with "complete impartiality and transparency" in fulfilling its responsibilities under the Treaty.

- The World Bank's role in relation to the "differences" and "disputes" is limited to the designation of people to fulfil certain roles when requested by either or both of the parties.

6.2 Lessons from Doklam

What is the issue?

- The India - China standoff in Doklam is now resolved with diplomatic efforts.

- However, the turn of events calls for India to pay attention to some larger questions on our military strength and support of other powers.

What accompanied the ending of Doklam standoff?

- A consensus was reached to enhance mutual trust, focus on cooperation and manage differences.

- Revitalizing a series of dialogues mechanisms and to promote youth and educational cooperation was also agreed upon.

- Stress was laid on mutually seeing each other as development partners rather than as threats.

- Above all, both sides have displayed their intent to conduct comprehensive dialogues to sort out any future differences.

What should India learn from the Doklam issue?

- **Army strength** - India has to look into the relative strength of its military power as against that of China's.

- With due acknowledgement to the professional Indian armed forces, the reality is that they do not outweigh the Chinese in a conflict scenario.

- India's military strength was sufficient only to make a defensive response to the whole issue.

- **Infrastructure** - The high density of infrastructure on the Chinese side has forced India to respond with the Line of Control (LoC) mindset in a disputed territory where India has strong claims.

- Here again, India limited itself to a defensive position, as it feared of losing some territory.

- It thus did not choose to draw the Chinese in and then inflict punitive losses.

- The infrastructure on the Indian side, both strategic railway lines and important roads, has shown no significant progress over the years.

- **Military preparedness** - India's military preparedness in this context is weaker in relation to its opponent.

- The delay in military modernisation schemes have made army's ammunition reserves unsustainable even for a 10-day-long war.

- Not properly equipped and stocked Indian armed forces seem to be unprepared and vulnerable, to a possibly two-front collusive threat from China and Pakistan.

- **Bhutan** - Bhutan has been a strong Indian ally and has stood by New Delhi during the standoff.

- However, views within Bhutan are strongly demanding a "balanced foreign policy" i.e. opening of ties with China.

- Also, there are high chances of resumption of the now cancelled Bhutan-China border talks.

- The talks involve a swap for Doklam with disputed areas in the north, an offer which has always interested Bhutan.

- All these developments are something which India cannot afford to ignore.

- **International support** - Though being indirect, India got considerable support from the many countries in the Doklam issue.

- The world nations' own relations with Beijing made it very difficult for them to state their support openly.

- At this juncture, it is for India to seriously think on relying on international support against China if India and China were to clash again.

6.3 Indo-Myanmar Ties

What is the issue?

Indian PM recently visited Myanmar

What are the highlights of the visit?

- The timing of the trip was complex because Myanmar's army had launched brutal counter-attack against Rohingya rebels in Rakhine province which lies close to Mizoram.

- India chose to ignore worldwide condemnation of the assault which has sent 1,25,000 people fleeing to Bangladesh.

- Instead India issued a statement condemning "the recent terrorist attacks in northern Rakhine State, wherein several members of the Myanmar security forces lost their lives".

- India has taken the view that it must be sensitive to Myanmar's fears of secessionist ethnic groups.

- Eight MOUs were signed between both the nations during this visit.

Why is Myanmar important to India?

- India shares a 1,640-km border with Myanmar, is central to its strategic North-East considerations.

- India's keen to keep Myanmar in its orbit, mindful of how China is courting its neighbour.

- Myanmar is in need of more diplomatic friends as it has irritants with its neighbours like Thailand and Laos.

- Thus Myanmar has been one diplomatic success for India in its backyard.

What can be done?

- India needs to build on its firmer relations by boosting its economic interests in the country.

- The Sittwe port build by India in troubled Rakhine province, but I has not been maintained India need to concentrate on that.

- India could encourage creation of a fisheries industry in the area.

- India need to push forward in many ways and the Government has been generous with foreign aid.

6.4 Problems faced by Rohingyas in India

Why in news?

Union Home ministry's decided on deporting Rohingyas back to Myanmar.

What is the current situation of Rohingyas in India?

- At least 40,000 Rohingyas have been estimated to have entered India.

- Only 16,000 of them are documented.

- Many Rohingyas living in India have long term visas and refugee cards issued by the United National High Commission for Refugees (UNHCR).

- Majority of Rohingyas who fled to India are working for lower wages in Uttar Pradesh or Jammu or Haryana.

- The reason why a lot of them make their way to Jammu is because the avenues for employment in the unorganised sector are more.

- The men mostly work as scrap dealers and construction workers, making anything between Rs 150 to Rs 300 a day, while the women mostly stay at home to take care of the children.

What problems are the Rohingyas facing in India?

- There are reported complaints open drains, unsanitary surroundings and slum-like conditions in the Rohingya camps across India.

- Few children has been dead due to pneumonia, during the winter winds.

- Snakes make a regular appearance during rains, as so do outbreak of dengue, diarrhoea and other diseases.

- Some women refugees have reported instances of harassment.

- The deporting announcements by Union government also made the community anxious.

Why should they not be deported now?

- Deporting Rohingyas is against the constitutional guarantees to refugees in India.

- It is also against the principle of non-refoulement.

- The principle of non-refoulement or not sending back refugees to a place where they face danger is a principle of customary international law and is a part of various conventions that India has ratified.

- Many individuals remain in internally displaced camps in the central Rakhine state.

- In this situation, it could be inhuman to deport them back to their nation.

- UNHCR condemned India for its decision.

What is the government's rationale behind deporting Rohingyas?

- Although Indian has a reputation of welcoming refugees, it is not a signatory to the UN Convention on Refugees and the Protocol of 1967.

- While magnanimity is India's character, it shouldn't be at the cost of its own security.

- **Complexity -** Rohingya crisis involves not just Myanmar's internal politics.

- It also affects the relationship between Myanmar and Bangladesh.

- Myanmar is sandwiched between India, Pakistan, and Bangladesh on one side and the ASEAN neighbours on the other with large Muslim population.

- There is also the global dimension with the Gulf Cooperation Council (GCC) and the Organisation of Islamic Cooperation (OIC) having taken a very strident role in this whole issue.

- **Security -** There has been a problem of growing Islamic radicalisation among the Rohingyas since the Afghan War of the late 90s.

- It has been established that extremist organisations like Jamaat ul-Mujahideen Bangladesh have strong networks among Rohingyas.

- The Indian intelligence has also discovered Pakistani Army & ISI connections with the ranks of "Arakan Rohingya Army" which is currently involved in an insurgency against Myanmar.

- **Misuse -** A lot of illegal immigrants from Bangladesh have been found to be using Rakhine as a springboard to get refugee status in India, Indonesia, Malaysia, Thailand and even Europe.

7. BILATERAL RELATIONS

7.1 Xiamen Declaration

Why in news?

Xiamen Declaration of BRICS forum was recently adopted.

What is the declaration about?

Xiamen's Location in China Map

- It explicitly called out several Pakistan-based terror organisations and expressed concern on the security situation in the Afghanistan-Pakistan region.

- It also referred to violence caused by the Taliban, Al-Qaida and its affiliates, including theEastern Turkestan Islamic Movement Haqqani network, Lashkar-e-Taiba, Jaish-e-Mohammad, Tehrik-i-Taliban Pakistan etc.

- The Chinese government, as is evident from the inclusion of the Uighur-focused Eastern Turkestan Islamic Movement in the above list, is concerned about growing Islamist activity in its western provinces.

What is the significance of this?

- India-China saw the importance of building durable security architecture for their increasingly fraught relationship.

- China had until recently been blocking the designation of the head of the JeM, Masood Azhar, as an international terrorist by the United Nations.

- This was done presumably to protect Beijing's clients in Pakistan, where Azhar continues to move around.

- It is not yet certain whether this declaration represents a change in China's stand on Azhar.

- But it is a sign that relations between the India-China have not been harmed by the doklam stand-off.

- India's efforts to make Beijing yield its obstructive position at the United Nations should continue.

7.2 Bali Declaration

Why in news?

Indian parliamentary delegation refused to be a part of the Bali declaration adopted recently in Indonesia.

What is Bali declaration?

- The declaration was adopted at the 'World Parliamentary Forum on Sustainable Development', in Indonesia.

- It went on to "call on all parties to contribute to the restoration of stability and security, exercise maximum self-restraint from using violent means.

- It claimed to respect the human rights of all people in Rakhine State regardless of their faith and ethnicity, as well as facilitate safe access for humanitarian assistance.

- The declaration adopted carried "inappropriate" reference to the violence in Rakhine State from where 1,25,000 Rohingya have fled to Bangladesh.

What is the reason for India's stand?

- India repeated its stance that the purpose of convening the parliamentary forum was to arrive at a mutual consensus for implementation of SDGs.

- The proposed reference to the violence in Rakhine State in the declaration was considered as not consensus-based and inappropriate.

- India senses that the conclusion of the Forum, was not in line with the agreed global principles of 'sustainable development.

- India objected forum's view on Myanmar, as never before country specific issues have been included in the declaration, because doing so dilutes the objective of these forums.

7.3 India & Japan - Agreements on the North-East

Why in news?

Japanese PM recently visited India as a part of 12th Indo-Japan annual summit.

What are the highlights?

- A memorandum of understanding to set up India Japan Act East Forum was signed.

- Other major agreements focussing the north-eastern region were also signed.

- **Forum -** The forum aims at bringing together India's Act East Policy and Japan's Free and Open Asia-Pacific strategy.

- This is expected to increase connectivity and promote developmental projects in the Northeast region.

- **Loan -** India and Japan also signed a document on Japanese loan and aid for highway development in the Northeast.

- Japan will extend a loan of Rs 2,239 crore to India for 'North East Road Network Connectivity Improvement Project'.

- This will complement India's other connectivity projects in the region including BBIN (Bangladesh, Bhutan, India, Nepal) and BIMSTEC Motor Vehicle Agreements.

- The connectivity initiatives are also part of the Indo-Japan corridor conceived earlier for the Indo-Pacific region.

- The corridor also extends to Eastern Africa under the Asia Africa Growth Corridor.

What is the significance?

- Development of the Northeast is a priority for India and a key to promote its Act East Policy.

- In this context, the agreements come as contribution to intra-regional and international connectivity in the Northeast region.

- Significantly, it is viewed as an alternative to the Chinese dominated One Belt One Road (OBOR).

- Besides, Japan has a great potential for people-to-people and cultural exchanges between Japan and the Northeast.

- This comes in the backdrop of Japan's historic connection to the Northeast through the Battle of Imphal (fought between Japanese Army and the British during World War II).

7.4 India - Japan Defence Ties

Why in news?

India - Japan Defence Ministerial Dialogue was recently held in Tokyo, Japan.

What are the highlights of the meet?

- India and Japan agreed to enhance the overall defence ties between the two countries.

- The agreement on enhancing exchanges between the two forces is likely to translate into more **bilateral exercises**.

- The meet could result in **exchanges in the field of technology and equipment,** furthering India's aim of increasing its domestic defence production.

- The meet stressed the importance of **bilateral training interactions** and is expected to consider Anti-Submarine Warfare (ASW) training in future to expand cooperation.

- Besides, the Defence Ministers also exchanged views on the security situation in the **Indo-Pacific region**.

- The defence dialogue carried a joint condemnation of **North Korea**'s recent nuclear test.

- Also, the two sides expressed satisfaction on the recent India-US-Japan naval exercise, **Malabar 2017**.

- The Armies of both nations are expected to hold a **joint exercise on anti-terrorism** next year for the first time.

- Japan has also invited India to participate as an observer in a humanitarian assistance and disaster relief (HADR) exercise held by Japan Ground Self Defence Force.

What lies ahead?

- India and Japan are witnessing mutual, deeper and diversified bilateral defence cooperation.

- This is particularly after the signing of the bilateral Memorandum on Defence Co-operation and Exchanges, and two Defence Framework agreements in recent years.

- The recent dialogue has strengthened this existing cooperation and the outcomes are optimistic particularly with India's ambitions on domestic defence manufacturing.

7.5 Indo-Japan Strategic Partnership

What is the issue?

- India & Japan currently have a "Special Strategic and Global Partnership".

- New Delhi accords this status to no other partner.

- However, it largly falls short of a full fledged alliance.

Why did India confer such a status?

- **Geopolitics -** The rise of China and doubts about USA's commitments in Asia has pushed both the countries towards this relationship.

- **Economic Aspect -** Japan is investing heavily in Indian projects.

- The two countries are also working on a joint infrastructure development and connectivity drive traversing the Indian Ocean.

- Their projects span from Myanmar to Sri Lanka to Iran and encompass the Asia-Africa Growth Corridor.

- **Defence –** Indo-Japan joint naval exercises are being regularly organised together with the U.S. Navy.

- Major arms deals like the ShinMaywa US-2i amphibious aircraft are on the cards.

- Japanese investments in the strategically places like the Andaman & Nicobar Islands is also likely to help India enhance its security sentinals.

How is this different from an alliance?

- Alliances have lacked their relevance in the post-cold war era and strategic partnerships have increasingly become the norm.

- **Lacking commitment** - Unlike alliances, strategic partnerships don't demand commitments to a partner's disputes with other countries.

- New Delhi does not take a strong position on Japan's territorial disputes with China and Russia.

- Likewise, Tokyo does not openly side with India in its quarrels with China and Pakistan.

- Strategic partnership involves countries retaining their unconstrained diplomatic flexibility while continuing political engagement & economic cooperation.

- **Collaborative Approach –** It also involves regular high-level interactions over a range of activities whereas an alliance is usually more pronounced in for defense & economy.

- India and Japan are not only moving forward on economic and defence cooperation but are also cooperating on issues such as civil nuclear energy and UN reform.

- It is also essential in the present times where states find themselves interdependent, even if their relationship is characterised by strategic tension.

- e.g. India might confront China at Doklam but it also wants Chinese investment.

7.6 India's Afghanistan Strategy

Why in news?

The government has plans to train Afghani police officers in India.

What geo-political message does India convey?

- **For Afghan -** India plans to expand its security assistance to Afghanistan by training police officers, as part of a UNDP project.

- This indicates a continued commitment for Afghan's security & stability by active capacity building.

- **For Pakistan** and other countries in the region that deal with the Taliban, India's action conveys that it will not be deterred.

- **For U.S** and its NATO allies, India makes it clear that will play a part in putting Afghanistan back on its feet in its own way.

How is the trade relationship?

- The decision to enhance security training comes on the heels of an India-Afghanistan trade fair in Delhi.

- Regardless of actual transactions made, it will demonstrate a determination in exploring business possibilities.

- Overcoming transit obstacles posed by Pakistan will be discussed.

- The India-Afghan-Iran trilateral arrangement to circumvent geographical hurdles and the commitment to complete the 'Chabahar port' development project soon is another reassurance.

- A sustainable trade route from South Asia to Central Asia is therefore clearly in the making.

7.7 India and South Korea - CEPA

Why in news?

- India has decided to upgrade its existing trade pact with South Korea.

- The domestic industry has flagged concerns over the agreement.

What is CEPA?

- Comprehensive Economic Partnership Agreement - CEPA, was a trade deal signed between India & South Korea in 2009.

- The CEPA has increased bilateral trade volumes by over 50%.

- Many Korean companies have penetrated deep into the Indian consumer goods market and have directly benefitted from CEPA.

- Recently in a review meeting, both countries have decided to upgrade the CEPA at the earliest – possibly by 2018.

- This has angering domestic exporters, who claim the pact has disproportionately helped Korean exporters.

What are the concerns about CEPA?

- **Trade Deficit –** India's trade deficit with South Korea is continuously worsening with time.

- While India imported $12.58 billion worth of goods from South Korea in 2016-17, its exports totalled only $4.24 billion.

- **Misuse -** The Duty free import facility for gold from South Korea was found to be misused by round tripping.

- Recently, the Directorate General of Foreign Trade – DGFT, had to withdraw the zero-duty import facility to plug the same.

What is the way ahead?

- A focus on enhancing market access and strengthening the rules of origin will be the key for India to improve its exports.

- Underlined the importance of pushing trade in services as a prime mover of global growth will also benefit India's cause.

- Caution needs to be exercised for broadening the terms of the deal as most of our existing bilateral trade engagements have faltered.

8. INTERNATIONAL ISSUES

8.1 Fatah Hamas Conflict

Why in news?

Hamas decided to dissolve the Gaza administrative committee and hold talks with Fatah.

How did the conflict evolve?

- Fatah is the largest faction of the multi-party Palestine Liberation Organization (PLO) closely identified with the leadership of its founder Yasser Arafat.

- Hamas is a Palestinian Sunni-Islamic fundamentalist organization.

- In the 2006 parliamentary election, Fatah lost its majority in the Palestinian parliament to Hamas.

- This led to a conflict between Fatah and Hamas, with Fatah retaining control of the Palestinian National Authority in the West Bank, while Hamas dominated Gaza.

- Both organizations are Sunni Muslim.

- Both are pledged to restore to Islamic rule the whole of Mandate Palestine.

- Their fundamental disagreement is over the strategy for achieving this common purpose, i.e Fatah believes more in peaceful process, whereas Hamas wants to resort to violence.

- Earlier Hamas opposed the PLO entering peace talks with Israel, utterly rejected the first Oslo Accord agreement of 1993 and was appalled by the PLO 's recognition of the State of Israel.

What is the recent development?

- Israel has been steadily tightened its occupation of the West Bank.

- But the Palestinian leadership has been unable to resist or launch a peace bid because of the divisions within.

- However, in recent months Hamas has shown interest in a rapprochement as the humanitarian crisis in the Gaza Strip, blockaded by Israel and Egypt, worsens.

- In May it adopted a new political charter, softening its stand on Israel and accepting, for the first time, the idea of a Palestinian state based on the 1967 border.

- It said that it would allow the reconciliation government based in Ramallah to run Gaza and hold elections in the territories.

- Fatah has welcomed the statement.

What lies ahead?

- Hamas is seen as a terrorist organisation by several international actors, including the US, Israel and the European Union.

- But Hamas's moderation is real and gradual.

- It first set aside a charter, which Israel and its allies saw as an impediment to peace, and it is now proposing intra-Palestinian reconciliation.

- If Fatah and Hamas form a national government and ease the many restrictions currently in place on Gaza, it would be a huge relief for the territory's 1.8 million people.

- A united bloc would also enhance the bargaining power of the Palestinians vis-a-vis Israel.

- The international community should respond positively by putting pressure on Israel for a new round of the peace process.

8.2 TPP without the US

What is the issue?

- The US has come out of the Trans-Pacific Partnership (TPP) after Trump's election.

- The other countries in the group are now discussing on the ways to rework the deal, overcoming the initial hesitation and uncertainties.

Why was TPP less attractive without the US?

- The TPP seemed more like a **leaderless** grouping after the US withdrawal.

- The anticipated **economic impact** with the loss of the US **market** hampered the progress of the deal.

- Ex: Countries like Vietnam and Malaysia lost the benefit of preferential access to the US and other North American markets with US withdrawal.

- Being a prominent actor in the regional affairs, the American withdrawal could have a significant impact on the **geopolitical effect** of the partnership.

- These factors made many countries sceptical of the TPP and drove them to given up on the Transpacific Partnership initially.

TPP Trans-Pacific Partnership

How is TPP still optimistic?

- Despite the above uncertainties, countries are now getting back to discussions to revive the deal.

- The rest of the members believe that TPP holds **economic and strategic significance** even without the US.

- The economic gains are still looked for, with markets like Canada and Mexico.

- Also, earlier members who did not have bilateral FTAs with the US found it hard to comply with **US's demands** on certain sensitive issues.

- These included issues like the intellectual property, investor-state-dispute-rules, state-owned enterprises and labour standards.

- The US withdrawal has become a source of some relief for these countries which include Brunei, Japan, Malaysia and Vietnam.

- The rework on the deal could make revisions in some chapters of the TPP agreement granting **greater flexibilities** to members.

- Besides these benefits for the members, TPP's rules and regulations could possibly become templates for many **future trade agreements.**

- Also, with US withdrawal, **Asia** is becoming a more prominent actor in the new TPP.

- This is emphasized by the role Japan and Australia are playing in the efforts to taking forward the deal.

- It comes despite the presence of Canada and Mexico, who are preoccupied with revisions in the North American Free Trade Agreement (NAFTA).

8.3 Catalonia's Cry for Secession

Why in news?

A referendum was recently conducted in Catalonia following the long-standing demand for independence.

How did the issue evolve?

- Catalonia is an autonomous community of Spain in the north-east end of the Iberian Peninsula.

- It has four provinces: Barcelona, Girona, Lleida, and Tarragona.

- Catalonia was historically an autonomous region of the Iberian peninsula, which encompasses Spain and Portugal.

- However, its autonomy was never recognised despite having its own language, laws, and customs.

- Many sovereigns tried to impose the Spanish language and laws in order to culturally unify the kingdom.

- This fuelled Catalan separatism which was crushed under the dictatorship of General Francisco Franco in 1940s.

- However, calls for complete independence continued to grow.

- This is further amplified by economic crisis with rising unemployment and spiralling inflation.

- Separatists feel that the wealth from Barcelona region is being diverted disproportionately to other poorer provinces.

What is the current crisis?

- The legislature of Catalonia recently passed a law to back a supposed "Vote for Secession" to be held on the 1st of October.

- The Spanish constitutional court has swiftly declared the law illegal.

- Subsequently, the union government at Madrid is gearing itself to invoke Article 155.

- This would confer the union extraordinary powers to suspend provincial self-governance and help prevent the referendum.

- Catalan government claimed that 90% voters have backed region's breakdown from Spain in referendum.

- The referendum was declared illegal by Spanish authorities and turnout was only 43%.

- Prime Minister of Spain has vowed to do everything in his power to prevent the region's independence.
- The future is uncertain with both the sites not reaching any common ground.

How can the future be best approached?

- The separatist conflict is rooted in the demand for greater regional autonomy, which needs to be recognised by the Madrid establishments.
- Also, Spain's austerity measures following the Euro-zone debt crisis has been highly unpopular in Catalonia.
- Currently, as Madrid stares at improved economic prospects, it shouldn't be hard to strike strategic compromises with Barcelona.
- Such a conciliatory stance is imperative considering the risk of a populist upsurge in a region where separatism remains a live issue.

8.4 Kurdistan Independence Vote

Why in news?

Iraqi Kurds have planned to go ahead with a proposed referendum on seceding from Iraq.

Who are the Kurds?

- Kurds constitute the fourth largest ethnic group in West Asia but don't have a nation of their own.
- They are scattered in various countries and are a considerable minority in Turkey, Iran, Iraq and Syria.
- They have historically been oppressed by their respective governments which has fueled the desire for establishing a Kurdish nation that encompasses the Kurdish regions different countries.
- In Turkey, Kurdish rebels are involved in a civil war for secession, while in Syria they have already established a regional government.
- Currently, Iraqi Kurds are planning a referendum on secession.
- As 'Yes' seems a certainity, this is expected to enhance the nationalist aspirations of Kurds living in other countries.

What have been the reactions to the referendum?

- The Iraqi Supreme Court has already asked the Kurdistan Regional Government to suspend the vote, till its legality is settled.
- The Turkish government has ordered a military drill on the Iraqi border, while Iran has also issued a warning.
- Although a Yes in the referendum doesn't guarantee secession, it has been perceived as a message to the outside world reiterating that there is popular support for independence.

What is the current political status of Iraqi Kurds?

- Iraqi Kurds were granted some autonomy after 1991 when a regional government was constituted at Erbil.
- In recent years, both Baghdad and Erbil cooperated in the fight against the Islamic State.
- Although independence remains the proclaimed goal of Iraqi Kurdis, Mr.Barzani - who heads the regional administration at Erbil, has often personally signalled a compromise.
- While Baghdad has chosen to ignore such gestures, the current developments make restarting negotiations essential.

8.5 US Migration Policy – Revocation of DACA

Why in news?

U.S. President Donald Trump has decided to revoke the DACA policy that protects the children of immigrants.

What is DACA?

- Deferred Action for Childhood Arrivals (DACA) policy is an Obama-era executive action designed to protect those who arrived in the U.S. as children accompanying their undocumented migrant parents.

- Obama administration's viewed that as long as such childhood arrivals integrated lawfully and productively into American society, there could be no reasonable argument to send them back.

- On the contrary, Mr. Trump had promised to crack down on all forms of undocumented immigration and hence called for DACA's revocation.

- Consequently, nearly 800,000 people in the U.S. now face the possibility of losing their jobs, driver's licences and university seats and even deportation.

What is the current situation?

- Now, the buck is effectively with the Congress to come up with a law for a lasting solution to the problem.

- No new applications are being processed currently and existing beneficiaries requiring renewal of permits for a further two-year period before March 2018.

- Beyond that deadline, their continuance in the U.S. would require lawmakers to come up with a new bill similar to the previously proposed (but failed) "Development, Relief & Education for Alien Minors" - (DREAM) Act.

How does the future look?

- If an immigration bill gets passed, the painful questions surrounding visa issues could be laid to rest.

- This would help foster a climate of greater predictability for businesses.

- Given the hostile political climate, there is a real risk that short-term calculations force lawmakers to overlook the need for a more robust and a sustainable remedy.

8.6 Sri Lanka's Constitutional reform

Why in news?

Sri Lankan Prime Minister has presented an interim report on the drafting of a new Constitution.

Why a new Constitution?

- The Tamil community in Sri Lanka has long been concerned of the discrimination by the majority Sinhalese.

- The TNA (Tamil National Alliance) has been demanding a federal solution to address the political aspirations of the Tamil community.

- The 13th Amendment in 1987 to the 1978 Constitution was the first time when power sharing arrangements between the Centre and the Provinces were made.

- This, being without total consensus, successive governments have come up with improved proposals to bring a final resolution to the issue.

- The recent report is that of an all party steering committee, chaired by the Prime Minister, on formulating the Constitution in Parliament.

What are the highlights?

- The report envisages an undivided and indivisible country, with the province as the unit for **devolution of power**.

- It introduces the concept of '**subsidiarity**'.

- Under this, function that can be performed by the lowest tier of government should be vested in it.

- The report also provides for the creation of a **second parliamentary chamber** representing the provinces.

- The report commits that the controversial terms 'unitary' and 'federal' be avoided.

- Instead, Sinhala and Tamil terms that suggest an undivided country be used to describe the republic.

- Besides, the **electoral system** solely based on proportional representation is proposed to be changed.

- A mixed method under which 60% of parliamentary members to be elected under the first-past-the-post system is to be introduced.

- Complying to earlier demands, the interim report aims at **abolishing the executive presidency**.

- The government has promised that the pre-eminent status given to Buddhism will remain as such; an assurance that may help overcome opposition from the majority.

What is the way forward?

- While the interim report is a significant step, there is a possibility that the whole process could be derailed by the extremists.

- Demands from some opposing factions for retaining the state's unitary character and the feature of executive presidency are getting stronger.

- On the other hand, the TNA had taken the unprecedented position that they would agree with the contents of the interim report.

- It is for the government to ensure that the reforms are materialised, to resolve Sri Lanka's long drawn controversial issue.

Notable Provisions in 13th Amendment

- The 13th Amendment to the Sri Lankan Constitution was a follow up of the Indo-Sri Lanka Accord signed in 1987.

- The accord called for devolution of more powers to the Tamil majority north and east provinces.

- This was on the rationale that devolution would grant the Tamils more rights and independence in managing their affairs.

- Accordingly, the 13th Amendment (13A) was passed, and it provided for the creation of:

    i. Provincial Councils in Sri Lanka.

    ii. The High Court of the Province.

    iii. The Finance Commission.

- Besides, it specified the provisions relating to:

    i. appointment and powers of the Governor of Provinces.

    ii. appointment and powers of the Board of Ministers.

    iii. membership and tenure of Provincial Councils.

    iv. legislative powers of the Provincial Councils.

    v. alternative arrangements on account of failure in the administrative machinery.

- It also made Sinhala and Tamil as the official languages of the country and English as the link language.

- The concern at present is that practical problems still exist in devolving land, the police and financial powers to the provinces.

8.7 WTO - Public Stockholding

Why in news?

The G33, including India, has proposed for an amendment in the Agreement on Agriculture of the WTO, in regard to public stockholding.

What is the problem in this regard?

- Public stockholding (PSH) is a policy tool used by governments to procure, stockpile and distribute food when needed. Ex: MSP scheme.

- Governments purchasing at prices higher than market prices are considered to be subsidising their farmers, under WTO rules.

- Current rules suggest a fixed subsidy of 10% for food procurement from farmers to feed the poor.

- Also, the methodology for subsidy calculation is based on a price index of 1986-88, and that does not account for inflation.

- Currently, public distribution programmes of developing countries are included under trade-distorting Amber Box measures that attracts reduction commitments.

What is the demand?

- The G33 countries are thus demanding that these programmes for food security purposes be exempted from subsidy reduction commitments of WTO.

- It suggested incorporating a new annexure to categorise foodgrains procured specifically for public distribution purposes.

- It demanded that PSH programmes be included in the list of Green Box subsidies that are exempted from reduction commitments.

- But there is opposition from the US, the EU, Australia, Canada, Brazil, among others to provide unlimited market price support under the banner of 'public stockholding for food security'.

What lies before India?

- World Trade Organization's 11th ministerial meeting is planned in the year end in Buenos Aires.

- India, a major player in the G-33 group of developing countries, has repeatedly demanded a permanent solution for public stockholding issue.

- India has already agreed to WTO's Trade Facilitation Agreement on the promise that the public stockholding issue be resolved.

- India cannot afford to make another compromise in the coming meet, without a permanent solution to the issue.

G.S PAPER III

9. ECONOMY

9.1 Slowing Growth Rate

Why in news?

Central Statistics Office (CSO) released a set of data signifying the health of Indian Economy.

What are the findings?

- India's GDP growth slowed to 5.7% in the April-June quarter of 2017-18, against 7.9% in the same quarter of 2016-17.

- This looks more dismal considering that it was recorded against expectations of a 6.5% growth.

- GVA for the April-June 2017 quarter came at 5.6%, lower than 7.6% in same quarter last fiscal.

- The GVA growth for 'manufacturing' came in at 1.2% in the quarter, substantially lower than the 10.7% growth recorded in the same quarter last fiscal.

- The eight core industries output growth for July 2017 was at 2.4%.

- Fiscal deficit in 2016-17 was 3.5 per cent of GDP.

- The fiscal deficit had risen to ₹5,04,896 crore by July 31, against the Budget target of ₹5,46,532 crore for 2017-18.

- Revenue deficit had shot up to ₹4,22,272 crore, 31 per cent in excess of the Budget Estimate of ₹3,21,734 crore.

- With the front-loading of its spending, the Centre's fiscal deficit touched 92.4 per cent of the full-year target between April and July.

What are the reasons for slowdown?

- **Demonetisation –** Effects of demonetization continues to linger especially on industry and consumption.

- Corporate results for Q1 were not satisfactory and if one includes the unorganized sector comprising SMEs, the picture darkens further.

- **RERA -** The introduction of Real Estate Regulatory Act (RERA), though a very good move, has impacted the real estate sector to an extent as it has come in the way of new projects.

- **GST -** It would be incorrect to attribute the fall in manufacturing GVA to the 'demonetisation effect'.

- This is mainly due to the apprehensions among the trading/dealer community over the impact of the July 1 GST rollout, which prompted them to go in for de-stocking of inventory.

- Reduction in **farm revenues** because of falling non-cereal foodgrain prices and resultant compressed demand.

- Also, **fiscal tightening by the states** to keep budget deficits on track added to the problem.

What are the challenges?

- **Fiscal Targets -** The limit of around Rs 3.3 lakh crore budgeted for the year cannot be exceeded unless the government is willing to cross the fiscal deficit target.

- Therefore, growth may be expected to pick up and reach a 7% mark in the coming months but anything beyond that is unlikely.

- **Capital formation** – This remains a concern for the economy, with the 'Gross Capital Formation Rate' moving down to 27.5% from 29.2%, which means that companies are not investing.

- Reviving consumption & addressing NPAs are both needed to ensure new investments happen.

- **Employment Generation -** Also, job creation needs to be accelerated.

What will be the performance in the coming months?

- All the disruptions mentioned above are expected to be temporary, which will get corrected along the way.

- Consumption spending is also expected to increase with the festival cum harvest season nearing.

- However, rural spending is a point of concern as the latest data on area sown for rice, coarse grains, oilseeds and pulses is lower than last year which could lead to moderation in growth in production.

- Investment in infra projects is expected to pick up, albeit gradually.

- It is also expected that the government will spend on capital projects.

What lies before the government?

- Government should think of relaxing its stand on fiscal consolidation and make increased **capital spending** to revive the economic situation.

- Government should tap the optimistic potential of the buoyant **services sector** and utilise the opportunities it holds for economy and job creation.

- Also, it should focus on the potential **small and medium enterprises** and correct the negative effects of GST on them.

- Above all, it is high time that government addresses the slow growth of **bank credit** and the debt overhang problem.

- Only this will ensure a better **investment climate** and boost manufacturing.

- Focus should shift from short-term effect of structural reforms such as GST and demonetisation and turn to the **larger investment and demand crisis.**

9.2 Failure of Bank Board Bureau

What is the issue?

- India's public sector banks are going through a severe bad loans crisis caused primarily by poor governance.

- The bank board bureau setup created to monitor public sector banks is being irrelevant.

What are the duties of bank board Bureau?

- The government step towards reform, public sector bank formed Bank Board Bureau headed by former Comptroller & Auditor General.

- It been set up to examine how the functioning and governance of PSBs could be reformed.

- The Bureau was entrusted with the task of choosing the top leadership of PSBs and improving governance norms.

- It is seen as a step towards increasing PSBs' independence and raising their level of competence.

- Its main purpose was to separate the day-to-day governance and supervision of the banks from the concerns of their ultimate owner, the government.

What are the issues with bank board bureau?

- The Bureau when it was eventually formed did not have the power to oversee all senior appointments, including board-level choices.

- It was reduced essentially to recommending names of the heads of PSBs and financial institutions.

- Some new members of boards "non-official directors" are also members of the ruling, who act according to political desires.

- The Power, to choose the heads of institutions such as IIFCL, IFCI, SIDBI and Exim Bank, was taken away from it and given to the finance ministry.

What is the reason of its ineffectiveness?

- In many instances, its recommendations being simply ignored by the government.

- Rather than going to the Cabinet for approval, its recommendations are re-scrutinised and sometimes overruled by the finance ministry.

- Its incomplete control over the choice of members of bank boards is also clearly visible.

- The government began the process of PSB reform with convening meetings of bank heads and launching Indradhanush reform programme.

9.3 RBI report on Demonetisation

Why in news?

The Reserve Bank of India's annual report has revealed the data on amounts retrieved after the recent demonetisation drive.

What are the highlights of the report?

- The report brings out that as much as **Rs. 15.28 lakh crore** of the demonetised high-value currency returned to the banking system.

- This is around **99% of the total value** of the withdrawn currency at the time of demonetisation.

- The bank has **not received** a part of the demonetised sum which is equal to **Rs 16,050 cr.**

- The final deposit figures could still rise with influx of money from District Central Cooperative **Banks**.

- This is because, these banks were very recently allowed to deposit withdrawn notes that they had accepted for a few days after demonetisation after which it was stopped.

- Also, RBI is in discussions with the government to further accept the demonetised notes held by citizens and financial institutions in **Nepal**.

What are the favourable outcomes of demonetisation?

- The whole process has brought more **accountability to money** and the anonymity with cash transactions is reduced.

- Big data analytics of deposits and increase in suspicious transaction reports have thrown better light on holdings of **black money**.

- The reports by banks are also helping in identification of **shell firms** and taking necessary actions against **money laundering activities**.

- This could possibly lead to an increase in future **tax revenues** with better **tax compliance.**

- The recent surge in digital transactions, inflows into mutual funds and insurance companies, the rise in new income tax assessees are evident of transformation to a **modern economy**.

- The drive has promoted more **formalisation** of the economy and **finnacialisation of savings**.

What are the contentious outcomes?

- As against the government's expectations on the impact the exercise would have on illegal money, the return of almost 99% of devalued currency raises doubts on the purpose of the drive.

- **Banking** - This is the first time since 1952-53 that **reserve money** for the whole year **contracted**, by 13 per cent due to demonetisation impact.

- The RBI incurred a **loss in seigniorage** i.e. the profit made by the central bank on account of issuing currency.

- Also, **processing and destruction of old** Rs 500 and Rs 1,000 notes kept in various currency chests and regional offices of the RBI pose a challenge.

- It has costed the government around Rs 8000 crore for **printing new notes** during the period July 2016-June 2017.

- **Economy** - Worsening business conditions are significantly bringing down **private investment.**

- Demonetisation considerably made a hit on the **unorganized supply chains** that were dependent on cash transactions.

- How efficiently were they able to rebuild after the economy was remonetized is still doubtful.

- The figures and outlook on **consumption,** which has long been the main driver of the economy, is also not very optimistic with demonetisation impact.

- Overall, the growth prospects look dull due to the impact of demonetisation.

What lies ahead?

- The challenge now is to ensure that the creation of new black money is minimized.

- A committed government plus tax reforms such as the GST will be part of the solution.

- Government has to analyse the pros and cons of the demonetisation impact to take lessons for future reforms.

9.4 Size of RBI's Contingency Fund

Why in news?

- RBI has set aside Rs.13,140 crore for its Contingency Fund (CF) this year.

- This is the part of the reason for the smaller surplus.

What is the necessity of CF?

- The RBI says the CF is meant for unforeseen contingencies.

- CF exist to cushion against unforeseen fluctuations in forex and gold reserves, losses on its exchange rate operations, valuation losses on bond holdings and risks arising from its supervisory responsibilities.

- Today, the RBI's record forex reserves are vulnerable to an appreciating rupee and an NPA-ridden banking system.

- Expert committees have recommended that the RBI hold a minimum 12% of its assets in contingency reserves.

What is the problem with this?

- There is a disagreement between RBI and the centre on the level of reserves that a central bank should keep to tide over extreme financial disruptions.

- This is because of the differing ways in which the government and the RBI perceive the risks that a central bank anticipates.

- The RBI bases its assessment on the results of a sophisticated risk analysis by RBI staff.

- The government, on the other hand, considers there is nothing special about the composition of the RBI's assets.

- It feels that the risk to RBI is significantly less compared to its peers.

What should be done?

- Centre should avoid treating the RBI as another money supplier like the public sector undertakings that can be tapped to balance its fiscal math.

- As risk manager to the economy, RBI is tasked with managing the country's foreign exchange reserves, ensuring stability in the financial markets and acting as a lender of last resort to the banking system.

- It is only fair that it gets to decide on the capital buffers it needs to cushion against these risks.
- It is time the Government and the RBI planned out a mutually acceptable distribution policy as they did with the Monetary Policy Framework Agreement.

9.5 Pulses - Why did the Prices crash?

What is the issue?

- The prices of pulses crashed a few months ago.
- Along with bumper harvest, serious policy failures also contributed to this.

What is India's position?

- India ranks first both in production and consumption of pulses and their import.
- Domestic absorption in recent years has hovered between 21 million metric tonnes (MMT) and 23 MMT.
- Production has ranged from 16.4 MMT to 19.3 MMT.
- In 2016-17, India witnessed its highest ever domestic production of 22.95 MMT.

Why did production spike in 2016-17?

- The record production has been attributed to a normal monsoon in 2016 and high market prices of pulses at the time of the kharif sowing.
- Also, steep hikes in the Minimum Support Prices (MSP) by up to 9.2% for kharif and 16.2% for rabi pulses had aided the increase.

What else lead to the excess supply?

- Normally, in a year of such bumper production, imports would be expected to fall significantly.
- However, India imported a record 6.6 MMT of pulses at zero import duty.
- As a result, domestic supply of pulses in 2016-17 shot up to 29.6 MMT.
- This is way above the typical supply of 22-23 MMT.

What is the solution?

- **Export Import Regulations -** The landed price of imported pulses should not be allowed to adversely lower the market prices.
- This calls for a proportionate duty on imports to protect local farmers.
- On the contrary, if the government really favours free trade, as duty-free imports suggests, it should lift the ban on export of pulses that is presently in place.
- **De-listing -** Pulses should be de-listed from the APMC Act inorder to enable farmers to sell freely to whosoever they like.
- This will enable a better price realisation for the agriculturalists and a compression of the pulses value-chain.
- **Stock holding -** The relevance of the Essential Commodities Act (ECA), especially the provision that imposes stocking limits, must be critically evaluated.
- Unless private players are reassured that no ad-hoc stocking limits will be imposed, there will be no investments in building storage and efficient value-chains.
- Such storage infrastructure will help absorb excess during gluts & address shortages during poor harvests.
- **Futures Trading** - This should be allowed for all types of pulses so that planting and selling decisions of farmers are based on a futuristic rather than a backward-looking price information.
- **Public Buffer** - With these policy changes, and a fairly reasonable buffer stock in place, the government can surely manage the pulses sector better.

9.6 Global Human Capital Index

Why in news?

Global Human Capital Index was recently released by World Economic Forum.

What did the report say?

- It ranked India at a 103rd among 130 countries

- The Global Human Capital Index 2017 ranks countries on how well they are developing their human capital.

- The rankings are based on four thematic dimensions — capacity, deployment, development, and know-how.

- The index is led by Scandinavian nations Norway, Finland and Switzerland, followed by large economies such as the US and Germany.

- In South Asia, the race is led by Sri Lanka at rank 70 and Nepal at 98, while India has a slightly better standing than Bangladesh & Pakistan.

- With the exception of Sri Lanka, the other South Asian countries are yet to reach the 60% threshold in HDI.

What are the implications for India?

- This is a scathing commentary on how India is handling its demographic dividend.

- India stands at the bottom among the G20 nations, is the lowest among BRICS nations.

- Dragged down by its poor labour participation and a big gender gap, India seems to be struggling against huge challenges.

- It has been noted that although India's current educational attainment rate has improved over past generations, its youth literacy rate stands at a paltry 89%.

What are the positives for India?

- Despite the low ratings, the report notes that India is showing signs of slowly moving in the right direction.

- The primary way to realise the full human potential is by increasing inclusivity and expanding access to education and employment opportunities.

- On that note, the country scores well on the 'know-how' parameter that measures the use of specialised skills at work - such as economic complexity, availability of skilled employees.

- The other markers are that India ranks well on are its improving education system, skill diversity of graduates and high-skilled employment share.

What are the worldwide trends?

- The world average was only 62% on human capital development.

- Only 25 nations were found to have tapped at least 70% of their human capital, while for 14 countries was below 50%.

- South Asia's overall score was behind the Middle East and North Africa but ahead of Sub-Saharan Africa.

- China was ranked an impressive 34th and its rapid expansion of educational attainment across its younger generations is poised to be an asset in preparing the future workforce.

9.7 Ease of doing business in India

Why in news?

- "NITI-IDFC Report" on the 'Ease of Doing Business' in India was recently published.

- This is a timely endeavour to assess the impact of the government initiatives at the ground level.

What is the background?

- Government has carried out a series of regulatory reforms to create a favourable investment climate.

- Various compliances mandated under the Companies Act have been done away.

- Commercial courts were setup under the commercial Appellate Divisions Act of 2015, to resolve commercial disputes in a time-bound manner.

- Insolvency and Bankruptcy Code (IBC) - 2016 was introduced to global quicken insolvency cases and address the NPA problem.
- FDI liberalisation has taken place in the defence, pharmaceuticals and in airport management.

What does the report state?

- The criterion adopted for determining the ease of doing business is the efficacy of these reforms.
- The "NITI-IDFC Report" studies this based on an enterprise survey of 3,500 manufacturing firms across Indian.
- **Single window clearance:** This system was introduced under "Make in India" initiative in 2014.
- It involves routing of all approvals required by an enterprise to set up a business through a hassle free common application window.
- Only 20% of the enterprises surveyed were found to have used this, which suggests either lack of awareness on the part of enterprises or ineffective implementation.
- **Access to finance**: Most enterprises rely on borrowings from banks and financial institutions as sources for finance.
- 61% of the enterprises surveyed reported that access to finance has either remained the same or worsened over the last year.
- **Clearance Time:** The survey finds that the average time taken to set up a business in India is 118 days, varying widely across states from 63 days in Tamil Nadu to 248 days in Assam.
- On an average, the time incurred for land allotment is 156 days and for getting a construction permit it is 112 days.
- The average number of days for completing labour-related compliances is 74 and for renewal of such compliances it is 62.
- **Dispute resolution:** The survey showed that the time taken for dispute resolution by enterprises varied across states, from less than one year to 13 years.
- For pending legal disputes, the enterprises surveyed reported an average duration of four years once the matter is taken to court.
- **Sector Specifics -** Start-ups & younger enterprises are found to have taken lesser time than older ones.
- Furthermore, labour-intensive industries were found to face major challenges than capital-intensive industries.

Where are the areas that need improvement?

- The reforms and their impact were pronounced in big cities but not clearly noticeable in smaller cities & rural areas.
- The government needs to work for effective implementation of the reforms introduced across all states uniformly.
- Creating awareness of the reforms introduced is needed to enable the enterprises to avail these benefits.
- Labour compliances need to be further eased.
- In this context, the proposed Model Shops and Establishments (Regulation of Employment and Conditions of Service) Bill, 2016 is a step in the right direction.

How does the future look?

- While the report does raise some questions about the efficacy of the reforms carried out, it is a fact that the government focused and is heading in the right direction.
- The results may not yet be clearly visible, but there is a greater amount of positivity about India among investors.
- It can be safely assumed that the coming years would witness faster growth with a lower compliance burden on corporates.

9.8 Widening CAD

Why in news?

A recent data has revealed that India's Current Account Deficit (CAD) has widened to 2.4 % of GDP in the first quarter of 2017-18, which is the highest in the last four years.

What are the reasons for its increase?

- **Trade -** Imports overall rose by over 20% year-on-year in August.

- On the other hand, exports rose by only 10% in the same period.

- The resultant higher trade deficit has translated into higher CAD.

- Half of the rise in this import is contributed by the spike in gold imports prior to the introduction of GST.

- **Exchange Rate** - Rupee has appreciated by over 6% against the dollar this year.

- An over-valued currency has resulted in reduced margins and made exports uncompetitive; thus an imbalance in trade in favour of imports.

How did India manage inspite of higher CAD?

- **Capital Account Surplus -** India was able to pay its import bills easily due to a strong capital account surplus.

- Foreign investors have pumped huge sums into India as it remains one of the few places offering higher yields.

- Net FDI almost doubled in the first quarter this year.

- Also, net FPI jumped about six times to $12.5 billion.

- **External Debt -** India's total external debt also declined by 2.7% during the financial year 2016-17.

- However, this is not a sustainable solution to the problem.

CAD

- CAD refers to the deficit arising out of the difference between inflow and outflow of foreign exchange as a result of imports and exports.

- CAD stood at $14.3 billion in the first quarter of the current financial year.

- This was valued at 2.4% of gross domestic product, compared to 0.1% last year.

- Hence, same-gender sex remains a crime in the country.

What are the risks of this trend?

- A large CAD to GDP is viewed as making a country more vulnerable to sudden stops or reversals in foreign capital inflows.

- There are signs that the U.S.Federal reserves & some other western central banks are considering a monetary policy tightening.

- This will impact the foreign investment flows to India.

- This might also push the Rupee into a downward spiral.

What is to be done?

- The imbalance in trade is now to be resolved by boosting exports.

- The blockage of funds under GST and uncertainties has left little or no working capital at the disposal of exporters.

- Focussing on manufacturing in the labour-intensive sectors would bring the double benefits of boosting exports and generating employment.

- Efforts are needed to reduce paperwork and costly over-regulation so as to make exporting easier.

- Besides, RBI should keep a check on the external commercial borrowings to keep debt under control.

9.9 Export Subsidy Issue

What is the issue?

India's rising per capita income has created a problem for export subsidies.

What is the status India's per capita income?

- Income per capita is a measure of the amount of money earned per person in a certain area.

- It can be calculated for a country by dividing the country's national income by its population.

- India's per capita income is above $1000 formally qualifying it as a middle income country.

How India is responsible to WTO on this situation?

- According to WTO rules, now India is ineligible to provide direct export subsidies.

- Under WTO, production-based subsidies such as technological up gradation, capacity building and infrastructure development are permissible.

- Even for countries below the $1,000 per capita threshold, product-specific subsidies may be questioned if the export of the product concerned accounts for over 3.25% of the global exports for over two consecutive years.

- In that case, the country concerned will have to phase out subsidies over eight years.

- It can be reasonably expected that India will be dragged to the WTO for its subsidies regime.

What are the issues with Indian actions in this regard?

- India is recording consistent growth but centre failed to predict this issue.

- Instead, the Centre announced the Merchandise Export from India Scheme, providing a flat export benefit across 5,000 tariff lines at a cost of over ₹22,000 crore.

- Meanwhile, explicit export subsidy schemes such as duty drawback (reimbursement of import duty on inputs) continue.

What actions should India take?

- India needs to plan according to the global trends and frame its policies.

- The commerce and industries ministry should push for a new regime of support to exports, one that is based on improving ease of doing business.

- The Government needs to reach out exporters struggling with GST and resolve their concerns while telling them that direct subsidies cannot be continued.

9.10 GST e-way bill

What is the issue?

E-way bill proposed by GST council recently, is complex to understand and posing a challenge to the industry.

How tariff issues are addressed by GST?

- Under the VAT system many states collected VAT on subsequent sales and imposed entry tax and a road permit system.

- Under GST, this problem is addressed to a large extent, through an elaborate online reconciliation mechanism on GSTN.

- It the objective of GST to remove all non-tariff barriers, such as check posts, entry tax etc. so that the smoother movement of goods across states is ensured.

- This would ultimately reduce the prices of commodities.

What is e-way bill?

- The e-way bill can be electronically generated (on the government portal) either by the supplier or recipient of the consignment, before the movement of goods.

- The transporter needs to carry an electronically generated way bill or a permit, with every consignment having value exceeding INR 50,000.

- It may possibly subject to few exemptions such as agricultural commodities

- There are indications that it could come into effect from October 1, 2017.

- Till then, the states have been allowed to follow their own way bill/road permit system, including the ones used prior to GST.

What are the complexities with e-way bills?

- The e-way bill, once generated, is valid for one day for consignment up to 100 km and then one additional day for every 100 km thereafter.

- If e-way bill is generated, but the goods are not transported then it has to be cancelled electronically.

- If the transporter transfers goods from one vehicle to another in the course of transit, then he will be required to generate a new e-way bill, before commencement of the movement.

- Transporters may be required to obtain a unique Radio Frequency Identification Device (RFID) and get it imbedded on the vehicle and map the e-way bill to the RFID prior to the movement of goods.

- It is important to note that e-way bill is required even in case of intra-state movement (beyond 10 km), which was not the case earlier.

- Also, there were many states which did not have a system of way bill or a road permit in the erstwhile regime.

What are the issues with E-way bill?

- The industry is sceptical that this could result in Inspector Raj and the associated corruption, which GST was otherwise supposed to eliminate.

- There is a fear that the e-way bill system could undo reduction in commodity prices

- The GST rates are uniform across states against this backdrop, e-way bill would serve limited purpose.

- The mechanism proposed requires a certain level of maturity in terms of technology, systems and processes.

- Large proportion of transport sector is still unorganised and may not be equipped to deal with technology-led compliances.

- It appears to be too stringent in terms of the reporting requirement.

9.11   GST Compensation Cess

What is the issue?

GST Compensation Cess intended to compensate the losses of states for the first 5 years of GST doesn't stand on strong constitutional ground.

What is a Cess?

- A cess is a tax on tax, levied by the government for a specific purpose.

- The contributor and beneficiary of a cess must be relatable.

- Under Article 270 of the Constitution, proceeds of a cess can be retained exclusively by the Union and need not be shared with States.

- The objective is to ensure that expenditure goes for that specific purpose.

What is GST compensation cess?

- As part of the GST reforms, this Cess has been introduced through the GST (Compensation to States) Act, 2017.

- It is levied on inter- and intra-State supply of notified goods such as aerated drinks, coal, tobacco, automobiles for 5 years.

- The proceeds will be distributed to loss-incurring States on the basis of a prescribed formula as compensation.

What are the shortcomings?

- Once the money is transferred to State governments, it can be used to fund any scheme.

- It may even be used to fill the government's fiscal deficit.

- Further, there is no relation between the persons contributing to the cess and the recipients, the State governments.

- The goods earmarked for the cess, such as aerated drinks, coal, tobacco, automobiles and "other supplies", do not form a distinct category deserving the liability to pay this cess.

- The sin goods argument also fails as the luxury goods & jewellery are not covered.

- The term "other supplies" leaves much to the discretion of the government.

Is it constitutionally valid?

- The 122nd Constitution Amendment Bill initially proposed a 1% additional tax to compensate States but this was later withdrawn.
- Article 271 has been amended to state that an additional tax/surcharge cannot be imposed over and above the GST rates.
- The GST Council's power to recommend a special rate is confined to raising resources only during any natural calamity or disaster.
- So this cess cannot be justified under such power either.

9.12   Reducing the Price of Petrol & Diesel

Why in news?

The government has currently asked the "Oil Marketing Companies" (OMC) to absorb any increase in crude oil price.

Why hasn't petrol & diesel prices reduced with curde prices?

- Price of petrol & Diesel now is as highas it was in 2012 even though the crude prices have almost halved.
- During that time, the government used to subsidise consumers and the loss was borne by the government, OMCs and upstream public sector oil companies.
- Eventually the prices started falling.
- But it wasn't reflected in the market prices as the government kept cutting the subsidies.
- This made the prices reflect the market trends.
- But the current directive to OMCs to absorb increase in price is seen as a policy reversal against de-regulated pricing.

What can the Central Government do to reduce cost?

- Excise duty is fixed in rupee terms Rs 17.33 per litre for diesel and Rs 21.48/litre for petrol.
- So increase in the cost of diesel or petrol does not increase the revenue of the central government
- It would be unwise for the government to cut the excise duty as it has subsidised the customer for already a long period.
- However the excise duty rates can be made equal for both diesel and petrol.
- It will increase the price of diesel by 2% and reduce the price of petrol by 6%.
- Hence there will be reduction in distortion.

What can the State Governments do?

- **VAT Rate -** States impose very high VAT on petrol & diesel.
- Since VAT rates are ad valorem rates i.e calculated in percentage terms, their value in rupees increases with increase in prices.
- Whenever the oil price increases, revenues of states also go up.
- Thus, the states should periodically reduce their VAT rates.
- **Bringing under GST -** Taxes on petrol & diesel constitute a major portion of state revenue.
- So the states insist on keeping diesel and petrol out of GST.
- Even with a high GST rate of 32%, the states' share of the tax would be around Rs.5 /litre which is much below the current Rs 14,litre of petrol & Rs.21 per liter of diesel.
- So to reduce the prices, all states should have a uniform GST rate for diesel and petrol.

9.13 Social Business - Redesigning our Economies

What is the issue?

- Grameen Bank in Bangladesh made capital available to the poor - especially women.

- Its micro-credit program enabled millions to lift themselves out of dire poverty.

- Its work also exposed the shortcomings of our traditional banking systems thereby flaggin the need for large scale systemic reforms.

What are the flaws in our economic system?

- **The Crux -** Our reactions to poverty, unemployment and environmental destruction have been largely muted thus far.

- These are either perceived as natural calamities completely out of human control or as unavoidable costs of economic growth.

- **Profit Maximisation -** The central problem with the current form of capitalism is that it prioritises pursuit of individual profit.

- As a result, only businesses designed around this goal are recognised and supported.

- **Greater Aspirations -** Goals like the elimination of poverty & unemployment are currently being neglected.

- These can be corrected if we replace the existing with a new system that more accurately reflects human nature, needs and desires.

- Social business models are a beginning in this regard.

What is social business?

- Freedom from profit pressures is primary to any social business.

- It is different from charity as it is designed to generate revenues and thereby become self-sustaining.

- It therefore does not need to constantly attract new streams of donor funding to stay afloat - which drains the time and energy of so many in the non-profit arena.

- Social business offers advantages that are available neither to profit-maximising companies nor to traditional charities.

- The simple economics and sustainablility of social business is already being illustrated by successful experiments worldover.

9.14 U.S plans to roll back QE

Why in news?

U.S. Federal Reserve recently announced that it would begin to gradually roll back quantitative easing (QE).

What is quantitative easing?

- Quantitative easing is an unconventional monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply.

- It increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity.

- Quantitative easing is considered when short-term interest rates are at or approaching zero, and does not involve the printing of new banknotes.

- Central banks like the European Central Bank, U.S. Federal Reserve have adopted this policy to boost their respective economies.

What is the significance of QE?

- It is a nine year long program implemented as aftermath of the 2007-2008 financial crisis.

- QE has been carried out in the hope that increased money supply would help stimulate the economy.

- Under the programme, the central bank has been buying bonds and other debt instruments like mortgage-backed securities from the open market.

- US also printed fresh dollars to buy these securities, it helped the nation to pump more dollars into their economy.

What are the reasons for roll back?

- The Fed's balance sheet currently stands at $4.5 trillion, now US has grown more confident about its economy recovery

- As the result of QE policy the quarter ending June grew at its fastest pace since 2015 and Inflation has shown some signs of strength.

- U.S is clear in rolling back its QE, as modern central banks are in the business of keeping inflation and growth at manageable levels.

How will it impact the world economy?

- Lower demand from the Federal Reserve should cause interest rates on U.S. bonds to rise from their current, historically low levels.

- This is likely to make these bonds more attractive to investors, as they can now be purchased at lower prices in order to earn higher yields.

- Investors are likely to sell their other investments offering lower returns to invest in U.S. bonds, which could cause some turbulence in global financial markets.

How this will impact India?

- The Indian stock market has witnessed a steady outflow of foreign capital as foreign institutional investors have sold out their holdings to invest elsewhere.

- The rupee has also shown weakness as investors pull money out of India.

- This trend is likely to continue until the risk-adjusted returns on various investments equalise.

9.15 Signs of a Commodities Supercycle

What is the issue?

- Globally, the prices of commodities are rising or expected to rise.

- This is seen as a sign of a likely commodities supercycle.

- The development is to be understood in view of the relationship between commodities prices and the US dollar.

What is a supercycle?

- In economic terms, a Supercycle is the longest period or wave in the growth of a financial market.

- e.g In 1700s, due to the Industrial Revolution in Britain, prices for coal, cotton, sugar, tea etc went up and greater quantities are produced.

- But over time, the innovation worn out, demand lowered when supply was growing, and the prices of commodities dropped, causing the end of the super-cycle.

- The last commodities super cycle was roughly from 2000 to 2014.

- This **boom in commodity prices** was largely due to the rising demand from emerging markets as well as the result of concerns over long-term supply availability.

How does US dollar influence the commodity prices?

- Historically there is an **inverse relationship** between the value of the dollar and commodity prices.

- When the value of the dollar drops, other countries will have more buying power, as it takes less of their currencies to purchase a dollar.

- This increased buying power naturally increases the demand and subsequently commodity prices increases and vice versa.

What happened after 2014?

- **Deviation in relationship** - The two years following the 2014 commodities supercycle witnessed a steep fall in prices.

- This coincided with the slowdown in the Chinese economy and resultant poor investment in the commodities space and poor demand globally.

- As a result, the association between the dollar and commodities prices reversed to a a**new direct relationship**.

- Despite a strengthening dollar scenario, commodity prices increased due to -

    1. Election of Trump as the U.S. President leading to hopes of increased public investment in infrastructure projects.

    2. Signs of economic recovery and stimulus investment made in Chinese infrastructure making favourable impact on commodity prices.

    3. Global growth was getting stronger and as a consequence there was a boom in resources.

Why is the Supercycle expected now?

- The above mentioned market euphoria around a recovery in commodities demand due to a stronger global economy has died out.

- The U.S. dollar index has now dropped by almost 10% since the beginning of the year.

- But there is a rise in global commodities prices, reflecting the return of inverse relationship between dollar and commodity price.

9.16 RCEP - Tariff Wars

Why in news?

The ministerial level meeting for RCEP, scheduled currently is expected to see tough negotiations on tariff duties.

What are the problems?

- Rigid stands of other nations demanding India to remove import duties on more than 92% of all goods (both agricultural & industrial) is presently making negotiations unsustainable.

- This would mean almost entirely dismantling the wall protecting Indian industry and farmers from indiscriminate competition.

- Considering the disastrous consequences of such a move & the rigidity of others, India would find it difficult to reach a compromise and risks being isolated.

What are India's concerns?

- While New Delhi was willing to eliminate tariffs on a considerable number of items on a country to country basis, it is being pressured into treating all members equally, along with almost complete tariff elimination.

- For a country like India, with a large 'sensitive agricultural setup' and labour-intensive industrial sector, bending to such exorbitant demands is impossible to meet.

- **China Fear -** The biggest of worry is the unhindered flow of goods from China with which India already has an annual trade deficit of over $50 billion.

- A Free Trade Agreement (FTA) with no duties on most products could increase this deficit significantly.

How has the negotiations progressed thus far?

- The gradual cornering of India by RCEP partner countries is reflected in the how the negotiations have progressed.

- **1st Proposal -** India initially proposed a three-tier system for tariff elimination that was country specific.

- The proposal vouched a reduction of - 42.5% of tariff lines for China, New Zealand and Australia, 65% for South Korea and Japan and 80% for ASEAN.

RCEP

- Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement (FTA) between the members of ASEAN and the six other countries - Australia, China, India, Japan, South Korea and New Zealand.

- RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.

- The agreement is scheduled to be finalized by the end of 2017.

- RCEP is viewed as an alternative to the Trans-Pacific Partnership.

- Hence, same-gender sex remains a crime in the country.

- This was rejected by all members including the ASEAN.

- **2nd Proposal -** India was then forced to give up its initial proposal in favour of a single offer for all with only a small caveat for addressing its vulnerabilities with minimum deviations.

- Over the past year, New Delhi has indicated to RCEP members that it could offer to eliminate tariffs on about 70-75% of items for all members with certain minor deviations.

- These too failed to satisfy the RCEP members & an increased market access for items like wheat and dairy was demanded.

What does India stand to gain for RCEP?

- India's expected gains in goods from the RCEP pact are not significant, given the fact that the existing tariffs in member countries are already relatively low.

- While India's gains in RCEP are to mainly come from services liberalisation, including easier work visa norms, the offers in that area have been almost non-existent.

- Moreover, many RCEP members are now insisting on inclusion of substantial commitments in the area of e-commerce and investment facilitation — the two areas where India wants to preserve its sovereign right for policymaking.

What are India's options?

- A free trade pact between the RCEP countries accounting for 45% of the world population and over $21 trillion of GDP does seem attractive, but not at the price India is being asked to pay.

- India should not run the risk of putting the future of its industry and farmers at stake while getting almost nothing in return.

- There is a world of wisdom in exiting while there is still time rather than signing a bad deal.

10. INFRASTRUCTURE

10.1   Public Wi-Fi Hotspots

What is the issue?

- TRAI has recently invited interested firms to establish nationwide, pay-as-you-go PDOs (Public Data Offices).

- It aims at providing affordable and wide access to data to citizens.

- However, there are certain issues to be addressed to make the initiative more consumer friendly.

What are PDOs?

- Public Data Offices are conceived more as PCOs that were used for making phone calls by public on paid basis.

- The firms are intended as 'aggregators' and are invited to set up, on a pilot basis, PDOs to function as **public wi-fi hotspots**.

- Any entity can purchase, self-register, set-up and operate a PDO.

- They offer products for consumption, with low denominations ranging from Rs 2 to Rs 20, etc based on data used.

- It is based on an open architecture based Wi-Fi Access Network Interface (**WANI**).

- It allows users to do one-time enrolment into the service through KYC and mobile one time password, and access data.

- Public wi-fi hotspots aims at decongesting telecom networks and ensuring last-mile delivery of broadband to users.

What are the concerns with this?

- **Licensing** - Department of Telecom has raised concerns with allowing **non-telecom companies** to operate public wi-fi hotspots.

- It argues that Telegraph Act mandates that such entities take licences from the government for selling data.

- Also India's biggest mobile carriers are concerned that the entry of aggregators without licence would undermine the **level-playing field** conditions.

- **Cyber Space** - the **privacy and security concerns** with cyber space in India, leaves scope for doubting the safety of using public wi-fi.

- **Gender** - common places like the tea shops and bakeries are currently emerging as favoured locations to host PDOs.

- The limited geographical reach of wi-fi make these places over-crowded to utilise spots of maximise signal strength.

- Given the social characteristics of these urban spaces, and the social norms with using public spaces, how gender inclusive these places could be is highly uncertain.

10.2   Saubhagya scheme

Why in news?

PM recently launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana, also known as Saubhagya scheme.

What are the fundamental problems in Indian power sector?

- The power generation utilities in India remain vastly under-utilised, and investments in the sector is drastically falling.

- The plant load factor (PLF) an indicator of capacity utilisation of power generation units, has dropped consistently over the decade.

- The Ujwal DISCOM Assurance Yojana (UDAY) has failed to make enough of a difference to this state of affairs.

- Demand for electricity from State distribution companies is dropping with their deteriorating financial status.

- Distribution agencies have very little incentive to demand more electricity from power generators, and they cannot make profits.

What are the highlights of the scheme?

- It aims to make electricity accessible to every household by the end of 2018.

- Under the scheme poor households who have no access to electricity will be provided electricity connections free of cost.

- The beneficiaries for free electricity connections would be identified using Socio Economic and Caste Census (SECC) 2011 data.

- This scheme hopes to improve electricity access within villages that are already classified as "electrified", according to the criterion that 10% of households enjoy access to electricity.

- The solar power packs with battery bank for un-electrified households located in remote and inaccessible areas will be provided.

- The Rural Electrification Corporation Limited (REC) will remain the nodal agency for the operationalization of the scheme throughout the country.

What are the shortcomings?

- The scheme doesn't address structural issues that plague the broken power sector.

- It does very little to address the real problem of affordability i.e. the recurring burden of power bills.

- It failsto account illegal connections taken by households which find it difficult to afford legal access to power.

10.3   Road Safety - Focus Areas

What is the issue?

A sense of urgency on road safety is still to pervade the collective consciousness.

What is the present status?

- India signed the 2015 Brasilia Declaration committing to halve the number of deaths in road accidents by 2020.

- "Road Accidents in India - 2015", released last year by the Ministry of Road Transport and Highways shows that this will be a challenge.

- The total number of road accidents increased by 2.5% from 2014 to 2015.

- Number of people killed in such mishaps during the same period increased even more by 4.6%.

- There were approximately 1.5 lakh road related deaths in 2015 alone.

What measures could meet the objectives of Brasilia Declaration?

- **Road safety agency -** Presently, safety certification is done in-house by implementing agencies like NHAI.

- It gives rise to conflict of interests.

- So there is a need for a separate independent body in order to certify whether a new/upgraded highway meets all safety requirements.

- **Drafting a Mission -** A clear mission draft for Road- safety is required on the lines of the one prepared by the Kakodkar committee on Railways.

- **Safe Drivers -** There is no mandatory safety training before appearing for a driving test.

- Also, a substantial number of bogus licences exist.

- A foolproof mechanism to issue and renew "genuine" licences by the many driving schools in India needs to be devised.

- **Newer Technology -** The NHAI incorporated Indian Highways Management Company Limited (IHMCL) on December 2012.

- Whilst electronic toll collection (ETC) is its major objective, the IHMCL can well be re-energised in its "ancillary projects" charter to focus on safety delivery through technology.

- Beginnings could be made with regional control centres, emergency call boxes, variable message signage and integration of FastTag, mobile messages and in-cab radio broadcasts.

- **Raising Resources –** While the government has announced a Rs 1-lakh crore "Rail safety fund", road safety, too, needs such magnitude of resources.

- To meet this, a 25 paise out of the Rs.2 cess on every litre of petrol and diesel can be earmarked for a road safety fund.

- **Updating codes -** Safety related provisions of the Motor Vehicles Act, the Indian Roads Congress manual for highway design, and the Road Safety Manual should all be refreshed and aligned.

- **New legislations –** Bills relating to vehicle safety and testing, registration, insurance, a Good Samaritan law are already under consideration.

- A Motor Vehicle Accident Fund for cashless compensation for treatment during the Golden Hour is also on the cards.

- The government should prioritise these and oversee their passing.

10.4   Viability of Indian Solar Projects amid Trade Shocks

Why in news?

Rise in Chinese solar module prices could hurt India's solar parks.

What is the background?

- A recent assessment was made by "Investment Information & Credit Rating Agency" (ICRA) on solar investments.

- It says that the recent rise in China's Photo-Voltaic (PV) module prices could make the costing of India's solar sector unviable.

- Solar projects in India is now seeing bids well below ₹3/kwh, with the lowest being ₹2.44/kwh at Bhadla phase III in Rajasthan.

- The rise in imported PV module prices between May and August, has been from 30-32 cents per watt to 35-37 cents per watt.

- This is expected to impact the viability of all projects where bid tariff is below ₹3.5 per unit.

Why has this unexpected price spike emerged?

- It has been attributed to the sudden spurt in buying in the US, as a trade ruling against China's solar module makers is anticipated.

- Two US panel manufacturers, Suniva and Oregon World, have moved the US International Trade Commission for protection against Chinese imports.

- If the President intervenes, the US may see a slowdown in demand for Chinese panels.

- That could lead to lower prices for Indian panel buyers.

- But uncertainty prevails currently since it cannot be said whether these price spike will last for months or years.

- In this backdrop, some Chinese suppliers are reported to be delaying on supplies and are seeking renegotiation of contracts.

How does the future look?

- For solar power to raise its presence, the industry will have to step up installations and improve panel efficiencies.

- The annual imports of solar equipments, amounts to over $2 billion at present.

- India is touted to emerge as one of the world's largest markets for PV modules in future.

- Hence, indigenous solar equipment production capacity needs to be enhanced to cope with financial and trade shocks even if costs go up a little.

10.5 Reduction in IUC

Why in news?

Telecom Regulatory Authority of India (TRAI) has slashed mobile termination charges (MTC) by 57% to 6 paise/minute.

What is IUC & MTC?

- The term 'interconnection' refers to an arrangement under which telecom players connect their equipment, networks and services with other Telecom Services Providers.

- IUC is a charge payable by a service provider, whose subscriber originates the call, to the service provider, whose subscriber receives it.

- IUCs include termination, origination and transit charges.

- Mobile Termination Charge (MTC) is paid to cover the network usage costs as the operator, on whose network the call terminates.

- Connecting calls requires infrastructure investment.

- Thus, IUC ensures operators make appropriate investments to carry voice calls without terminations.

- Any change in IUC directly impacts the call tariff.

- Along with recent reduction TRAI also added that these charges would be completely done away with by January, 2020.

What is the reason for this move?

- The revision in the mobile termination charges is in line with the international trends.

- As per TRAI's argument this is likely to result in direct benefit to customers through lower tariffs.

- The cost of terminating a 4G call is relatively small compared to the cost of terminating a call using 2G.

- TRAI also argues that this mandate will promote technologies with lesser costs. The reduction in MTC would encourage operators to invest in new technology and bring down the cost of voice services close to nil.

How this new decision impacts industries?

- Reduction in the IUC may have resulted in declining profitability for leading telecom companies which is still using 2G calling.

- Reliance Jio, has been able to bring down cost by using the latest technology, and asks for abolition of the IUC right away.
- If all telecom operators were more or less of equal size, net revenue from termination charges anyway would have been zero.
- But that is surely not the case, TRAI could have perhaps exercised more caution before doing what it did.

10.6 Viability of the Bullet Train Project

What is the issue?

- India is planning its first high-speed railway.
- Some see the project as a non profitable extravaganze.

What is the project about?

- India is considering establishing a high-speed train corridor between Ahmadabad & Mumbai based on the Japanese Shinkansen technology.
- The project which will be funded & executed by Japan.
- The Japanese are giving a 50-year loan of Rs 88,000 crore of the total project cost of Rs 1,10,000 crore.
- The rest will come from the central government and state governments of Gujarat and Maharashtra.

What is the financial viability?

- A project viability report was done, but the details haven't been shared with the public.
- Projections have shown that the train service will need to carry nearly 1 lakh passengers a day to keep fares at a reasonable levels.
- The current traffic is only about 18,000 per day.
- This means that either fare will have to be raised well above air fares, or that the system will have to be subsidised perpetually.

Has Japanese funding been really generous?

- Japan's loan is claimed to be "virtually interest-free".
- While the interest rate of 0.10% being offered to India sounds great, according to a financial analyst, the average Indian inflation at 3%, and Japanese at 0% has serious implications.
- The rupee will hence depreciate 3% every year vis-a-vis the yen.
- So over 50 years, the sum to be repaid will be well over twice of Rs 88,000 crore.
- This will be a huge burden on future generations. .

Is this advantageous for our passenger needs?

- 95% of rail users in India do not use even the present fast trains like Shatabdi as they find the fares to be costly.
- So, the bullet trains can address only a small population that alrady has the option of air travel.
- The cost of the Mumbai-Ahmadabad bullet train project is almost as much as the entire annual rail budget which stood at Rs 1,21,000 crore last year.
- The Indian railway system, with over 13,000 trains running every day, carries more than 8 billion passengers per year plus 1,000 million tonnes of freight over the whole country.
- A big bang bullet for the few, or a large, improved and safer system for all is the choice that we need to make as finances are limited.
- Notably, there is no mention of transfer of technology anywhere in the agreement, which is the norm for big projects.

11. AGRICULTURE

11.1 Farming - Price Deficiency Mechanism

Why in news?

In line with the NITI Aayog's earlier suggestion, Madhya Pradesh government has announced a new price deficiency payment mechanism.

What is it about?

- The price deficiency mechanism aims at **compensating farmers in cash for their failure to get the minimum support prices (MSP).**

- Under this plan, the state will work out a "model price" by looking at past market rates in Madhya Pradesh and other states.

- Subsequently, the farmers will be paid either the MSP or the model price, whichever is higher.

- Initially, the scheme will cover some selected pulses and oilseeds, where the official procurement is typically low, unlike in rice and wheat.

- But, subsequently it may be expanded to ensure remunerative returns for all major crops.

What is the need for this?

- As highlighted in one of the recent reports of Niti Aayog, MSP has many shortfalls in making farming profitable for farmers.

- **Unremunerative** - It blamed the MSP system for **distorting agricultural markets** and cropping pattern in favour of two main staple cereals - rice and wheat.

- Also, the post-harvest peak marketing season and the resultant price fluctuation lead to **inadequate price realisation** for farmers.

- In many cases, prices received by growers fail to cover even their production costs due to a bumper harvest-driven price crash.

- **Coverage** - MSP is largely confined to wheat and rice and to some extent to cotton and sugarcane.

- Also region wise, it is confined to parts of a handful of states where the procurement, transportation and storage infrastructure exists.

- For other crops and other places, MSP is seeming irrelevant and growers are forced to go in for distress sales.

- **Reach** - NSSO survey reveals that a very few percentage of farmers knew of MSP and that only a few within that managed to sell their produce at MSP.

- Besides these, MSP causes needless accumulation of stocks in the government coffers, involving huge maintenance costs and storage losses.

What is the way forward?

- As production costs vary from region to region and even from farmer to farmer, the present concept of "one nation, one MSP" should be modified to address the regional concerns.

- Farmers should be made aware of the various schemes that the government run for their benefit.

- The risks associated with price fluctuations can be addressed with the new non-market intervention-based system.

- The proposed new system has also the potential to avoid physical handling and warehousing of commodities.

- The price deficiency payment mechanism thus can go a long way in making farming remunerative.

11.2   Doubling Farmer Income by 2022

What is the issue?

- The government has released a seven-point plan to double farmer income by 2022.

- The package has some glaring deficiencies.

What are the flaws?

- **No New Ideas -** The plan is little more than a mere repackaging of the ongoing agricultural development schemes.

- **Productivity -** It is focused more on raising farm productivity than on improving the profitability of farming.

- This disregards the fact that higher farm output does not necessarily lead to higher income.

- Bumper harvests have in fact often caused a slide in prices.

- **Marginal Farming -** Income from increasing output can at best be only marginal because land holdings of most farmers are too small.

- Thereby, they can't produce sizeable marketable surpluses.

- **Growth Rate -** Doubling of income by 2022, from current levels would require an estimated income growth of over 10% annually.

- Such acceleration is hard to come by through the productivity route alone.

What are priority areas?

- More emphasis on various lucrative farm and not-farm economic activities that find a passing mention in the plan is needed.

- These can include, among others, high-value farming involving horticulture, floriculture, herbal farming and farm forestry.

- Allied activities, including novel ventures such as rabbit and quail rearing can also be promoted.

- Waste reduction and value-addition of farm produce with effective market support could help enhance incomes.

- Also, the creation of off-farm employment in rural sectors needs to be established.

What are the policy changes required?

- A stable policy regime governing agricultural pricing and trade needs to be established.

- **Trading -** The current pricing policies seem to have a pro-consumer bias, dictated chiefly by the need to keep inflation down.

- This spurs uncalled for interventions such as frequent opening and shutting of imports and exports of farm goods and imposition of stockholding and other curbs on trade.

- This needs to change to ensure a balance of produce and consumer interests.

- **Prices -** As minimum support price (MSP) mechanism has failed to show results, it needs to be supplemented with other measures.

- One such is the price deficit reimbursement scheme of Madhya Pradesh that seeks to compensate farmers for any shortfall in realising the MSP.

11.3 NITI Aayog's Agriculture Agenda

What is the issue?

- NITI Aayog recently released its three-year action agenda (TYAA) for the government for reforming various sectors of the economy including agriculture.

- An examination at the major issues plaguing the agriculture sector thus becomes vital.

What are the problems in this regard?

- The government has taken initiatives like forming High Level Committee (HLC) on Management of Foodgrains, Task Force on Agriculture, Committee on Doubling of Farmers' Income and restructuring the FCI.

- However, these have had mixed results and problematic issues still persist.

- **MSP** - Minimum Support Prices scheme has not improved profitability in cultivation in the last three years.

- The situation is worse for producers of basic vegetables like potatoes, onions and tomatoes as prices at harvest time plunged to low levels.

- **Market** - Attempts to reform APMC markets on the lines of model Act of 2003, and now of APLM, 2017, have not succeeded much.

- The e-NAM scheme, which is supposed to create an all India market ensuring better prices to farmers, also has some bottlenecks.
- It is still installing software in mandis to switch auctions to electronic ones, and also Inter-mandi and inter-state transactions are very rare.

What should be done?

- NITI Aayog's TYAA basically talks of action for:
    1. increasing productivity of land and water
    2. reforming agri-markets on the lines of e-NAM
    3. reforming tenancy law
    4. relief measures in the event of natural disasters
- However, there is a need for prioritising policy actions and emphasising the role of trade policy in agriculture.
- **Market** - Government should devise plans to buy directly from farmers' group such as Farmer Producer Organisations(FPOs).
- The necessary logistics for grading, storage, movement, and linking them to organised retail (including e-retail) has to be set up.
- Government should also change certain laws including ECA (Export Credit Agency) laws to facilitate easy credit to local exporters of agri products.
- These would make market initiatives to have a more pro-farmer approach.
- **Profitability** - one way to improve farmers' profitability is to open up exports of all agri-products, without any restrictions.
- Government can allow storage by private trade to build global value chains.
- Government should ensure that Pradhan Mantri FasalBima Yojana (PMFBY) delivers its objectives on compensation to farmers well in time to reduce loss in times of disaster.
- **Irrigation** - Government should ensure that Pradhan Mantri Krishi Sinchayee Yojana and NABARD's Long-Term Irrigation Fund are carried out as per the plan.
- However, besides these, government should take forward the micro-irrigation (drip and sprinklers) projects to have a high water-use efficiency.
- Enhancing Direct Benefit Transfer (DBT) of food and fertiliser subsidies to targeted beneficiaries is needed, as this can release resources for investments.
- A firm, wholesome action on all these fronts can bring the desired growth in the agriculture sector.

11.4   Price Deficiency Payment

Why in news?

The Niti Aayog, has recently released a three-year action agenda for the Centre suggesting the 'Price Deficiency Payment' (PDP) system among other reforms.

What is Price Deficiency Payment system?

- Under this, farmers will be compensated for the difference between the MSPs for select crops and their actual market prices.
- For crops such as rice and wheat where MSP is effective now, the same will continue.
- For other targeted crops, price deficiency payments system will be introduced.
- However, notably there may be a cap on the extent to which the Centre will bridge the gap between MSP and market price.
- A farmer would have to register with the nearest APMC mandi and report the total area sown, to avail this benefit.
- The subsidy would be paid via Direct Benefit Transfer (DBT) into the farmer's Aadhaar-linked bank account.

What are the benefits?

- **Subsidy Bill** - The government has been accumulating large food grain stocks in its godowns over and above the buffer requirement, leading to storage and wastage costs.

- Under the new system, the government can pay in cash to farmers, the difference between the support and market prices.

- This will actually reduce the need for the government to procure food crops, transport and store them, and then dispose of them under PDS.

- Resultantly, as Niti Aayog proposes, this system can keep India's bill on food subsidies, and storage and wastage costs under check.

- It can also address to an extent the world nations' concern on India's procurement subsidies being trade-distorting.

- **MSP** - The MSP system has many flaws in execution which include:

     i.   limited graphical coverage.

     ii. actual procurement being restricted to a few crops such as paddy and wheat despite announcements for 20-plus crops.

     iii. skewed cropping pattern in favour of rice and wheat as a result of this.

     iv. soil degradation and susceptibility of crops to pest as a result of this monoculture, leading to higher usage of chemical fertilisers and pesticides.

- The PDP system is expected to address these shortfalls and negative results of MSP scheme.

- As, it could be more effective than MSPs in ensuring that cropping patterns in India respond to consumer needs and that farmers actually benefit from price support.

11.5   Stubble Burning - An Economic solution

What is the issue?

- The practice of burning crop residue is harmful.

- As kharif harvesting season is approaching, the government is contemplating a new incentivise based approach to address this.

Why is stubble burned?

- There is usually an urgency to plant the next crop.

- So, farmers generally do not have time to let the previous crop's residue (stubble) to decompose in the field to turn into compost.

- The high labour cost makes harvesting the stubble to clear the fields undesirable.

- Burning them in the field itself is the quickest and the cheapest way to get rid of them.

- Most farmers, therefore, prefer to defy the ban on burning and pay the penalty for it - which is usually less than the removal cost.

What are its implications?

- About 35 million tonnes of crop waste is burnt in Punjab and Haryana alone.

- This releases enormous amounts of particulate matter, ash and environment and health injurious gases such as carbon monoxide.

- These contaminants contribute majorly to air pollution in north India, including the national capital region of Delhi.

- This happens during the early winter months of November & December which coincides with the kharif harvesting season.

How has the government handled this situation?

- **Monitoring -** Delhi High Court recently ordered concerned governments to use satellite imagery to prevent burning.

- But despite collection of penalties imposed by governments, preventing burning has not been effective.

- **Rewards -** Environment Pollution Control Authority (EPCA) has conceived a new reward mechanism for not burning stubble.

- EPCA is trying to get bio-power producers and other waste utilising industries to purchase this crop residue for use as supplementary feedstock.

- The response from companies seems fairly encouraging with "National Thermal Power Corporation" - NTPC as well as some private entities having expressed willingness.

- NTPC seems ready to even harvest stubble on its own cost and then pay the farmers an amount for the stuff collected.

- Hence, instead being a legally barred activity requiring penal action, it is now expected to be viewed as an additional source of income.

What are some noteworthy possibilities for the future?

- **Mechanisations -** Machines that can gather the stubble and sow seeds in one go are already available.

- Some machines sow without even the removal of previous residue.

- Such technologies need to be encouraged regardless of their high costs.

- This is possible by facilitating the emergence of a vibrant services sector that provide such equipments to farmers.

- **Targeted Subsidising -** Some states are already offering up to 40% subsidy currently on versatile machinery.

- Such production enhancing incentives for bio-power producers and farm machinery manufacturers could also be considered.

- The Centre should also contribute to this effort along with states as this would help protect both the environment and human health.

12. SCIENCE & TECHNOLOGY

12.1   IRNSS - The Second Major Failure

Why in news?

The recent launch of IRNSS-1H satellite as part of the NavIC (Navigation in Indian Constellation) project was a failure.

What went wrong in the launch?

- A heat shield of IRNSS-1H failed to separate.

- The heat shield is a protective cover provided around the satellite to help it withstand the adverse temperatures felt when a rocket is launched into space.

- Separation of the heat shield occurs mid-flight when the rocket leaves Earth's atmosphere.

- The performance of PSLV-C39 went as per plan up to the point where the satellite had to be inserted in orbit but the heat shield prevented it from being deployed in space.

What was IRNSS-1H supposed to do?

- NavIC project with an indented cost of Rs.1,420 crores essentially comprises only seven satellites.

- IRNSS-1H, was the eighth satellite, launched to replace IRNSS-1A, which developed problems last year.

- It was supposed to sit in a "Sub-Geosynchronous Transfer Orbit".

IRNSS & NavIC

- IRNSS (Indian Regional Navigation Satellite Systems) is a group of satellites launched for providing satellite-based navigation services in the Indian subcontinent under the NavIC project on the lines of GPS – created by USA.

- It was designed mainly to provide an "Restricted Encrypted Service" for authorised users like the defence forces.

- But it also provides for accurate "position information services" to general users in India as well as the region, up to 1,500 km from the boundary.

- ISRO will also sell its capabilities to service providers like mobile phone manufacturers, vehicle manufacturers etc.

- The main reason for the development of IRNSS is the reliability that it offers when used for defence purposes.

- ISRO started work on the IRNSS programme in 1999 after the Kargil War, where Indian defence forces could not use American GPS in the conflict zone to locate its soldiers.

What made replacing of IRNSS-1A necessary?

- IRNSS-1A was the first satellite of the NavIC, launched in 2013.

- Recently, all the three RAFS-Atomic Clocks (Rubidium Atomic Frequency Standard clocks) on IRNSS-1A had failed, due to probable short circuiting.

- This rendered it ineffective for navigation services, which called for a replacement.

- While the clocks had failed, the rest of satellite components were found to be functioning perfectly.

- IRNSS-1A is currently being used for messaging activity.

Why are these clocks important?

- Atomic clocks are a key component in a navigation system for accurate timekeeping.

- This is crutial, as the determination of a person's position on earth is subject to the accurate calculation of delays in signal transmission from the satellite to earth.

- Recognizing this importance, ISRO satellites are equipped with three clocks each — one being the primary timekeeper and two acting as backup.

- Due to the IRNSS-1A failure, modified versions of the original atomic clocks are being used by new satellites to overcome the technical issues.

12.2 Forecasting Dengue

Why in news?

Recent Indian study finds that it is possible to forecast the outbreak of the dengue.

What is the study about?

- Study focuses on changes in a factor called extrinsic incubation period (EIP) of the dengue virus, by taking into account daily and monthly mean temperatures different climatic zones.

- The EIP is the time taken for incubation of the virus in the mosquito.

- During this period, after the mosquito draws blood that is rich in viruses, it escapes the gut and passes through the mosquito's body and reaches its salivary glands.

- Once this happens, the mosquito is infectious and capable of transmitting the virus to a human host.

What are the outcomes of the study?

- Climatic conditions play an important role in EIP.

- Lower temperatures (17-18°C) result in longer EIPs thereby leading to decreased virus transmission.

- From 17 to 30°C, dengue transmission increases fourfold, feeding increases because of the enhanced metabolism of the mosquito, leading to shorter EIPs.

- A further increase in temperature beyond 35°C is detrimental to the mosquito's survival.

- There is a strong correlation between rainfall and dengue numbers, they propose an increase in breeding grounds for mosquitoes.

- Given its close link with both temperature and rainfall, it is possible to forecast the outbreak of dengue.

How it helps in Disease control?

- This climate-based dengue forecasting model could help health authorities assess the disease intensity in a geographic region.

- Based on this authorities can plan disease-control operations well in advance and optimise the use of resources meticulously.

- Factors such as population density and migration also need to be included for future risk assessment studies.

- This will help in mitigating the disease and strategic disease control.

12.3   Switching over to VoLTE

What is the issue?

- With the VoLTE revolution kick started by the Reliance Jio, Indian telecom players are battling to retain their competitive position in the market.

- Knowing the features and challenges of this new technology thus becomes essential.

What is VoLTE?

- Voice over Long-Term Evolution (VoLTE) is a standard for high-speed wireless communication for mobile phones and data terminals.

- Under the earlier LTE, the infrastructure of telecom players only allows transmission of data while voice calls are routed to their older 2G or 3G networks.

- Thus under LTE, one cannot access the 4G data services while on a call.

- On the other hand, VoLTE, a technology update to the LTE protocol, allows voice calls to be 'packaged' and carried through LTE networks.

- This would mean 4G data accessibility even during calls.

What are the benefits of VoLTE?

- VoLTE allows **voice** service being delivered **as data flows** within the LTE data bearer.

- VoLTE is an Internet Protocol Multimedia Subsystem (IMS) specification.

- IMS enables a variety of services to operate seamlessly on the network rather than having to switch to different applications for voice or video.

- The various benefits of VoLTE thus include:

  1. high definition voice quality, superior to the previous networks.

  2. faster, better and wider data connectivity.

  3. network would pick up 2G or 3G signals when VoLTE is unavailable, ensuring connection with both voice and data.

  4. video calls directly from the mobile number; this could avoid the necessity for applications such as Skype or Viber.

  5. as VoLTE counts voice calls as data usage, billing will be in terms of data consumption rather than minutes of usage.

  6. better battery life as battery consumption due to switching and searching for a network from 4G to 3G to place a call is not required under VoLTE.

  7. VoLTE thus facilitates a range of services such as video calling, file transfer, real time language translation and voice mail services.

What are the challenges?

- The service might be limited to mobile phones that are equipped with software to allow VoLTE function.

- Also, there is a possibility for call drops in the initial stages of implementation.

- Due to costs and complexity involved in the infrastructure, mobile phones and telecom operators may find it hard for adopting it immediately.

- Also, the incumbent operators are still dependent on revenue from voice, making them hesitant to switch over to VoLTE.

- These factors could prove them uncompetitive in the market.

- From the consumer end, the present free voice calls under VoLTE are not sure to continue with gradual change in pricing plans in future.

12.4   Introducing India's own Crypto-Currency

Why in news?

The government is considering the possibility of introducing India's own cryptocurrency, code-named "Lakshmi".

What is the need?

- Crypto-currency is a digital currency that allows transacting parties to remain anonymous while confirming the transaction is valid.

- The provision of anonymity is widely misused especially in making cross-border transactions.

- They are widely used as a means for money-laundering, terror funding and drug trafficking, and other illegal activities.

- The increasing share and presence of bitcoins due to speculative trading for return on investments is getting to be a cause of concern.

How can legalising help address this?

- India's attempt to legalise and introduce its own cryptocurrency would give it the status of a fiat currency.

- This formal government authorization could prove to be an alternative to popular non-fiat cryptocurrencies such as bitcoin and ethereum.

- "Lakshmi" would adopt a variation of the blockchain technology employed by bitcoin.

- The technology would help verify every trade and rule out the possibility of dual transactions employing the same coin.

- Also, the new currency would be subject to the same capital account controls as the rupee, in terms of cross-border transactions.

- The money supply at every instant is known and cannot be manipulated, unlike with normal fiat currencies.

- Besides, users would have to submit to the usual know-your-customer norms.

What are the challenges?

- The introduction of such a new cryptocurrency, would make it a legal tender alongside the rupee.

- This requires legislative action of making amendments to the Currency Act.

- Pegging it to rupee would have an impact on the rupee exchange rate along with the risk of fluctuations.

What is the way forward?

- India can consider legalising and regulating the existing popular bitcoin instead of introducing a new crypto-currency.

- Ex: Japan has recognised bitcoin as a legal currency, with anti-money laundering rules and capital requirements.

- Also, India can use GST as a tool to curb the frenzy over bitcoins by taxing their supply.

- Capital requirements, levy of GST on supply of bitcoins and income tax on the profits made are certain to reduce the speculative effect.

- It is for the RBI, CBDT and GST Council to discuss and formulate and roll out a policy to deal with bitcoins effectively.

12.5 Blockchain Technology in India

What is the issue?

In India high-level committee deliberations are said to be in support of encouraging the use of block chain technology.

What is Blockchain?

- Blockchain is the basis of bitcoins, it is a digital public ledger that records every transaction.

- Once a transaction is entered in the blockchain, it cannot be erased or modified.

- Blockchain removes the need for using a trusted third party such as a bank to make a transaction by directly connecting the customers and suppliers.

- Each transaction is recorded to the ledger after verification by the network participants, mainly a chain of computers, called nodes.

What is the status of blockchain technology in India?

- In India Financial players are the first movers to capitalise on this technology.

- It is witnessing a lot of traction within India, in sectors such as banking and insurance.

- In most of these industries, players are coming together to form a consortium to realise the benefits of blockchain at an industry level.

- The Institute for Development and Research in Banking Technology (IDRBT), an arm of the Reserve Bank of India (RBI), is developing a model platform for this technology.

What are the avenues of block chain?

- Bitcoin is just one of the applications for the technology, whose use is being tested across industries.

- It is an advantage, when there is a lot of data that is shared across multiple parties with no trust mechanism among the participants.

- Non-financial players like retail, travel, health care, telecom and public sector industries are also working on this technology.

13. ENVIRONMENT

13.1 Plastic roads in India

What is the issue?

India has a huge potential of using its plastic waste for laying plastic roads.

What are plastic roads?

- Roads constructed from mix of aggregate (sand and stone chips), bitumen and shredded plastic.

- The new material mix is reported to have superior binding.

- But plastic roads are quite the rage in the European Union which has taken on massive environmental conservation and pollution mitigation goals.

What is the status of plastic roads in India?

- India has already built some 21,000 miles of roads using plastic waste.

- The civic authority in Bengaluru has experimented with plastic roads building some 600 km of thoroughfare.

- The Centre even issued a set of guidelines for plastic blending in rural roads programme, the Pradhan Mantri Gram Sadak Yojana.

- Researchers in Tamil Nadu, has developed plastic blended water-resistant blocks, it can be used to line canals and other flowing water bodies.

- Plastic based roads are catching up in many other cities in India.

What are the advantages of plastic roads?

- Safer disposal of plastic is ensured than melting it down and releasing copious quantities of toxic fumes.

- It is a cheap input that could pull down road construction cost.

- Can be efficiently used for rural road building and smart city plans.

- The bitumen usage is cut because of plastic thereby reducing the carbon footprint of road construction.

- It has greater durability than asphalt-concrete roads because they don't absorb water.

13.2 Environmental Cess vs GST

What is the issue?

- GST has abruptly replaced Clean Energy and Swachh Bharat levies.

- This has disrupting the budgetary allocations for environmental protection.

What is Cess?

- Unlike usual tax, a cess is levied to raise funds for a specific purpose.

- The proceeds are first credited to the Consolidated Fund of India, and the Centre may, after due appropriation by Parliament, utilise such sums of money for purposes designated under the cess.

- While in principle a cess is to be levied till the time the Government gets enough money for the specified purpose, several cesses, by virtue of their broad-based objectives, have continued for years.

- Hence, they've become an important source of revenue for certain ministries.

How did GST impact Cess?

- GST subsumed several central & state levies under it.

- Among them were three environment-related cesses - Swachh Bharat Cess, Clean Energy Cess and the historical Water Cess on water consumption by industry and local authorities.

- Unless the nodal ministries are compensated for revenue loss, the Cess-targeted schemes will suffer.

What are specifics of the cesses discussed above?

- **Water cess -** Introduced under the Water (Prevention and Control of Pollution) Cess Act 1977, it was to augment the resources of the Central and State pollution control boards to address water pollution.

- Water cess is the second most important source of revenue for State Pollution Control Boards next only to consent fees.

- The loss of this revenue will be a huge setback for boards which already suffer from poor technical capacity and autonomy.

- Even if the loss is made good through budgetary allocation, the channelling of money through State budgets will make the boards even more vulnerable to the discretion of State governments.

- It is to be noted that State governments have a dismal track record of empowering the pollution watchdogs.

- **Swachh Bharat Cess -** The Centre collected ₹12,500 crore in 2016-17 through this Cess for the Swachh Bharat Abhiyaan (SBA) which aims to make India open-defecation free by 2019 and improve the appalling state of waste management in the country.

- While it is clear the programme will require significant public expenditure to meet the targets, it will be interesting to see whether budgetary allocations are maintained after the abolition of the cess.

- **Clean Energy Cess -** Levied on coal at the rate of ₹400/tonne in 2016 (progressively increased from ₹50/tonnes in 2010), it amounted to a staggering ₹28,500 crore in 2016-17.

- Touted as a tax on carbon, it met almost 50% of the budget of the ministry of new and renewable energy for 2016-17.

- This is despite the fact that MNRE is only one of the beneficiaries along with the ministries of water resources, environment and drinking water and sanitation from the fund.

What has the government's actions perceived?

- The abolition of these cesses when the Government is projecting itself as a global leader in clean energy seems both symbolically and financially ill-timed.

- More shockingly, the coal cess is being continued at the same rate under the GST but will now contribute to the 'GST - Compensation Fund", a corpus meant for compensating States for revenue losses arising from the shift to the new indirect tax regime

- It remains to be seen if Budget 2018-19 will adequately compensate ministries for the loss of revenue but the fact that these cesses were unceremoniously abolished shows that environmental issues aren't a policy priority for the government.

How to approach the future?

- The Government should ensure that functional schemes aren't starved for the need of funds.

- This opportunity should also be used to introspect on the changes required to encourage more efficiency in resource use, prevention of pollution and management of waste.

- Perhaps it's time for a Green Tax Council, at par with the GST Council, to design and implement environmental fiscal reform in India

13.3 Augmentation Program in Buxa Tiger Reserve

Why in news?

National Tiger Conservation Authority (NTCA) recently chose Buxa tiger reserve in West Bengal for the tiger augmentation programme.

What is the significance of Buxa tiger reserve?

- It has notified as a tiger reserve in 1983, located in Alipurduar district of West Bengal, parts of which border Bhutan.

- The reserve is located very close to Assam's Manas Tiger Reserve.

- Buxa consists of moist, deciduous and evergreen forests.

- It is home to at least 68 species of mammals, 41 species of reptiles and more than 246 species of birds, four species of amphibians, 73 species of fishes and over a hundred species of butterflies and moths.

- The herbivore list includes elephants, Indian gaur, chital, sambars, barking deer and hog deer.

How the augmentation program will be done?

- Forest Department officials claimed there were tigers in the reserve, almost no sighting of the big cats raised questions about their presence.

- The survey of tigers in 2011 based on DNA analyses of scat put the number of tigers at 20.

- The initial plan is to introduce six tigers at Buxa.

- Experts have consciously decided not to augment tigers in the Buxa reserve from the Sunderbans, a completely different mangrove ecosystem.

- Instead, tigers from the forest reserves of Assam, which have a similar flora and fauna, will be introduced in Buxa.

- Experts believes that tigers are migrating from nearer Manas wildlife sanctuary through Buxa-Bhutan corridor.

What are the challenges?

- The introduction of tigers is a challenge to forest officials as there is human habitation in the area.

- There are also common clouded leopards, jungle cats and fishing cats, which occasionally surface in the tea gardens nearby.

- Chances of wild animals getting killed while crossing the tracks are high, as broad gauge rail line is passing through the reserve.

- Tourist accommodations run by both the forest department and private operators, in the reserve possess high threat to tiger habitat.

13.4 Ghazipur Landfill Tragedy

What is the issue?

- A recent landfill collapse in Ghazipur, UP, has killed two people and caused injuries to many.

- The incident calls for addressing the problem of over-stressed landfills and adopting proper waste management techniques in cities.

What led to this tragedy?

- The Solid-Waste Management Rules, 2016 prescribes certain conditions for landfill sites:

  1. a landfill site must not exceed 20 meters in height.

  2. it must not be older than 22-25 years.

  3. it must have a clay-lining at the bottom to save the land and ground water.

- As against these specifications, the Ghazipur dump-yard is 50 metres high and almost 33 years old.

- The other two un-engineered" dumping grounds in Delhi include Okhla and Bhalaswa sites.

- Experts say that Ghazipur, Okhla and Bhalaswa could not be called "landfill sites" but just "dumping yard", as they do not follow the prescribed norms.

- A joint-efforts of rains, fire and excessive pressure due to running out of space led to the recent collapse of the site.

What are the flaws in the approach?

- Following the tragedy, the National Green Tribunal questioned the Delhi government and the East Delhi Municipal Corporation (EDMC).

- The EDMC told the green court that it had moved a plea seeking allotment of land to develop new landfills.

- NGT has rejected EDMC's alternative landfill site at a new place on the grounds that the site falls in an environmentally-sensitive zone.

- The issue here is that the heaping garbage is increasingly posing environmental and public-safety hazards.

- Finding **new landfills would only mean relocating the problem** and not solving it.

- Also, this is not a problem restricted to Delhi alone but is the case with most Indian cities handling municipal waste.

What is desired?

- The tragedy calls for solving the unending waste management problems in Indian cities.

- The 'un-engineered' dumping sites in the name of landfills should be transformed into "**decentralised processing centres**".

- ex: Bio-methanisation plant could be an option.

- These centres should carry on **segregating waste at source** into recyclables, organic wastes and toxic wastes.

- Non-profits and educational institutions could be roped in to engage in **public awareness** campaigns.

- Rather than having a one-size-fits-all approach, the waste problems of urban India should have a **region centric approach** based on the needs, demands and resources.

13.5   Waste Management

What is the issue?

- The Ghazipur landfill collapse has highlighted the poor status of waste management in Indian cities.

- It demands a scientific approach to the problem, to keep check on any such tragedies in future and to capitalise through waste management.

How is waste management approached in India?

- The reality is that except for few Indian cities, most of the cities only **'dump' waste and not 'manage'** them as such.

- Solid Waste Management Rules, 2016 are hardly being followed by the cities.

- National records reveal that out of the collected 80% of the generated waste, only a mere 28% is being processed.

- Urban local governments leave the task of value extraction to the informal system of garbage collectors and recyclers.

- These informal systems are inefficient in recovering resources in discarded materials as they are just dumped.

- Moreover, the Swachh Bharat programme, intended to address all these, focuses too narrowly on individual action rather than a collective systematic approach.

Why is waste management so important?

- The volumes of wastes generated are estimated to grow in the coming years.

- A mere shifting of collected waste from the cities is increasing the **pressure on the suburban areas**.

- Moreover the **stench** from the landfill is a serious cause of concern for the people living in the colonies adjacent to it.

- It is also being the cause for many deadly **diseases** like tuberculosis, typhoid, dengue, malaria and encephalitis.

- Further, the methane gas produced by bio-degradable waste causes **fire,** and people are the forced to inhale the poisonous gases from the **smoke** emitted.

- Additionally the unregulated use of **plastics** is polluting the rivers, lakes and sea, and is being ingested by cattle feeding on dumped refuse.

- All these firmly increase the need for addressing the issues with waste management.

What should be done?

- Tonnes of waste generated should necessarily be treated as a **potential resource.**

- **Segregating the waste** at the source into dry and wet is a prerequisite for adopting a scientific mode of waste disposal.

- The wet waste or organic refuse can be used for **composting** or production of **methane** for household use or power generation, and the dry waste can be sent for recycling.

- Furthermore, the municipal bodies should adopt an **integrated system** for transporting and very importantly scientifically **processing** the waste segregated at source.

- India should also make some **regulations** on the use of **plastics**.

- Central Pollution Control Board should undertake periodic assessments of the preparedness of urban local bodies in this regard.

- Above all, managing waste also requires a behaviour modification among citizens and institutions.

13.6 Making Use of Compost

What is the issue?

Compost derived from biodegradable waste will ensure sustainable solid waste disposal by following waste to health mechanism.

What are the challenges in solid waste disposal?

- Proper collection, separation, transportation and disposal of solid waste to some distant preferably out of sight is not made in India.

- Processing and treating different streams of solid waste, and safe disposal of the residuals in scientific landfills, has received much less attention.

- In recent times unscientific landfill practices have led to man-made disasters such as Deonar (Mumbai), Bellandur (Bangalore), and Ghazipur (Delhi).

- The use of incinerator for disposal of mixed waste is a financially and environmentally expensive solutions, since toxic emissions looms large from this method.

How compost will ensure proper solid waste management?

- Compost is an organic matter that has been decomposed and recycled as a fertilizer and soil amendment, it is a key ingredient in organic farming.

- In this method compost is produced from biodegradable waste collected from the city, it provides an alternative to farmyard manure.

- It is rich in microbial content that helps plants to take up soil nutrients.

- It provides an opportunity to simultaneously clean up the cities and help improve agricultural productivity and quality of the soil.

What is the need for such compost?

- Excessive and imbalanced use of chemical fertilisers has led to severe deterioration in the quality of soil.

- Only about 20 -50% of the nitrogen in urea is absorbed by plants, remaining pollute surface water with nitrogen runoff.

- Organic manure or compost plays a very important role as a supplement to chemical fertilisers in replenishing the nutrient-depleted soils.

- The addition of compost or organic manure reduces nitrogen wastage, as its humus absorbs the nitrogen and acts like a slow release sponge.

What are the advantages of such compost?

- The water holding capacity of the soil which uses compost helps with drought-proofing.

- It is rich in organic carbon which is an essential element of integrated plant nutrient management, as it increases the productivity of other fertilisers.

- Horticulture crops grown with compost have better flavour, size, colour and shelf-life.

- It reduces input costs for farmers, since it is weed-free, makes soil porous, roots stronger and resistant to pests and decay.

- Landfills would be cleaned up for production of this compost and the fields around them would be much more productive.

What are the challenges with availability of this compost?

- The availability of this compost is purely based on proper delivery mechanisms, which is lagging in India.

- Government Schemes made for composite has not worked well because of its administrative complexity

- The high volume but low value nature of compost makes it not so attractive for fertiliser marketing companies to promote its use.

- Compost manufacturers feels harder to meet the quality specifications laid down by the Fertiliser Control Order (FCO).

How the challenges can be addressed?

- Government policies which safe guards the interest of fertilizer manufactures should be formulated.

- The state agricultural departments can help to facilitate the use of city compost through their widespread extension networks.

- Fertiliser companies need to make vigorous efforts to market city compost using their well-connected dealer channels.

- Subsidies for the city compost based fertiliser will promote its use among farmers and it also promotes companies to co-market the compost.

13.7 Snow Leopard Conservation

Why in news?

The conservation status of snow leopard has been changed from "endangered" to "vulnerable" by the International Union for Conservation of Nature (IUCN).

What are the characteristic features of Snow leopards?

- These are rarely sighted cats that live in the peaks of central Asia including the Himalayas and Russia's remote Altai mountains.

- Their habitat covers more than 1.8 million sq km, across 12 countries and usually found at elevations of 3,000-4,500m.

- Their coats change with the seasons from a thick, white fur to keep them warm and camouflaged in winter, to a fine yellow-grey coat in summer.

- They are threatened by poaching for their fur, infrastructure developments and climate change.

- In India this animal habitat is in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.

What are the criteria for endangered status?

- An observed, estimated, inferred or suspected population size reduction of ≥ 50% over the last 10 years or three generations

- Area of occupancy estimated to be less than 500 km²,

- Population size estimated to number fewer than **2500 mature individuals** witness a continuous decline

- Population size estimated to number fewer than 250 mature individuals.

- Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations

- The current move is based on the criterion that it crossed the threshold number of 2500

What will be the impact of the downgrade?

- The factors that pose a threat to the species, like trafficking live animals in Central Asia, and hostility from communities because of its attacks on livestock, remain unchanged.

- New research indicates that even when wild prey is available, the attacks on livestock by snow leopards have been on the rise.

- The bigger challenge of loss of habitat owing to changing climate patterns needs continuous conservation efforts.

- There is no clear knowledge about its population health, in remote habitat in the alpine zones of the Himalayas and trans-Himalayas.

- There are possibilities of trafficking of this animal in Central Asia, and hostility from communities because of its attacks on livestock.

- A more fundamental worry is over the likely loss of habitat owing to changing climate patterns.

- So the downgrading might send a wrong message and the governments might shift their focus away from the conservation efforts.

- It is vital that the momentum of conservation should not be lost merely on account of the technicality.

What should be done?

- The existing conservation must be strengthened by enlarging protected areas in all the range countries.

- Studies on the leopard's vulnerability have to be intensified.

- The task of monitoring its entire habitat of high mountains must speeded up.

- The reasons for hunting livestock must be dound out to insulate the owners from losses.

- They should be encouraged to move away from traditional pastoral grazing.

- Incompatible activities such as mining and human interference in their habitats should be kept out.

13.8   Economic Impact of Climate Change

Why in news?

World Economic Outlook was recently released by the International Monetary Fund.

What are the highlights of the report?

- An analytical chapter highlights some of the damaging macroeconomic impact of weather shocks, particularly for low-income countries.

- 1 °C increase from a temperature of 22degree Celsius reduces the growth of median emerging market economy by 0.9% in a year.

> **Conservation efforts taken in India**
>
> - India has launched a programme on the lines of Project Tiger for its conservation, covering 128,757 sq. km.
>
> - India is also a part of an upcoming international collaborative effort, the Global Snow Leopard and Ecosystem Protection Program that involves those 12 countries.
>
> - India handled man-animal conflict by roping in communities in conservation, and compensating them for any losses.
>
> - e.g An insurance programme was launched for the residents of Spiti Valley in Himachal Pradesh to mitigate the problem of the cat preying on goats, sheep, donkeys.

- Its impact on the median low-income developing country is even higher.

- The growth doesn't recover quickly after a weather shock and takes evens decade to fully recover.

- Countries located in areas with higher temperature are highly vulnerable to the impact of global warming.

- The resultant loss of output and lower productivity also affects capital formation.

- The overall impact is a considerable bearing on the medium- to long-term growth prospects of the country.

What makes India more vulnerable?

- India, being a **tropical country**, is more susceptible to changes in temperature.

- Also, in India, about 50% of the population directly or indirectly depends on **agriculture** for a livelihood.

- The existent distress in the farm sector and the state governments' response with loan waivers have already strained their **fiscal condition.**

- Furthermore, the production of kharif crops is expected to decline.

- The possibility of adverse weather events is likely to increase in the future posing a greater challenge.

- The impact of climate change in agriculture is thus expected to reverberate in other sectors of the economy and affect the overall growth prospects.

What should be done?

- **India**- India, which is considerably better, still has to strengthen its **macroeconomic stability** to deal with temperature shocks.

- India has considerably reduced its dependence on the monsoon as evident from avoiding a runaway inflation even after two successive years of drought.

- However, more needs to be done to enhance **productivity** in the agriculture sector.

- India can work on **programmes** that will help improve the quality of land and reduce the risk of climate change. Ex: Use employment under the MGNREGA to enhance soil and water conservation.

- India also needs to strengthen its overall capability by investing in and adopting new **technology**.

- **Global** - Emerging market and low-income economies will have to build significant macroeconomic resilience so as to reduce the impact.

- Right policies and institutions in place may help attenuate the effects of temperature shocks, to some extent.

- In all, it is essential for the countries to realize that steps to minimize the impact of climate change will have to be taken both at individual country and global levels.

14. INTERNAL SECURITY

14.1 Combat Aircraft Concerns

Why in news?

The dysfunctional procurement of light combat aircraft is hindering the growth of indigenous defence sector.

What are the recent aircraft deals?

- **Gripen E -** Swedish company Saab and the Adani Group agreed to build the Gripen E single-engine fighter in India.

- **F-16 -** US-major Lockheed Martin and Tata Advanced Systems Ltd (TASL) to build the F-16 Block 70.

- **Mirage 2000 -**With the support of Dassault Aviation (French) and Thales teams as per the contract, these aircrafts are upgraded.

- French vendor Dassault proposed shifting the Mirage 2000 production line to India.

- **MiG29 M -** Deal have been initiated between Russia and IAF for procurement of MiG-29M.

- Super Hornet- Boeing had made a deal to manufacture with F/A-18E/F Super Hornet in India.

- **Typhoon -**Eurofighter GmbH consortium had offered the Typhoon deal to India.

What are the issues with combat aircraft procurement?

- From 1999 Indian Air Force demanded 126 combat aircraft to replace its ageing fleet of MiG-21 and MiG-27 light fighters.

- It was originally hoped that the Tejas light combat aircraft would replace the MiGs.

- But IAF decided to supplement its three-squadron fleet of Mirage 2000 multi-role fighters, which had performed well during Kargil.

- The IAF immediate requirement was 126 fighters, the Tejas production was not able to meet that target.

- The original plan to build an affordable, single-engine, light fighter was officially dead.

- IAF finally picked the Rafael, the most expensive heavy fighter in the list.

- It has ordered 36 Raffles for a mind-boggling ^7.87 billion, which is one-and-a-half times what was budgeted for 126medium range combat aircraft.

What are the characteristics of Tejas aircraft?

- The Tejas is an Indian single-seat, single-jet engine, multirole light fighter.

- It is the smallest and lightest in its class of contemporary supersonic combat aircraft.

- It is designed by the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL) for the Indian Air Force and Navy

- As of 2016 the Tejas MK1 Only 21 aircrafts has been produced for the Indian Air Force (IAF) and the naval version was undergoing flight tests for Indian Navy (IN).

- This indigenously produced will reduce the monetary constrains, and provide more efficiency of Indian Defence.

14.2 Data Analytics and National security

What is the issue?

Indian defence and police forces are effectively using data analytics for countering their foes.

What is data analytics?

- Data analytics is the process of examining data sets in order to draw conclusions about the information they contain, increasingly with the aid of specialized systems and software.

- It is widely used in commercial industries to enable organizations to make more-informed business decisions.

- Globally, defence analytics is a $2 billion market but it is still at a nascent stage in India.

- Few budding analytics firms in India had helped the army in predicting border infiltration patterns and provided analytics services to BSF, CRPF and Police departments across the country.

What are the cases data analytics was most useful?

- **Border Incursion -** Terrorists on the other side of the border usually send a herd of cattle to check for mines that the armed forces have placed on the border.

- Analysis of past data has shown that the next incursion is likely to happen in the about eleven or twelve days after a herd of cattle meanders close to the border.

- **Public agitation -**When an agitation happens anywhere across the country, there are multiple factors like social media posts, hashtags or news articles, religious group's posts.

- Based on these correlation metrics, all data are merged with the intelligence data from police agencies and predict a protest or agitation.

- **Smuggling**-Fewdata analytics also predicts that cross border infiltration and narcotic smuggling spike upwards on cloudy and foggy days.

- **Bomb Blast -** During the 2013 Bangalore blast, Intelligence department analysed 1000 gigabytes of CCTV images from 3-5 traffic signals to reach out the criminal.

- **Locating strategic areas -**During the 2016 assembly elections, Police in Assam used GPS data to plan the deployment of forces.

- GPS imagery was used to plot polling booths routes in insurgency hit areas and plan force deployment better in case of disaster recovery.

- **Locating the criminals -** Based on data points of where anonymous calls are arising during any political unrest,police allocate more patrolling vans to those areas.

- Using frequency of cell phone tower signals police can locate criminals.

14.3 Countering Internet Radicalisation

Why in news?

During the high-level meeting at the UN, India had made its remarks on preventing terrorist use of Internet and planed for an action plan.

What is Internet radicalisation?

- Internet is used by terrorist as an effective tool for radicalisation and terror financing.

- Terror groups use the internet to advocate the use of violence to further a religious, ideological or political cause.

- These terror group use different forms of material to encourage radicalisation towards violence.

- Such Extremist material can include articles, images, speeches or videos that encourage hate or violence and websites created or hosted by terrorist organisations

- This material is affecting minority youths, who may be vulnerable to becoming radicalised.

How India is vulnerable to internet radicalisation?

- India is much impacted by the threat posed by terrorists using Internet.

- Many youths from western coast are reported victims of internet radicalisation.

- India's pluralism make it particularly sensitive to the dangers.

- The rapid growth of internet users in India is now close to 500 million and growing, this underlines the scale of the challenge.

What is the action plan to contain terrorism via internet?

- Responses to terrorism must be similar across geographies and cultures, where differential standards must not be accepted.

- Critical Internet resources and data centres should be dispersed and redundant to mitigate impact of major terror attacks.

- Global Internet Forum to Counter Terrorism (GIFCT) is formed by Facebook, Microsoft, Twitter and YouTube, it formalizes and structures how the companies work together to curtail the spread of terrorism and violent extremism.

- UN General Assembly re-affirmed their collective determination to prevent the Internet from being misused by terrorist groups and individuals.

14.4 Internal Security Scheme

Why in news?

The Union Cabinet has recently approved a Rs.25,000-crore internal security scheme.

What are the highlights of the scheme?

- The Cabinet Committee on Security (CCS) gave its approval for the implementation of the umbrella scheme, **Modernisation of Police Forces**.

- The MPF scheme will be implemented between 2017 and 2020.

- Out of the total financial outlay, the Central government's share will be about 75% and the rest will be that of the states.

- The noteworthy provisions in the scheme cover the following diversified areas:

    1. Internal security.

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2. Law and order.

3. Women's security.

4. Availability of modern weapons.

5. Mobility of police forces.

6. Logistical support.

7. Hiring of helicopters.

8. Upgradation of wireless, satellite communications for police.

9. Crime and criminal tracking network and systems (cctns)

10. e-prisons.

- The scheme also earmarks a specific sum for internal security-related expenditure for J&K, north-eastern states and states affected by Left-Wing Extremism.

- The government's grant for police modernisation would be followed by steps to grant the force autonomy from political masters.

- Police stations would be integrated to set up a national database of crime and criminal records which will be linked with other criminal justice system machineries.

- Besides, it also provides for:

  i. setting up a state-of-the-art forensic laboratory in Amravati.

  ii. upgradation of the i) Sardar Patel Global Centre for Security, ii)Counter Terrorism and Anti-Insurgency in Jaipur, iii)Gujarat Forensic Science University in Gandhinagar.

What are the objectives?

- Following the 14th FC's recommendations, the Centre delinked from its support various centrally sponsored schemes which included modernisation of police.

- The state governments showed little interest to make any investments, and thus police modernisation witnessed a setback leading to increased security challenges.

- The prime objective of the new scheme is thus to strengthen the law and order mechanism and mordernise the police forces.

- The new initiatives aim at providing assistance to States for upgradation of police infrastructure, forensic science laboratories, institutions, etc.

- It provides for the objective of a SMART Police who are expected to be strict, sensitive, modern, mobile, alert, accountable, reliable, responsible, tech-savvy and trained.

- Very importantly, the scheme aims at granting police, autonomy from political masters.

- This will help them render their service as 'People's Police' rather than as present 'Ruler's Police'.

- The scheme can thus go a long way in ensuring a solid foundation of good law and order promoted by a structured and accountable police machinery.

PRELIM BITS

HISTORY

Ananda Temple

- It is a Buddhist temple in Myanmar, built in the early 12th century.

- It is based on Indian Style of Architecture.

- Archaeological Survey of India (ASI) has carried out structural conservation and chemical preservation work of this temple.

- The ASI has undertaken several major conservation works across various countries of Asia such as Bamiyan Buddhas in Afghanistan, the Angkor Wat in Cambodia, the Ta Prohm Temple in Cambodia, the Vat Phou Temple in Laos, and the My Son Temple in Vietnam.

Buland Darwaza

- It is the most iconic architectural accomplishment of Akbar's reign.

- It is the main entrance to the palace at Fatehpur Sikri, a town which is 43 km from Agra.

- It was built in 1601 A.D. by Akbar to commemorate his victory over Gujarat.

- Buland Darwaza known as gate of magnificence is the highest gateway in the world and is an example of Mughal architecture.

- It incorporates almost all the essential features of Akbar's architectural traditions: red sandstone, stone carvings, and relief by inserting white marble.

- The construction of the Buland Darwaza was inspired by Timurid architecture.

Rumi Darwaza

- The Rumi Darwaza, sometimes known as the Turkish Gate is in Lucknow, U.P.

- The gateway built in Awadi architecture and considered as an entrance to the city of Lucknow.

- It was built under the patronage of Nawab Asaf-Ud-daula in 1784.

- It is believed that the gate is called Rumi gate, simply because it was modelled after the gateways of then Constantinople or Modern Istanbul.

- The Rumi Darwaza in Lucknow and the Persian philosopher and Poet Rumi have no connection.

Pulikkali

- It is a recreational folk art from the state of Kerala.

- Literal meaning of Pulikkali is the 'play of the tigers' hence the performance revolves around the theme of tiger hunting.

- On the fourth day of Onam celebrations, performers painted like tigers and hunters in bright yellow, red, and black dance to the beats of instruments like Udukku and Thakil.

- The folk art is mainly practiced in Thrissur district of Kerala.

GEOGRAPHY

Earthquake

- The Ritcher Scale measures the magnitude, which is the amount of energy released during an earthquake.

- The magnitude is derived from a formula involving a logarithm, which makes the scale exponential rather than linear.

- For e.g. an earthquake of magnitude 8.1 is 10 times larger than magnitude 7.1, and 100 times larger than magnitude 6.1.

- But in terms of energy released, magnitude 8.1 is 31.623 times stronger than magnitude 7.1, and 1,000 times (31.623 times 31.623) stronger than magnitude 6.1.

- The Mercalli Scale measures the intensity, which measures the effects of an earthquake.

- These readings are based on factors such as how people perceive the shaking. The same earthquake will have different intensity readings at different places.

- The effects will depend upon the distance (i.e) the farther one moves away from the epicentre, the less intense the shaking.

Antarctica Glacier

- An iceberg over 250 square kilometres in size, has broken off from an enormous Pine Island glacier in Antarctica.

- It is second such incident in the last two years.

- The Pine Island Glacier is one of the largest in West Antarctica.

- The glacier loses 45 billion tonnes of ice to the ocean each year equivalent to one millimeter of global sea level rise every eight years.

- This may be due to warmer ocean waters reaching the base of the glacier and weakening it.

Hurricane Irma

- Irma is a powerful category 5 Hurricane in the **Atlantic Ocean**.

- It is second major hurricane of the 2017 Atlantic hurricane season after **Hurricane Harvey**.

- It has a maximum sustained wind speed of **160 miles per hour**.

- It made landfall in Cuba's Camaguey Archipelago, caused devastation in Carribean islands and heading towards Florida, US.

- It is the strongest hurricane ever to form in the Atlantic Ocean outside of the Gulf of Mexico and Caribbean Sea.

Measuring height of Mount Everest

- The government of Nepal is finalizing a methodology to measure the height of Mount Everest.

- Already there are three different measures, in which two are determined by Indian survey and one by China.

- In 1856, the Royal Surveyor of India has measured the height as 8,840 metres and again in 1955, an Indian survey measured as 8,848 metres.

- In 2005, China conducted its own survey and came up with a figure that is exactly between the two heights measured by the two Indian surveys.

- China claimed the peak's "rock height" that of naked rock, uncapped by snow is 8,844 m high, or 4 m less than the "snow height".

Sahara Forest Project

- Jordan has launched "Sahara Forest Project" to turn its sand dunes into farming land to produce food using sun and sea water.

- The project is funded by Norway and the European Union.

- It will use solar panels to provide power and include outdoor planting space, two saltwater-cooled greenhouses, a water desalination unit and salt ponds for salt production.

- Jordan is a water poor country that is 90% desert, located on the east bank of Jordan River in West Asia.

- It is bordered by Saudi Arabia to the east and south; Iraq to the north-east; Syria to the north; Israel, Palestine and the **Dead Sea** to the west; and the **Red Sea** in its extreme south-west.

Mount Agung Volcano

- The volcano is located in Bali, Indonesia.

- It is threatening to erupt for the first time since 1963.

- Experts are saying that an eruption by the volcano is imminent. There has been evidence of hundreds of tremor being recorded at the site.

- When it erupted in 1963, global temperatures dropped by between 0.1C and 0.4C.

City of Alexander

- Archaeologists in Iraq have discovered a 2,000 years old city which is thought to have been founded by Alexander the great.

- ***Qalatga Darband***, a fortified settlement in northern Iraq is believed to have been founded in 331 BC after the battle against the Persian king Darius III in Mesopotamia.

Pacific Storm

- The Pacific typhoon "**Doksuri**" is currently racing to the south of Hong Kong for a landfall over Vietnam.

- It is expected to make qualitative change to the Indian Monsoon.

- It will set up a low-pressure area in the Bay of Bengal, which could even grow as a depression, to bring heavy rain initially over East India and later over Central India, West, North-West and South India.

Sardar Sarovar Dam

- Sardar Sarovar Dam, India's largest dam has been inaugurated.

- It is a gravity dam on the Narmada River near Navagam, Gujarat.

- It is the second-biggest concrete gravity dam in the world after the Grand Coulee Dam in the United States.

- The project was conceptualised by Sardar Vallabhai patel in 1946 and Jawaharlal Nehru laid the foundation in 1961.

- The World Bank was initially funding the project, but withdrew in 1994.

- As per the arrangement, the power generated from the dam will be shared among Maharashtra, Madhya Pradesh and Gujarat.

SAUNI Yojana

- Saurashtra Narmada Avataran Irrigation Yojna is a project to divert flood waters of Narmada to Saurashtra region and fill up the reservoirs through giant pipelines.

- There are 4 link canals through which the water is diverted.

- Link I takes water to Jamnagar and Dwarka districts and Link II to Botad, Bhavnagar and Amreli Districts.

- These two pipelines are designed to pump Narmada water in 17 identified dams in the regions such as Krushnasagar dam, Bhimdad dam (Botad), Bhogavo dam etc.

- Recently, President of India laid the foundation stone of SAUNI Phase-II Link-4 canal in Rajkot.

- The project targets to provide irrigation water for 10.22 lakh acres of land in Saurashtra region.

Polavaram Project

- It is a multi-purpose irrigation project in East Godavari District in Andhra Pradesh State.

- The dam across Godavari River is under the construction and it aims to transfer the surplus water from Godavari to Krishna river basin.

- The project is considered as "lifeline of the State" and has been declared as a "**National Project**" under the AP Reorganisation Act, 2014.

- As per the act, the central government shall execute the project and obtain all requisite clearances, including forest, environmental and rehabilitation and resettlement.

- The regulation and development of the project is under the control of Union government and accordingly it constituted the Polavaram Project Authority (PPA) for the purpose.

- Recently, NGT has directed the Environment Ministry and the AP government to examine about huge quantity of waste material being dumped in agricultural lands near Polavaram project.

Rewas Port

- Rewas is one of 48 "minor" ports of Maharashtra located at Rewas Creek, near Karanja creek at mouth of the Patalganga River.

- Mumbai Port Trust, JNPT and Maharashtra Maritime Board will jointly take over the development of Rewas port project.

Lakshadweep Island

- Parali I island, uninhabited and part of Bangaram atoll in Lakshadweep, has vanished due to erosion.

- All the five islets of Bangaram atoll such as Bangaram, Thinnakara, Parali I, II and III, had undergone erosion and Parali I has been inundated.

- Lakshadweep, formerly known as the Laccadive, Minicoy, and Aminidivi Islands is a group of islands in the Laccadive Sea, off the south western coast of India.

- Kavaratti serves as the capital of the Union Territory and the region comes under the jurisdiction of Kerala High Court.

- Nine degree channel separates Laccadive and Minicoy islands.

- The islands form the smallest Union Territory of India.
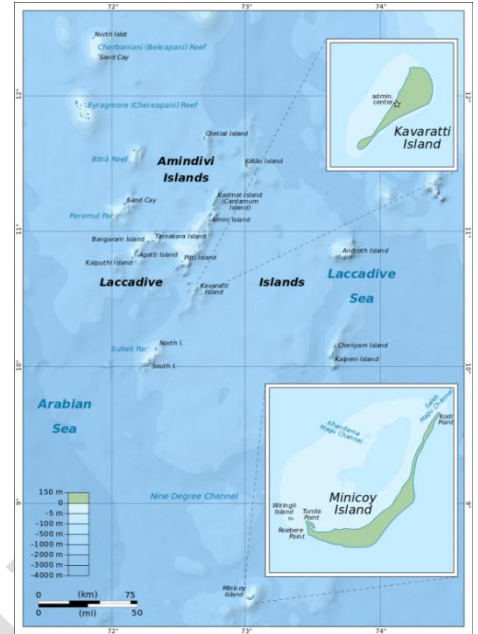
Deendayal Port

- The Kandla Port, one of the top 12 major ports in the country, has been rechristened as Deendayal Port.

- The port is located on the Gulf of Kutch and it is one of major ports on west coast.

- It is the largest port of India by volume of cargo handled.

- Ministry of Shipping in exercise of powers conferred on it under Indian Ports Act, 1908 made this amendment.

Mahamana Express

- The Mahamana Express, superfast series trains between Varanasi and Vadodara was recently inaugurated.

- The name of the train was chosen after the name of Pandit Madan Mohan Malaviya who was popularly known as Mahamana and also the co-founder of the Benaras Hindu University.

- The first Mahamana express was flagged off in 2016 between Varanasi and New Delhi route. It is also in service between Bhopal – Khajuraho route.

Char Dham Highway Project

- National Green Tribunal (NGT) has cleared the proposal for Char Dham Highway project.

- The Char Dham highway development project is an initiative to improve connectivity to the Char Dham pilgrimage centres in the Himalayas i.e Gangotri, Yamunotri, Kedarnath and Badrinath.

- Generally, these four pilgrimages sites in Uttarakhand are known as Chota Char Dham to differentiate them from the bigger circuit of Char Dham sites namely Badrinath, Dwarka, Puri and Rameswaram.

- The project objective is to provide roads with paved shoulders, make provisions for landslide mitigation and other road safety measures, which will provide all weather road connectivity for pilgrims and for movement of defence forces.

POLITY

West Bengal to Bangla

- West Bengal cabinet has approved changing State's name to Bangla.

- The state had earlier proposed that West Bengal be named Bangla in Bengali, Bangal in Hindi and Bengal in English.

- But the Centre rejected the proposal of having 3 names in 3 different languages and state is compelled to have "Bangla" as the new name.

- According to the Indian Constitution, the power of changing the name of the State lies with the Centre.

- The Article 3 of the Constitution deals with the formation of new States and alteration of areas, boundaries or names of existing States.

- It says that Parliament may by law, form a new State by separation of territory from any State or by uniting two or more States or parts of States or by uniting any territory to a part of any State; increase the area of any State; diminish the area of any State; alter the boundaries of any State; alter the name of any State;

CBI and RTI

- Delhi High Court has ruled that CBI is not fully exempted from Right to Information (RTI) act.

- When a RTI activist sought information pertaining to corruption in several top offices from the CBI, it declined to share it.

- The CBI has been denying information citing Section 24 of the RTI Act.

- Section 24 of the act says that provisions of revealing information to the public will not apply to intelligence and security organisations, which include IB, RAW, NIA, CBI and the Enforcement Directorate.

- However, the act clearly states that the information pertaining to the allegations of corruption and human rights violations will not fall under Section 24 of the RTI act.

- The High court has ruled that the allegations of corruption do not attract blanket exemption given to the CBI under Section 24.

- It can be denied only if they fell under Section 8(1) of the RTI Act which gives 10 grounds on which information can be denied.

Citizenship for Chakma and Hajong refugees

- GoI has announced that it will grant citizenship to all chakma and hajong refugees living in the north east.

- The government also ensured that the rights of the indigenous people are not diluted.

- Chakmas and Hajongs were originally residents of Chittagong Hill Tracts of Bangladesh (erstwhile East Pakistan).

- They left their homeland when it was submerged by the Kaptai dam project near Chittagong, Bangladesh, in the 1960s.

- The Chakmas, who are Buddhists, and Hajongs, who are Hindus, also allegedly faced religious persecution and entered India through the then Lushai Hills district of Assam (now Mizoram).

- The Centre moved the majority of them to the North East Frontier Agency, which is now Arunachal Pradesh.

GOVERNMENT INITIATIVES

National Nutrition Week

- The National Nutrition Week was observed throughout the country from 1st to 7th September.

- The basic objective of this annual event is to intensify awareness generation on the importance of nutrition for health.

- The Food and Nutrition Board of Ministry of Women & Child Development will coordinate with concerned Department of the State/UT Governments, National Institutions, NGOs for awareness creation.

Sakhi

- It is a one-stop centre for providing medical, legal and rehabilitation facilities for women subjected to any kind of violence.

- These centres will be established across the country to provide integrated support and assistance under one roof both in private and public spaces in a phased manner.

Homoeopathy Virology Lab

- Union AYUSH minister has inaugurated India's first advanced Homoeopathy Virology lab in Kolkata.

- The laboratory has been established to develop new drugs and technologies in Homoeopathy to combat emerging challenges of viral diseases.

- The laboratory is the only one in India for conducting basic and fundamental research in Homoeopathy for viral diseases like influenza, Japanese encephalitis, dengue, chickunguniya and swine flu.

Business and Climate Summit

- The Business & Climate Summit (BCS) is the leading annual forum for businesses, investors and policymakers on climate action.

- The summit focuses on creating a roadmap for reaching net zero carbon emissions over the next half century.

- It demonstrates how low carbon strategies are good for business and good for growth.

- 3 editions have been organized so far in Paris (2015) and London (2016) and New Delhi (2017).

- The Federation of Indian Chambers of Commerce and Industry (FICCI), India's apex business organisation, was the host of BCS 2017.

SmartE

- The first batch of E-rickshaws under the brand name of "SmartE" was launched in Gurugram by Ministry of Road, Transport and Highways.

- The E-rickshaws have been manufactured in India and are fitted with GPS and tracking system.

- It has established strategic partnerships with the Haryana government and Delhi Metro Rail Corporation to launch 1000 vehicles in Gurugram and Faridabad in 2017.

- It will provide the last mile transport connectivity in the area and meaningful self-employment for marginalised youths in next 4-5 years.

First Hyperloop Transport System

- Hyperloop Transportation Technologies (HTT) has signed an agreement with the Andhra Pradesh government to set up first Hyperloop transport system in India.

- The system will connect the city centres of **Amravati and Vijayawada**.

- The technology uses a high-speed train that promises travel at twice the speed of a commercial aircraft.

- Hyperloop consists of a low pressure tube with capsules that are transported at both low and high speeds throughout the length of the tube.

- The project will be implemented in PPP mode.

Swachhathon 1.0

- Swachhathon 1.0, the first ever Swachh Bharat Hackathon, was organized by the Ministry of Drinking Water and Sanitation.

- It is organised to crowd source solutions to some of the Sanitation and Hygiene challenges faced in various parts of the country.

- It invited innovators from schools and colleges, institutions, start-ups and others to come up with solutions for problems like monitoring usage of toilets, triggering behaviour change, Solution for early decomposition of faecal matter, toilet technologies in difficult terrains etc.

Electric Vehicle Capital of India

- Karnataka wants to become the electric vehicle capital of India.

- Karnataka is the **first state** to roll out an Electric Vehicle and Energy Storage Policy.

- The policy looks not only at boosting sales of EVs, but also setting up charging infrastructure.

- Policy aims to set up EV manufacturing zones along with facilities for testing that can be used even by start-ups.

- The state estimates that it will be able to create employment for 55,000 individuals over the next few years through the EV industry.

New NIRF Exercise

- National Institution Ranking Framework (NIRF) for the year 2018 has been announced by the centre with a change.

- The NIRF ranking was started in 2016, ranks higher educational institutions in India on the basis of a variety of parameters.

- The 2016 and 2017 NIRF lists reflected the ranks of only those institutions that had taken part in the exercise.

- But for 2018, instead of institutions choosing to take part in the exercise, they are being auto-registered through a large online database.

- The All-India Survey on Higher Education (AISHE) portal of institutions available with the Ministry of Human Resource Development will be used for auto registration of institutions.

- With this initiative, the number of institutions for NIRF is expected to raise three fold from previous year rankings.

- Last year ranking, among universities, Indian Institute of Science in Bangalore was ranked first and Jawaharlal Nehru University in Delhi was second.

FCRA licence

- Recently, the Home Ministry has cancelled the FCRA licences of the Delhi University, JNU and IIT Delhi, for failing to file annual returns for five consecutive years.

- Union HRD Ministry clarified that the institutions created through an Act of Parliament do not need an FCRA licence to receive foreign funds.

- Such institutions are exempted from filing returns as they are covered under the annual government audit.

Institute of National Importance (INI)

- INI is a status conferred to a premier public higher education institution in India by an **Act of Parliament**.

- It is conferred on an institution which "serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state".

- INIs receive special recognition and funding.

- All IITs, NITs, AIIMS', School of Planning and Architecture and Indian Institutes of Science Education and Research are considered Institutes of National Importance.

Operation Sadbhavana and Operation Samaritan

- These operations are carried out by Indian Army in Jammu & Kashmir and North East states respectively.

- Under this, army undertakes various civic action programmes which aimed at winning hearts of the people and integration of the people with the nation.

- Under operation sadbhavana, recently army sponsored educational and national integration tour for Jammu and Kashmir youths.

Kaushal Panjee

- Ministry of Rural Development has launched a mobilization platform 'Kaushal Panjee' (Skill Register).

- The skill register aims to be citizen centric end-to-end solution to aid mobilization of candidates for Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) and Rural Self Employment Training Institutes (RSETI).

- It facilitates mobilization through Self Help Group members, Gram Panchayat Functionaries, Block Officials, CSCs and directly by the candidate.

- RSETIs and DDU-GKY Partners can access the Kaushal Panjee to connect with the mobilized rural youth.

- Kaushal Panjee is connected to the Social Economic Caste Census 2011 which will help the States plan and target their mobilizations based on the socio-economic profile of households in their State.

Portal PENCIL

- PENCIL (Platform for Effective Enforcement for No Child Labour) is an electronic platform for no child labour developed by the Labour Ministry.
- The portal creates a robust implementing and monitoring mechanism for enforcement of the legislative provisions of National Child Labour Policy (NCLP).
- Since the subject of **labour is in the concurrent list**, the enforcement of the policy depends on respective state governments.
- This online portal aims to connect the Centre to the state government, district and to all project societies for effective implementation of NCLP.
- The portal has a component of child tracking system.

Global Entrepreneurship Summit, 2017

- NITI Aayog, in partnership with the US administration, will host the eighth annual Global Entrepreneurship Summit in Hyderabad.
- This is the first time the Global Entrepreneurship Summit is being held in South Asia
- The theme for this year's summit -- Women First, Prosperity for All -- will celebrate entrepreneurship in all its strength, diversity and entirety.
- It will empower Indian entrepreneurs to build partnerships and helps secure funding.
- The four primary focus areas are health care and life sciences, digital economy and financial technology, energy and infrastructure, and media and entertainment.

Jan Sampark

- It is a monthly programme to facilitate adoption, organized by the Ministry of Women and Child Development (MoWCD).
- The Central Adoption Resource Authority (CARA) under MoWCD is the nodal authority.
- The first of its kind programme was held recently in New Delhi.
- The Programme enables the public to have interaction with its officials and staff for seeking information related to Adoption.

Divyang Sarathi

- It is the mobile application, developed for accessible and easy information dissemination to 'divyangjans'
- It is an integral part of the ICT component of the **Accessible India Campaign** launched by the Ministry of Social Justice and Empowerment.
- The unique features is its audio notes (text-to-voice conversion software) which converts the written information into an audio file as well as the adjustable font size which can be altered as per the user's requirement.

Smart Agriculture Conclave

- The conclave is organised by **Department of Biotechnology** under the Ministry of Science and Technology in partnership with UK research councils.
- The objective of this conclave is to set the stage for "Farmer Zone".
- It is a collective open-source data platform for smart agriculture which will use biological research and data that will be beneficial for small and marginal farmers.
- It helps in dealing with climate change, weather predictions, soil, water and seed requirements, and providing market intelligence.

Coastal Shipping and Inland Water Transportation Summit

- Kochi will host the fifth edition of the 'Coastal Shipping and Inland Water Transportation Business Summit 2017'.
- The summit will be an initiative to explore the immense potential of coastal shipping and waterways.

Zero Hunger Programme

- On the occasion of world food day (October 16), three districts in India will initiate India's ambitious 'Zero Hunger' programme through interventions in farm sector.

- The three districts are Gorakhpur in Uttar Pradesh, Koraput in Odisha and Thane in Maharashtra.

- It is a dedicated farm-based programme in sync with India's Sustainable Development Goals (SDGs) to end hunger by 2030.

- It will be initiated by the Indian Council of Agricultural Research (ICAR) in association with the Indian Council of Medical Research (ICMR), the M S Swaminathan Research Foundation and the Biotechnology Industry Research Assistance Council (BIRAC).

- These three districts would act as a model of an integrated approach adopting suitable agricultural/horticultural practices.

- The programme consists of organisations of farming system for nutrition, setting up genetic gardens and initiation of 'Zero Hunger' training.

- A **genetic garden** for biofortified plants/crops contains the germplasm of naturally biofortified crops or such crops through plant breeding.

- It has plants and crops that help supplement micro-nutrient deficiencies, including iron, iodine, vitamin A and zinc among others.

SATH

- Sustainable Action for Transforming Human Capital (SATH) is a joint initiative of **Government of Assam and NITI Aayog.**

- It aims to provide support to Assam in identifying key health priorities and implement the solutions towards transforming the health.

- The workshop brings experts from development organizations such as World Bank, World Health Organization, UNDP, UNICEF.

VASTRA 2017

- VASTRA 2017 is an international textiles and apparel fair organized by the Union Minister of Textiles in Jaipur.

- The international fair was started in 2012 and it is considered as the place for disseminating technology in textile sector.

Deendayal Hastkala Sankul

- It is a trade facilitation centre for handicrafts located in Varanasi.

- The centre would help the artisans and weavers showcase their skills to the world, and facilitate a brighter future for them.

- It will facilitate the weavers/artisans/exporters in promotion of handlooms/handicrafts in both domestic and international markets.

- It will preserve the traditional handloom and handicrafts products of Varanasi which will boost the tourist potential of Varanasi.

Incredible India 2.0 Campaign

- President of India launched Incredible India 2.0 campaign and "Adopt a Heritage" project on the occasion of World Tourism Day.

- The campaign will focus on developing at least 10 cities where the spirituality quotient, medical and wellness potential will be promoted.

- At present cities from **UP** — Ayodhya, Agra, Mathura, Varanasi-Sarnath, and Gorakhpur, **Haryana** - Kurukshetra, **Assam** - Guwahati, and **Tamil Nadu** - Kanyakumari have been identified for developing tourist circuits.

- The tourism ministry has set itself a target of completing this exercise of developing cities by October 2018.

- "Adopt a Heritage" project entails encouraging students, public sector and private organisations to participate more actively in the maintenance of Indian heritage.

GOVERNMENT SCHEMES

Khelo India

- The Cabinet committee on economic affairs has approved the revamp of the Khelo India.

- It is a National Programme for Development of Sports, which aims to enable a pathway from schools to Olympics.

- Earlier the initiative focussed on infrastructure development, it will ensure all-round growth in its revamped form.

- Each athlete selected under the new scheme will get a scholarship of Rs. 5 lakh per annum for eight years.

- The government also aims to set up 20 universities across the country as hubs of sporting excellence.

Pt. Deen Dayal Upadhayay Vigyan Gram Sankul Pariyojana

- The scheme aims to formulate and implement appropriate S&T interventions for sustainable development through cluster approach.

- It is implemented by Department of Science and Technology (DST) in few clusters of villages in Uttarakhand.

Young Entrepreneurs of TRIFED (YET)

- Young Entrepreneur Development Programme of TRIFED plans to expand sale operations by empanelling young sales men/women.

- These sales people will undertake house to house campaign for sale of tribal products.

- They will be paid a commission of 10% on net sales.

- By this revamped plan every tribal products will have a Tribal Craft Mark in form of hologram/ label/tag for its genuineness and authenticity.

TRIFED

- It is a PSU under Ministry of Tribal Affairs.

- Its objective is to promote tribal art and craft for the benefit of tribal artisans of the country

- It works on the scheme Institutional Support for Development & Marketing of tribal products/produce.

Pradhan Mantri Sahaj Bijli Har Ghar Yojana

- The Scheme, also known as Saubhagya aims to provide last mile electrical connectivity to all rural and urban households.

- It will provide subsidy on equipment like transformers, meters and wires.

- The government has set the target of providing 24X7 power for all by 2019.

LPG Panchayat

- Union Petroleum Ministry has launched LPG Panchayat, aimed at encouraging rural communities to turn to clean fuel.

- The **first LPG Panchayat** was held in **Gandhinagar**, which brings LPG users of a village and officials of fuel companies together.

- It created an interactive platform to discuss safe and sustainable usage of LPG, its benefits and linkages between using clean fuel and empowering women.

Soil Quality Scheme

- Government aims to analyse the soil quality of farms through Hyper Spectral Imaging (HSI) technique developed by IIT Bombay.

- HSI means analysing extremely detailed images of an object, to the scale of nanometres and then reconstructing its constituent elements.

- The technique can picture the nutrient balance of a patch of land without necessarily collecting soil sample.

- Thus Satellite-images, images from low lying drones can be used to calculate the proportion of nitrogen, potassium and phosphorous as well as other minerals in the soil.

Vishwajeet Scheme

- Vishwajeet scheme aimed to help top IITs to get top league in global rankings.

- It had the provision of funding to top seven IITs over a period of five years to upgrade infrastructure, hire foreign faculty and collaborate with foreign institutions.

- Recently, the scheme was scrapped by Union Finance Minsitry.

- However, Union HRD ministry has introduced "Higher Education Finance Agency (HEFA)" to provide support to universities for creating the research infrastructure.

UJALA Scheme in Malaysia

- Government of India has launched Ministry of Power flagship scheme UJALA (Unnat Jyoti by Affordable Lighting for All) in the State of Melaka, Malaysia.

- The successful Indian model of UJALA scheme has become a sought-after example for the different nations of the world.

- Under this, Energy Efficiency Services Limited (EESL) plans to distribute about 1 million LED bulbs, which will replace CFLs.

- The initiative will have the logistical assistance and facilitation support from **Green Growth Asia**, which is a not for profit organization.

- The price of each bulb will be way lesser than global average price of the LED bulb.

UDAAN

- The Cabinet Committee on Economic Affairs has approved the proposal of the Ministry of Home Affairs for extension of time period of Udaan Scheme till 31st December, 2018.

- It is a national integration scheme with the goal to mainstream J&K youth with rest of the country.

- It provides exposure to the youth of J&K to corporate India along with skill enhancement and job opportunities.

- Leading Corporate have partnered with National Skill Development Corporation (NSDC) under UDAAN.

- Initially the time period of Udaan was upto 2016-17.

BILATERAL AND INTERNATIONAL INSTITUTIONS & ISSUES

Open Skies Agreement

- The national civil aviation policy of 2016 allows countries covered under such agreements an unlimited number of flights to the six metro airports in Delhi, Mumbai, Hyderabad, Kolkata, Bengaluru and Chennai.

- Recently, India has finalised an Open Skies Agreement with Japan, allowing designated airlines of both signatory countries to operate freely.

- In 2003, India had signed an open skies agreement with the 10-member ASEAN.

- India had signed the agreement with US (2005), Jamaica, Guyana, Czech Republic, Finland, Spain, Sri Lanka (2016) and with Greece (2017).

Surya Kiran

- India and Nepal began their 12th edition of joint military exercise with around 300 troops each side in Rupandehi district in the western part of Nepal.

- It focuses on counter-terrorism and forest fighting operations.

- According to the Indian Army officials, the Surya Kiran is the largest joint exercise in terms of troop participation.

- Disaster management and joint operations for disaster relief will also be a part of the exercise.

- Surya Kiran series of exercises are held alternately in India and Nepal.

Karnataka−Finland Innovation Corridor

- Karnataka Department of Information Technology (IT) entered into a MoU with Finland to establish Karnataka- Finland Innovation corridor.

- The corridor offers a virtual platform facilitating the exchange of information and expertise in the fields of science, research, innovation and skill development.

- It envisions organising joint projects, such as start-up incubation programmes, research programmes, events, competitions and exposure visits.

India − EFTA pact

- Switzerland is pressing for early Free Trade Agreement (FTA) between India and European Free Trade Association (EFTA).

- The agreement is expected to promote economic ties between the countries.

- EFTA comprises of Switzerland, Norway, Iceland and Liechtenstein.

- It is officially negotiating a free trade pact known as Trade and Economic Partnership Agreement (TEPA), with India since October 2008.

- Under an FTA, trading partners give market access to each other with a view to promoting bilateral trade in goods and services, besides investments.

International Law Meet

- The International Institute of Law was founded in 1873 in Belgium by international lawyers.

- The institute selects 132 lawyers from different countries to act independently towards international legal measures.

- Recently, its 78th session of global level meeting was held in India.

- It's the **first time** that **India is hosting** this global legal meeting.

- Some of the topics discussed at the session were judicial review of the decisions of the U.N. Security Council, the legal issues concerning international migration and international investment disputes.

- The institute was awarded the Nobel Peace Prize in 1904 for its efforts to promote settlement of disputes among States through peaceful means.

International Solar Alliance Framework Pact

- The ISA was instituted to connect 121 solar-resource-rich nations for research, low-cost financing and rapid deployment of clean energy.

- ISA needs ratification of its framework agreement by 15 member countries to be recognised as inter-governmental and multilateral agency under the United Nations charter.

- Recently, Seychelles became the 9th member to ratify the framework agreement.

- Till now India, France, Nauru, Niger, Fiji, Mauritius, Tuvalu and Bangladesh have ratified the agreement.

- The first 15 countries who ratified the agreement would then be founding members of ISA.

- Some of the countries which are signatory but yet to ratify includes Australia, Brazil, Cambodia, Peru, Benin, Burkina Faso, Democratic Republic of Congo, Comoros, Djibouti, Dominican Republic and Ethiopia.

- Recently, Costa Rica became the 39th signatory to the framework agreement and it is expected that these countries will ratify the agreement.

World University Rankings 2018

- The Times Higher Education "World University Rankings 2018" list the top 1,000 universities in the world.

- It is the only global university performance table to judge research-intensive universities across all of their core missions: teaching, research, knowledge transfer and international outlook.

- The ranking is topped by University of Oxford, UK followed by University of Cambridge, UK.

- 42 Indian institutions figure in this year's list. But the highest ranked, the Indian Institute of Science, Bengaluru, weighs in only in the 251-300 range.

- Overall, European institutions occupy half of the top 200 places, with the Netherlands, Germany and UK as the most-represented countries.

- Asia's top university, the National University of Singapore, has ranked in 22nd place.

Worldwide		India	
Rank	Name	Rank*	Name
1	University of Oxford, UK	251–300	Indian Institute of Science, Bangalore
2	University of Cambridge, UK	351–400	Indian Institute of Technology, Bombay
3	California Institute of Technology, US	501–600	Indian Institute of Technology, Delhi
3	Stanford University, United States	501–600	Indian Institute of Technology, Kanpur
5	Massachusetts Institute of Technology, US	501–600	Indian Institute of Technology, Kharagpur
6	Harvard University, US	501–600	Indian Institute of Technology, Roorkee
7	Princeton University, US	601–800	Aligarh Muslim University
8	Imperial College London, UK	601–800	Banaras Hindu University
9	University of Chicago, US	601–800	University of Delhi
10	ETH Zurich – Swiss Federal Institute of Technology, Zurich, Switzerland	601–800	Indian Institute of Technology, Guwahati
10	University of Pennsylvania, US	*Ranked within this range	

International Literacy Day

- International Literacy Day is celebrated on 8th September every year by UNESCO.

- This day marks the meeting of the world congress of Ministers of Education in Tehran for the first time in 1965 to discuss the programme of education at the international level.

- The UNESCO in its 14th Session in November, 1966, declared 8th September as the International Literacy Day.

- The theme of this year is `**Literacy in a digital world'**.

World Travel and Tourism Council (WTTC)

- WTTC, a forum for the travel and tourism industry, is made up of members from the global business community and works with governments to raise awareness about the industry.

- It is headquartered in London and it organises global summit every year.

- It is known for being the only forum to represent the private sector in all parts of the travel and tourism industry worldwide.

- It publishes research in conjunction with Oxford Economics on the economic and social impact of the industry.

- In its recent report on the Caribbean region, it states that the hurricanes Irma and Maria which struck Dominica, Puerto Rico has caused widespread devastation in its tourism potential.

- In the Caribbean region, travel and tourism account for a higher share of the GDP than in any other region of the world.

ECONOMY

Platform for Block Chain Technology

- The Institute for Development and Research in Banking Technology (IDRBT), an arm of the Reserve Bank of India, is developing a model platform for Block Chain technology.

- A Block chain is a public distributed ledger or decentralised database that keeps records of digital transactions.

- It is seen as the main technological innovation of bitcoin, since it stands as proof of all the transactions on the network.

- Each node (computer) connected to the bitcoin network using a client gets a copy of the database, which gets downloaded automatically upon joining the bitcoin network and and shared by all nodes.

- It removes the need for a third-party by directly connecting the customers and suppliers on the same platform.

Sunrise Industry

- Sunrise Industry is a colloquial term for a sector or business that is in its early stage, but is growing at a rapid pace and expected to become important in the future.

- It is often characterized by a high degree of innovation, and its rapid emergence may threaten the competing industry to decline state.

- Usually dynamic sectors such as technology related industries are considered as sunrise industries. E.g. Telecom industry in the mid 1990's

- The Confederation of Indian Industry (CII) wants sunrise sector status accorded to energy efficiency industries.

Initial Coin Offering

- China has recently banned individuals and organisations from raising funds through initial coin offerings (ICO) saying the practice constituted illegal fund-raising.

- ICO is an unregulated means of crowd funding for a project via use of Cryptocurrency.

- The right of ownership or royalties of a project is offered to investors in the form of digital coins in exchange for legal tender or other cryptocurrencies (usually bitcoin).

- The value of the coin will appreciate if the business is successful.

- Presently, there is no regulator for this kind of crowd sourcing.

ICEX

- The Indian Commodity Exchange (ICEX) launched the world's first diamond futures contracts to provide exporters with a hedging tool.

- Diamond was notified as a commodity for derivatives trading on online exchanges.

- Indian Commodity Exchange Limited is a screen based on-line derivatives exchange for commodities and has established a reliable, time tested, and a transparent trading platform.

- It has set up process by putting in place grading and vaulting facilities in order to facilitate deliveries.

- Major shareholders are Reliance Exchangenext Ltd, Indiabulls Financial Services Ltd., Indian Potash and IDFC Bank.

Peer-to-Peer Lending

- RBI has announced that Peer-to-peer lending (P2P) platforms will be treated as non-banking financial companies (NBFC) and will be regulated by it.

- P2P lending is a form of crowd funding used to raise loans in an online platform which are paid back with interest.

- Individuals or businesses can borrow money using an online platform which matches the lenders with borrowers.

- P2P lending platforms are largely technology companies registered under the Companies Act that act as aggregators for lenders and borrowers.

- The interest rate may be set by the platform or by mutual agreement between the borrower and the lender.

Economic Advisory Council

- Government has set up a five member economic advisory council headed by Niti Aayog member Bibek Debroy.

- The council would address issues of macroeconomic importance and present views to the Prime Minister.

- The body, which is an independent council, can take up the issues suo motu or on reference from the Prime Minister.
- Ratan Watal, Principal Advisor of NITI Aayog, will be the Member Secretary to the Council.

5G 2020 Forum

- Government has constituted High Level 5G India 2020 Forum with Secretaries of Ministries of Telecom, Information Technology and Science and Technology.
- The primary goal of the forum is to achieve early deployment of 5G in India.
- It aims to strengthen domestic telecommunication equipment manufacturing and promote manufacturing ecosystem targeting 50% of India market and 10% of global market over next 5 to 7 years.
- Under the 5G technology, the government aims to deliver about 10,000 megabit per second (10 gbps) in urban areas and 1 gbps in rural areas.
- The International Telecommunication Union (ITU) will finalise the standards of 5G technology.

International Financial Service Centre (IFSC)

- The RBI had recommended to the finance ministry to consider one common regulator to issue approvals required for doing business in the IFSC.
- The country's first International Financial Services Centre (IFSC) is located at the Gujarat International Finance Tec-City (GIFT), Gandhinagar.
- The proposed name for the regulator is the GIFT Financial Sector Regulatory Authority, which will have all the powers to regulate Banking, Insurance and Capital Markets in IFSC.
- RBI also highlighted the model of successful Asian IFSCs such as Hong Kong, Dubai, and Singapore having unified regulator.
- Special Economic Zones Act, 2005 provides for the setting up of an International Financial Services Centre (IFSC) in a Special Economic Zone (SEZ).
- Businesses setup in IFSC comes under guidelines and regulations of Ministry of Corporate Affairs, RBI, SEBI and IRDAI.

Information Utility

- India's first Information Utility (IU) under the Insolvency and Bankruptcy Code (IBC) was launched recently.
- The IBC regulator Insolvency and Bankruptcy Board of India (IBBC) granted the National e-Governance Services Ltd (NeSL) renewal registration for Information Utility till 2022.
- IU will serve as a store of information on all financial transactions of lenders and authenticated by borrowers and creditors.
- It store details of borrowers, defaults and security interest with safeguards.

Rajaswa Gyan Sangam

- It is a joint annual conference of the Central Board of Direct Taxes (CBDT) and the Central Board of Excise & Customs (CBEC).
- The first such joint conference of CBDT and CBEC was held in 2016.
- This year, for the first time, senior officers of the finance department of the States and the Union Territories will be attending the conference.
- The objective is to enable a two-way communication between the policy-makers and the senior officers in the field offices.

BRICS Interbank Cooperation Mechanism

- Union Cabinet has given its approval to EXIM Bank for signing Interbank Local Currency Credit Line Agreement.
- With this agreement, the bank can now enter into bilateral agreement for co-financing with large developmental institutions to ensure **lending in single currency**.

- Bank also signed MoU related to credit ratings, which would enable sharing of credit ratings amongst BRICS member banks.

- The agreement and the MoU have been highlighted in the BRICS leaders **Xiamen Declaration** adopted in BRICS summit, 2017.

India Mobile Congress

- The first ever mobile, internet and technology event – India Mobile Congress 2017, was recently organised.

- It is organised by the Cellular Operators Association of India (COAI), the industry association of mobile and telecom operators and internet firms.

- Department of Telecommunication is the nodal ministry.

- The event is seen as a true example of a public- private collaboration where the government and the industry have put together a world class event in India.

ENVIRONMENT

Mukundra Hills Tiger Reserve

- NTCA has given nod for shifting tigers from Ranthambhore National Park to Mukundara Hills tiger reserve.

- The Mukundara Hills, located in the south-eastern Rajasthan, is the third notified tiger habitat in the State, after Ranthambhore and Sariska.

- It was established in 2013 to cater to the spill over tiger population from Ranthambhore.

- The reserve covers the existing Darrah, Chambal and Jawahar Sagar wildlife sanctuary.


Prakriti Khoj

- It is an environment awareness initiative by the Union Ministry of Environment.

- The objective is to reach out to young minds to trigger their sensitivity towards environment protection and conservation.

- Schools under the National Green Corps (NGC) programme will get an opportunity to participate in the national level environmental quiz competition under this intitiative.

- NGC was initiated by Environment Ministry in 2001-02 for creating environmental awareness among children by formulating "Eco-clubs" in schools across the country.

B4 boat labs

- 'B4' – the 'Brahmaputra Biodiversity and Biology Boat', was launched to to safeguard the Asia's largest riverine island - Majuli island.

- The research will be carried out on floating 'B4' boat labs along the Brahmaputra River to study the changes caused by dams, climate change, human interventions and the eventual effects it has on the river eco-system.

- Majuli is the first island district of the country and also known for being the seat of Assam's Vaishnava monasteries.

Forest Plus Programme

- Forest Plus, also known as Land Use Science is a joint programme by the United States Agency for International Development (USAID) and Ministry of Environment, Forest and Climate Change (MoEF&CC).

- It aims to strengthen capacity for REDD (Reducing Emissions from Deforestation and Forest Degradation) implementation in India.

- It brings together experts to develop technologies, tools and methods of forest management to meet the technical challenges of managing forests for the health of ecosystem, carbon stocks, biodiversity and livelihood.
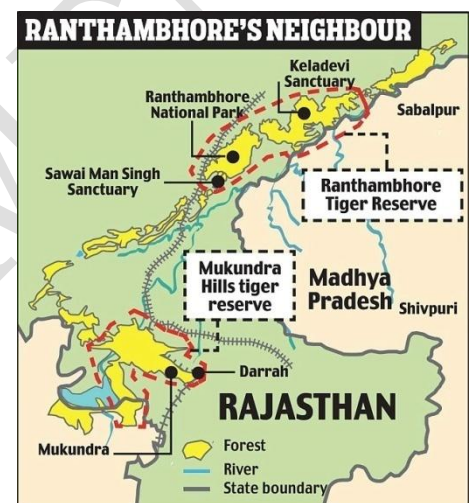
Chromium VI

- Researchers from CSIR have developed a new method to remove hexavalent chromium (Cr (VI)) from industrial effluents.

- They have used the heat-dried fungal biomass which converts Cr (VI) to a tri-valent form of chromium.

- Chromium VI is neurotoxic, genotoxic and a carcinogen whereas Chromium trivalent is a non-toxic.

- Cr VI is found in high concentration in tannery waste which is slightly alkaline in nature.

- The positively charged heat dried biomass binds to Cr VI and adsorb the negatively charged Cr VI and other toxic metals such as lead, arsenic which are normally found in tannery waste.

Mouse Deer

- The Telangana State Forest Department re-introduced the 'mouse deer' into the forests of Nallamalla in **Amrabad Tiger Reserve.**

- Mouse deer, also called as 'spotted Chevrotain' are nocturnal species.

- It is one of the endangered species usually found in deciduous and evergreen forests of the country.

- Because of their small size they are called 'smallest ungulates'.

Monitor Lizard

- India is home to four varieties of monitor lizard - Agra, Yellow, Water, and Large Bengal.

- Monitor Lizards are protected under **Schedule 1 of the Wildlife Protection Act, 1972**.

- They share their Schedule 1 status with tigers, rhinos, elephants and leopards, and hunting or harming them can attract jail terms of at least 3-7 years;

- Their trade is restricted under Appendix 1 of the Convention on International Trade in Endangered Species (CITES).

- The male reproductive organs of monitor lizards are traded in the name of "Hatha Jodi", which is claimed to possess magical powers that ensure prosperity for its owner.

New species in Western Ghats

- Scientists have described a new species of non-venomous **endemic snake "Aquatic Rhabdops"** from the Western Ghats.

- It is 3 foot long nocturnal snake hunts for prey underwater.

- The new species is named after its aquatic nature since the adults are mostly associated with freshwater forest streams.

- All Rhabdops snakes are endemic to India.

- The Aquatic Rhabdops is found only in the laterite plateaus of the Northern Western Ghats in Goa, Southern Maharashtra and Northern Karnataka.

Gharial Exchange Programme

- Bangladesh Forest Department and IUCN have piloted the first ever gharial exchange programme to initiate the captive breeding of the species in Bangladesh.

- The gharial is a crocodilian of the family Gavialidae, native to the northern part of the Indian Subcontinent.

- It is listed as "Critically Endangered" in the IUCN red list.

- The gharial is one of three crocodilians native to India, the other two being the mugger crocodile and the saltwater crocodile.

SCIENCE AND TECHNOLOGY

Space

Water on Exoplanets

- Recent evidence from NASA's Hubble space telescope revealed that earth sized exoplanets in the Trappist-1 system may contain water.

- TRAPPIST-1 is a system of seven Earth-size planets orbiting an ultra-cool dwarf star about 40 light-years away.

- This is by far the largest collection of Earth-like planets in the habitable 'Goldilocks' zone of a star.

- Goldilocks represents a zone which is neither too close nor too far from a star, which raises the possibility of liquid water being present on the surface.

- Three of the planets in the system are within the habitable zone, which strengthens the possibility that they may be habitable.

Pluto Mountains

- Two mountain ranges on Pluto have been named after Tenzing Norgay and Edmund Hillary respectively by the International Astronomical Union (IAU).

- These are the first geological features on the planet to be named following the close flyby by the New Horizons spacecraft in July 2015.

- IAU has officially approved the naming of 14 features on the dwarf planet for the first time.

- IAU is the internationally recognised authority for naming celestial bodies and their surface features.

- Tenzing Norgay and Sir Edmund Hillary were the first to reach the summit of Mount Everest and return safely.

Cassini Space Craft

- After 20 years in Space, NASA's Cassini Spacecraft has made its final death plunge in Saturn recently.

- It is a well planned demise to prevent any damage to Saturn's ocean bearing moons Titan and Enceladus.

- Cassini was launched from Cape Canaveral, Florida in 1997 and it arrived in Saturn in 2004.

- It is a joint NASA-European space agency mission.

- It is the fourth space probe to visit Saturn (pioneer 11, Voyager1, Voyager 2) and the first to enter orbit.

- Its design includes a Saturn Orbiter and a Lander called "Huygens" for the moon Titan.

- The European Huygens landed on Saturn's big moon Titan in 2005.

- This was the first landing ever accomplished in the outer solar system.

Fourth Gravitational Wave

- A fourth gravitational wave has been detected with help from Italy-based equipment Virgo detector.

- The latest space-time ripples were detected two giant black holes about 1.8 billion light-years away.

- The Virgo detector is an underground L-shaped instrument that tracks gravitational waves using the physics of laser light and space.

- The underground stations are known as interferometers, do not rely on light in the sky, but instead sense vibrations in space created by a gravitational wave.

- Previously, gravitational waves have been found using two U.S.-based detectors known as the Laser Interferometer Gravitational-Wave Observatory (LIGO).

Black Planet

- Astronomers have discovered a black planet using hubble space telescope.

- It is formally called as WASP-12b, an exoplanet that reflects almost no light, making it appear essentially pitch black.

- It orbits its parent star WASP-12A, about 1400 light year away.

- Its albedo is 0.064, whereas the albedo of earth is 0.3 and moon is 0.12.

- It is categorized as a hot Jupiter since its radius almost twice that of Jupiter and a year of just over one Earth day.

- Albedo – Fraction of light falling on a surface that is reflected.

- Exoplanet – A Planet that orbits a star other than a sun.

Lunar Station

- Russia and the United States agreed to co-operate on a NASA-led project to build the first lunar space station.

- The project envisages building a crew-tended spaceport in lunar orbit that would serve as a gateway to deep space and the lunar space.

DEFENCE

Anti-Tank Missile

- India's indigenously developed 3rd generation Anti Tank Guided Missile (ATGM), NAG has been successfully flight tested twice by DRDO.

- NAG, also known as Prospina, is a guided missile primarily designed to hit and destroy heavily armored military vehicles.

- India is looking to purchase 4th generation Anti Tank missile named Spike Missile from Israel.

Trawl System

- DRDO has recently undertaken the indigenous development of Trawl System.

- Trawl System is employed for breaching of land mines and creating a vehicle safe lane, for the advancement of mechanized forces in combat zone.

- The indigenous development is an important step towards achieving self-reliance in area of critical military equipment under 'Make in India' initiative.

Pralay Sahayam

- Ministry of Defence hosted a multi-agency exercise "Pralay Sahayam" on the banks of Hussain Sagar Lake in Hyderabad.

- The event demonstrated efforts of all central and state agencies, NDRF and the Armed Forces towards jointly tackling an urban flooding scenario in Hyderabad.

INS Tarasa

- INS Tarasa, a Water Jet Fast Attack Craft was commissioned into the Indian Navy.

- It is primarily designed for extended coastal and offshore surveillance and patrolling.

Exercise Yudh Abhyas – 2017

- It is a joint military training, being conducted at Joint Base Lewis McChord, Washington, USA between India and USA, as part of the ongoing defence cooperation.

- It is one of the largest joint running military training and defence corporation endeavors between India and USA.

- It will provide an opportunity to the armed forces of both countries to train in an integrated manner at Battalion level with joint planning at Brigade level.

- Multiple scenarios will be rehearsed with a view to understand each-other's organisational structure and battle procedures.

- Experts from both sides will also hold expert academic and military discussions to share each other's experiences on varied topics for mutual benefit.

Operation Insaaniyat

- The operation is carried out by Indian Government providing humanitarian assistance to Bangladesh on account of influx of refugees from Myanmar.

- As part of this operation, the Indian Air Force was tasked to airlift the relief material from India to Bangladesh.

ATAGS

- Advanced Towed Artillery Gun System (ATAGS) is a indigenous artillery gun which has set a new world record in range by hitting targets at a distance of 48 km.

- It is being jointly developed by the DRDO and the private sector.
- The development is being done through a consortium based model, similar to that adopted for the pinaka multi-barrel rocket launch system.
- The Army has not inducted any new artillery gun since the Bofors in the 1980's.
- Last year, India signed a contract for 145 M-777 Ultra-Light Howitzers from the US.

SCIENCE

Molecular robot

- Recently scientists have created the world's first 'molecular robot' millionth of a millimetre in size.
- To put that size into context, a billion of these robots piled on top of each other would still only be the same size as a single grain of salt.
- These tiny robots can be programmed to move and build molecular cargo using a tiny robotic arm.
- It can be used to build molecules and may help discover novel drugs.

Kinome

- It is the complete set of protein kinases that make up the genome of an organism.
- A protein kinase is an enzyme that modifies other proteins by chemically adding phosphate groups to them.
- It constitutes 2% of all human genes and 30% of all human proteins are modified by kinase activity.

Bio film

- Bio films are communities of microorganisms that attach to each other and to surfaces.
- They are able to act as barriers to antibiotics.
- During times of hostile conditions, such as increased temperature and presence of antibiotics, bacteria tend to come together and form a bio film to protect them.
- The stress response pathway is crucial for bacteria to survive during hostile conditions.
- Scientists have recently found two new molecules capable of destroying bio film forming bacteria.
- When the molecules combined with antibiotics, it showed efficacy in treating infections caused by multi-drug resistant pathogens.

INDEX AND REPORT

Trade & Development report 2017

- Trade & Development report 2017 was recently released by United Nation Conference on Trade and Development (**UNCTAD**).
- In its recent report titled 'Beyond austerity — towards a global new deal', it states that India, China unlikely to be 'growth poles' for global economy.
- The report pegs India's rate at 6.7% in 2017, down from 7% in 2016.
- It pointed out that effects of demonetisation and rollout of the Goods & Services Tax regime on the informal sector and reduction in pace of credit creation may affect India's growth prospects.

UNCTAD

- UNCTAD is a permanent intergovernmental body established by the United Nations General Assembly in 1964.
- It is headquartered in Geneva, Switzerland and part of the UN Secretariat.
- It is also a part of the United Nations Development Group (UNDG).
- It was formed specifically to handle the problems of developing countries dealing with trade, investment and development issues.
- **Other reports published by UNCTAD** – World Investment Report, The Least Developed Countries Report, Information and Economy Report, Technology and Innovation Report and Commodities and Development Report.

Global Competitiveness Index

- India has been ranked the 40th most competitive economy on the **World Economic Forum's** global competitiveness index.

- On the list of 137 economies, Switzerland emerged on top followed by the US and Singapore.

- India has slipped from the 39th position to 40th.

- Among the BRICS, China (27th rank) and Russia (38th rank) are placed above India.

- According to the report, India's performance improved in infrastructure, higher education and training, technological readiness and ICT indicators.

- A big concern for India is the gap between innovative strength (29th rank) and technological readiness (107th rank).