

CURRENT AFFAIRS

**Month of
March-2018**



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1ST WEEK OF MARCH

POLITY, GOVERNANCE AND PUBLIC POLICY

Ruling on LAAR Act

In News: Supreme Court has appointed a constitutional bench to rule on LARR Act
LAA act of 1894

- **Land Acquisition Act of 1894** had codified powers of eminent domain, where Landowners were placed at the state's mercy.
- Under this Government was accorded vast discretion to expropriate land for supposed public use.
- Requirements of due process were scant, and the amount of money paid in return for land was often inadequate.

LARR act of 2013

- Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR Act), replaced the LAA of 1894.
- This act provides number of safeguards for the process of acquisition manifestly fairer.
- It compels a social and environmental impact assessment as a precondition for any acquisition.
- It also acknowledges a need for a system of rehabilitation and resettlement for those whose livelihoods are likely to be affected by the transfer of land.
- These protections intend to alter the traditional relationship between the state and the citizen, allowing communal benefit to occasionally trump interests of pure capital.

Compensation Mechanism of LAAR 2013

- LAAR 2013 determined the compensation payable to a landowner from whom land had been taken prior to the year 2009.
- In such cases, the state ought to have not only taken possession of the land but also paid the amounts determined as due, failing which the entire proceedings will lapse.
- This means that even where the state has put the land acquired to some use, its failure to pay the holder compensation would render the entire proceeding nugatory.

Concerns with this Act

- There is a divisive provision in the Right to Fair Compensation and Transparency under LAAR 2013.
- Over the state argued that each of the landowners from whom land was acquired had specifically been told about the quantum of money that they were entitled to receive.
- Since they neither disputed the amount fixed nor came forward to receive the money, the government claimed it deposited cash payable by it into its own treasury.
- The government also claimed that the landowners were not entitled to retake their lands by claiming that they hadn't received their compensation, this action was sufficient to negate the operation of Section 24.

CourtRulings

- Ordinarily, the court held, the state is always obligated to pay the landowner money in terms of any award made.
- It was only in exceptional circumstances, the government could deposit those amounts into a court of law.
- These included cases where a landowner might have refused to receive compensation, for some reason or the other.
- But even there, a mere payment into the government's own treasury wouldn't suffice.
- Earlier a three member bench was formed to decide on this, the bench ruled that government's decision is void with lands being returned to their original owners.
- High Courts across India almost uniformly adopted this verdict, reversing acquisitions in a host of cases.
- Another three member bench decided that in cases where a landowner refuses compensation, a payment into the government's treasury was sufficient, and that there was no attendant obligation on the state to deposit this money into court.
- This reading clearly fits neither with the language of the LARR Act nor the law's larger objectives.

Way Ahead

- It must be noted that a three-judge bench cannot overrule a precedent set by an earlier bench of equal strength.
- In cases where it thinks the previous bench might have blundered, it, might refer the dispute to the Chief Justice seeking the creation of a larger panel.
- Maintaining such a rule not only ensures stability in the court's rulings but also provides the court with the necessary flexibility to correct its errors in appropriate cases.

Prospects of Alternative Dispute Resolution

In News: A committee under Arbitration and conciliation has recently submitted a report on making India a hub of arbitration.

Arbitration and Conciliation Act

- The Arbitration and Conciliation Act, 1996, was enacted in order to minimise the supervisory role of the courts in settlement of disputes.
- The Act permits an arbitral tribunal to use mediation, conciliation or other procedures during arbitral proceedings in order to encourage the settlement of disputes.
- Recent amendments were made to the bill which led to some significant changes, such as time-bound arbitration, widening the powers of the arbitral tribunal, settling the judicial vulgarities under Section 34 of the Act, etc.

Recent Changes in the Act

- Two new sections namely 29A and 29B—have been added, which provide for time limit for arbitral award and fast-track procedure, respectively.
- Section 29A provides a time limit of 12 months plus six months (total of 18 months) within which the arbitral award should be made, failing which the mandate of the arbitrator should be terminated.
- Another section provides the parties to the arbitration agreement may opt for the fast-track procedure wherein the award has to be made within six months of the reference to the arbitrators.
- The appeal against the arbitral award is restricted to grounds mentioned under Section 34 of the Act, wherein the recourse to a court against an award is limited to the extent provided for under the section itself.
- Even if such an appeal is preferred to the court against an arbitral award, the same shall have to be disposed of expeditiously within a period of one year from the issuance of notice to the other party.

Significance of the Bill

- If the dispute between the parties is referred to the normal course of litigation, it usually takes an average of 6.5 years in order to reach an effective solution.
- This is mainly due to the delays caused by the stays granted by the High Courts and the Supreme Court.
- In comparison, under the Arbitration and Conciliation Act, 1996, the interference by the courts is limited to what is provided for in the Act.
- It is notable that even after the termination of arbitral proceedings, the Act provides for limited scope of court intervention.
- The payments recovered shall be made into a designated escrow account with the stipulation that the amount so released will be used first for the payment of the lenders dues.
- It will also be used for the completion of the project and then for the completion of other projects of the same PSU/department, as mutually agreed upon.
- This will result in a paradigm shift from the current perception of delays in resolution of commercial disputes in India to it being viewed as an investor-friendly destination.

India as an Arbitration Hub

- The government of India is committed for speedy resolution of commercial disputes, and to make India an international hub of arbitration and a centre of robust ADR (alternative dispute resolution).
- This mechanism will cater to international and domestic arbitration, at par with the global standards available.
- The ADR mechanism has evolved over the years and has resulted in yielding better and time-effective outcomes as compared to the conventional option of filing the dispute before the courts.

- ADR has also become a favorable tool for the resolution of disputes without further burdening the already overburdened judicial system of our country, and has emerged as an aid to improve the financial health of the country.
- India has constituted a 10-member High Level Committee under the chairmanship of a retired judge of the Supreme Court for making reforms in dispute resolution mechanism.
- The suggested reforms will lessen the burden of the judiciary, and provide a fillip to the development agenda of the government.

Fugitive Economic Offenders Bill, 2018

In News: The Union Cabinet has recently approved the proposal of the Ministry of Finance to introduce the Fugitive Economic Offenders Bill, 2018.

Need for this Legislation

- There have been several instances of economic offenders fleeing the jurisdiction of Indian courts.
- E.g. Vijay Mallya fled the country to avoid being arrested for economic fraud, recent Nirav Modi-PNB fraud.
- The absence of such offenders from Indian courts has several adverse consequences such as -
 - hampering investigation in criminal cases
 - wasting time of courts of law
 - undermining the rule of law in India
 - non-repayment of bank loans
 - worsening financial health of the banking sector
- The existing civil and criminal provisions in law are not entirely adequate to deal with the severity of the problem.
- In this context, Budget 2017-18 hinted at the introduction of legislation to confiscate the assets of such absconders.
- The Bill comes as an effective, expeditious and constitutionally permissible deterrent to fugitive (escaping) economic offenders.
- This would also help banks and other financial institutions to achieve higher recovery from financial defaults.

Key Provisions

- **Declaration** - The Bill makes provisions for a Court, 'Special Court' under the Prevention of Money-laundering Act, 2002.
- A Director, appointed by the central government, will have to file an application to a Special Court.
- This is to declare a person as a Fugitive Economic Offender.
- **Fugitive Economic Offender** is a person against whom an arrest warrant has been issued in respect of a scheduled offence.
- And also who has left India to avoid criminal prosecution, or being abroad and refuses to return to India to face criminal prosecution.
- A scheduled offence refers to a list of economic offences contained in the Schedule to this Bill.
- **Features** - Confiscation of the property of the fugitive economic offender resulting from the proceeds of crime.
- Confiscation of other property belonging to such offender in India and abroad, including benami property.
- The Act disqualifies those declared as offenders from either filing or defending a civil claim in court.
- It is ensured that Courts are not over-burdened with such cases.
- Thus, only those cases in which total value involved is 100 crore rupees or more are within the purview of this Bill.
- **Mechanisms** - A special forum would be created for expeditious confiscation of the proceeds of crime, in India or abroad.
- The Special court will appoint an 'administrator' to oversee the confiscated property.
- The Administrator will manage and dispose of the confiscated property under the Act.
- **Remedies** - The alleged Fugitive Economic Offender may return to India and submit to the appropriate jurisdictional Court.
- In this case, the proceedings under the proposed Act would cease by law.

- This is, provided that the offender returns in the course of the proceeding prior to the declaration.
- Besides, the Court will issue a notice to the person named a 'fugitive economic offender'.
- Within 6 weeks from the date of notice, the person will have to present him/herself, failing which he/she will be declared a 'fugitive economic offender'.
- And their properties as listed in the Director's application will be confiscated.
- There is a 180-day window during which the property will remain attached, with a provision for appeal against confiscation order.
- **Constitutional safeguards** - The necessary constitutional safeguards provided for in the Bill include:
 - providing hearing to the person through counsel
 - allowing him/her time to file a reply
 - serving notice of summons, whether in India or abroad
 - appealing to the High Court
- **Principle** - The Bill adopts the principle of non-conviction-based asset confiscation for corruption-related cases.
- Notably, it is enabled under the United Nations Convention against Corruption which India has ratified in 2011.
- The convention envisages domestic laws for confiscation of property without a criminal conviction.
- This applies to cases in which the offenders cannot be prosecuted for reasons of death, flight or absence.

Concerns

- **Existing provisions** - Legal provisions to confiscate the assets of offenders already exist; however inadequate.
- These include the provision in the Code of Criminal Procedure for attachment of the property of 'proclaimed offenders'.
- It also includes the Acts targeting smugglers, foreign exchange offenders and traffickers in narcotics.
- **Concerns** - Proceedings for forfeiture of property under these have been marked by shortcomings and procedural delays.
- Disposal of confiscated assets had not been easy, especially at a price sufficient to recoup losses or pay off all creditors.
- Also, how far will the threat of confiscation of property be a serious deterrent to the offender is highly uncertain.
- **Challenges** - Under the present, Bill confiscation is not limited to the proceeds of crime.
- It further extends to any asset owned by an offender, including benami property.
- Such clauses are liable for legal challenge, especially if there are third party interests and doubts about real ownership.

I&B Ministry Vs Prasar Bharati

In News: Information and Broadcasting (I&B) Ministry has blocked funds meant for the salaries of the public broadcaster's employees.

About Rift

- Prasar Bharati runs Doordarshan and All India Radio and has staff strength of about 5,000.
- I&B ministry have not released funds for employees' salaries for two months now January and February 2018.
- The amount of salaries totals about Rs400 crore.
- The amount has been paid out of internal and extra budgetary resources of the public broadcaster.

Cause of the Rift

- **From Government's side** - Prasar Bharati has refused to pay a fee of Rs 2.92 crore to a private firm, to which the National Film Development Corporation had outsourced live coverage of an event.
- Prasar Bharati had blocked proposals for appointments and brushed aside a communication from the ministry calling for retrenchments.

- The sticking point was a ministry proposal to appoint a serving IAS officer as a full-time Board member through the Appointments Committee of the Cabinet.
- **From PrasarBharati's side** -Earlier, PrasarBharati had refused to terminate contractual employees of the broadcaster on I&B ministry's demand, calling it a "direct attack on the autonomy of the organization".
- PrasarBharati was repeatedly asked to let go of the contractual employees, which is the prerogative of the organization not the ministry.
- I&B ministry also threaten the organization that funds will be blocked if the instructions are not followed.

Government's Stand

- I&B ministry claims that PrasarBharati is as much bound by general financial rules of the government of India as any other ministry or organization receiving grants-in-aid from the government.
- As per the provision of general financial rules, any autonomous organization receiving grants-in-aid must sign a memorandum of understanding (MoU) with the ministry.
- It clearly brings out the physical and financial targets with timelines for activities to be done by utilising the said grant during that financial year.
- Government also states that irrespective of repeated reminders from the ministry, no MoU has been signed by PrasarBharati.

Supreme Court's Power to overrule itself

Context:A 5-judge Supreme Court Bench led by the Chief Justice is now slated to hear the conflicting judgments of two previous three member SC benches.

- This new episode was triggered by cases regarding land acquisition, and has brought to highlight, pressing constitutional issues.

About current issue

- Three separate cases involving compensations to be paid for land acquired for various activities came up to the Supreme Court at various times.
- Firstly, in January 2014, a three-judge Bench unanimously held that "paid" would mean compensation offered or rendered, and deposited in court.
- In February 2018, another 3 judge bench held that once compensation had been unconditionally offered and refused, it would be considered "paid".
- In another subsequent case recently heard by a 3 judge bench - the bench was surprised to know that one 3 judge bench had overruled another previously.
- As this is against judicial convention, the case has now been referred to the Chief justice of India to constitute a larger bench to resolve this issue.
- The matter is now slated to be heard by a 5 judge constitutional bench that would include the CJI.

SC rule against its own decisions

- The Supreme Court has the power to overrule its own decisions, but it has affirmed that this power will be used sparingly and only in compelling cases.
- But it has been fairly established that a Bench of the Supreme Court can't overrule a previous judgment delivered by a bench of equal or larger size.
- In such a situation, in case of an inability to agree, the only option available is to refer the matter to the CJI, requesting that a larger Bench to hear the same.
- Notably, this has to be a mere reference to the CJI and criticism or doubts about the correctness of the previous judgment (of a larger bench) can't be aired.
- Notably, this is merely a convention followed for ensuring certainty in law and there is no explicit constitutional provision for the same.
- It is to be noted that, since the Supreme Court has 11 to 13 Benches hearing cases concurrently in different contexts, conflicting opinions are only natural.

Supreme Court benches

- It was proposed in the constituent assembly that India's Supreme Court should exercise its jurisdiction as a full court, and not as separate Benches.
- But this was not accepted as it might not help in the optimal use of judicial time, may lead to a slower judicial process and backlogs.

- Initially, the Supreme Court was envisaged as having a Chief Justice and seven other judges, with Parliament having the power to increase this number.
- Evolution** - In the early years, all judges sat together, but as the work of the court increased, Parliament increased the number of judges.
- From 8 in 1950 to 11 in 1956, 14 in 1960, 18 in 1978, 26 in 1986 and 31 in 2008 (the current strength), the number of judges have gone up with time.
- To deal with more cases, judges started sitting in smaller Benches of two or three, and larger Benches of five or more were constituted only for some cases.
- Notably, a matter can be referred to a larger Bench only by a judicial order.
- Special benches** – Any case involving a substantial question of law (like interpreting the Constitution) must be heard by a Bench of at least 5 judges.
- While it is a norm to constitute such a bench, there have however been constitutional cases that were decided by smaller benches.
- Chief Justice of India is the head of the judiciary, and is vested with the administrative responsibility to constitute the benches.
- While all judges including the CJI are equal in their judicial powers, it is a norm to use the experienced senior judges for Constitutional Benches.
- Other Countries** – In the US, UK, Australia, Canada and South Africa, in most cases, all judges of the Supreme Court sit together in large Benches.
- Notably, Supreme Courts of the above mentioned countries usually have seven to nine judges only and their jurisdictions are also very selective.
- Considering the small number of judges, a judgment of a bench over 5 members would mostly imply the majority opinion of the entire court.

Delhi Master Plan 2021 – Court Stay on Amendments

Context

- Supreme Court has stayed the notification of amendments to the Delhi Master Plan 2021 – for not declaring the Environmental Impact Assessment Report.
- The prime question was on - whether issues such as safety, traffic, parking, and civic amenities were considered before the amendments were cleared.

About cases

- The Delhi Development Authority (DDA), the body created by an Act of Parliament in 1957 “to promote and secure the Development of Delhi”.
- It frames the Master Plan that lays down the guidelines, policies, and space requirements for various socio-economic activities for the city’s population.
- The Master Plan is also the basis for all infrastructure requirements of city and DDA is currently working on its outlay for the year 2021.
- Affidavits on the “Environment Impact Assessment” with considerations for the amendments to the 2021 plan weren’t filed by the concerned authorities.
- Hence, Delhi government, Delhi Development Authority (DDA) and the 3 Municipal Corporations of Delhi (MCDs), have been flanked by the Court.

About these amendments

- A Supreme Court-mandated “sealing drive” is currently underway, and establishments are being sealed for various real-estate violations.
- The proposed amendments were hence made due to pressure from owners of commercial establishments who were facing the prospect of closure.
- Notably, all political parties were all under severe pressure from trader groups in order to stop the sealing drive as businesses were taking a massive hit.
- Due to the urgency, a mere five-day public hearing was undertaken to discuss the amendments with trader bodies, resident groups and other stakeholders.
- While complete consensus wasn’t achieved, a compromised version now awaited notification by the Union Ministry of Housing and Urban Affairs.
- If notified, these amendments would have become part of policy but the SC decried these actions as it seems to be made with utter disregard for principle.

What are the proposed amendments?

- The amendments include increasing the Floor Area Ratio (FAR) and reduction of conversion charges, and allowed the amalgamation of plots for parking.

- Notably, while the current FAR is 180 (per 100) for local shopping centres, the amendment intends to make it 350, which is the standard for residential plots.
- Due to pressure from many Resident welfare associations (RWAs), provisions were made for shutting bars and pubs in residential areas.
- Another amendment sought to make certain markets pedestrian-only, if newly authorised commercial establishments could not provide parking facilities.
- Fire and other safety concerns were also raised by residents regarding allowing commercial units to function from basements.
- But as the amendments were rushed up by the authorities due considerations weren't given to all aspects in a holistic manner.
- Hence, Supreme Court has flagged various important issues like safety, and parking space for further brainstorming and has currently stalled proceedings.

Floor area ratio (FAR)

- FAR is the ratio of a building's total (gross) floor area to the size of the land on which it stands.
- A higher FAR translates into a taller building.

ECONOMIC AFFAIRS

Aircel Bankruptcy Crisis

In News: Aircel Cellular Ltd. has filed for bankruptcy under Insolvency and Bankruptcy Code, 2016.

About Aircel Crisis

- Aircel has more than 85 million subscribers across 17 telecom circles, in India.
- Aircel services were disrupted after Telecoms like Idea Cellular and Vodafone stopped interconnect services for non-payment of dues.
- While the operator had shut services in six circles, services in other regions were hit due to financial problems.
- GTL Infrastructure had switched off nearly one-third of the total towers due to non-payment of dues.
- Aircel is also facing an unsustainable debt rises, owing to intense competition following the disruptive entry of a new player.
- This has caused significant negative business and reputational impact on the company.

Present move

- As per RBI guidelines, the company invoked a Strategic Debt Restructuring (SDR) scheme in January 2018, but no agreement could be reached with the lenders on restructuring of debt and funding.
- Under the current circumstances, especially after RBI guidelines, the company believes resolution process under the Code is an appropriate recourse.
- To protect the interest of everyone (vendors, distributors, employees, etc.) and to preserve the value of the company and manage its operations it has taken this move.

measures taken by the company

- The Telecom Regulatory Authority of India (TRAI) had directed Aircel to generate Unique Porting Codes (UPCs) in operational circles where a large number of its subscribers were facing difficulties in porting their mobile numbers.
- Seeking cooperation from all stakeholders, including the vendor fraternity and channel partners during the IBC process, Aircel continued services from suppliers and partners for the ongoing business.
- The company also plans to communicate to all customers that it would strive hard to provide uninterrupted service connectivity and appealed for their support during the current "difficult" period.

Replacing the Accounting Regulator

In News: Union government has approved the proposal to set up the National Financial Reporting Authority (NFRA).

- Multiple corporate scandals, seems to be reflecting the failure of the auditors, which calls for reforming the regulatory structure for the auditing profession.

- Notably, there are already plans for annulling the self-regulatory role that is currently played by the “Institute of Chartered Accountants in India” (ICAI).

Audit regulator

- Almost all major economies today have independent audit regulators, with the most prominent ones being set up between 2000 and 2005.
- The Public Company Accounting Oversight Board (PCAOB) in the US is one of the earliest regulators, set up as a result of the Sarbanes-Oxley Act of 2002.
- To share knowledge and experiences, the International Forum of Independent Audit Regulators (IFIAR) was set up in 2006.
- Today, IFIAR has 52 independent audit regulators worldwide.

Indian scenario of audit

- In India, discussions on setting up an independent oversight body had commenced almost a decade ago, however it is only now that it is finally close to being implemented.
- The Institute of Chartered Accountants of India (ICAI) has sufficient safeguards to ensure that the process does not result in self-regulation.
- There are few practical concerns with the Quality Review Board coming into existence.
- The inclusion of an independent audit regulator, National Financial Reporting Authority (NFRA), in the Companies Act, 2013 was also failed due to various reasons.
- There are also lacks of awareness regarding the extent of responsibilities of an auditor among non-auditors.

Cause of Concerns

- In India there are inadequate reporting and recognizing the inherent weaknesses in self-regulation.
- It is difficult to demonstrate that a mechanism that is designed, managed and includes members of the professional body can ensure effective implementation of independent oversight.
- This is perhaps the reason why India is not yet a member of IFIAR.
- NFRA’s extensive powers in terms of its ability to investigate, impose penalty and banning operations of auditors and audit firms have been the mainstay of most conversations around the topic.

Alternative Approach

- Several corporate scandals have surfaced in the past, where Chartered Accountants had failed in their audit duties.
- This was again reiterated in the “Punjab National Bank fraud”, and calls for better regulating the auditing profession has grown stronger.
- Notably, replacing the self-regulatory role of “Institute of Chartered Accountants of India” (ICAI) with an external regulator is already under consideration.

NFRA

- The setting up of an external regulator namely “National Financial Reporting Authority” (NFRA) has been envisaged in the Companies Act 2013.
- While NFRA hasn’t been notified yet, it is being touted as a powerful body that will lay down accounting and auditing standards to be followed in India.

About Proposal

- National Financial Reporting Authority (NFRA) is intended to serve as an independent regulator for the auditing profession.
- Section 132 of the Companies Act, 2013 gives the Centre the power to set up such an authority.
- According to it, NFRA can do the following:
 1. recommend to the Centre formulation of accounting and auditing standards and policies to be adopted by companies and auditors
 2. monitor and enforce such standards and policies
 3. oversee quality of services of the professions associated with the compliance of these standards and policies

Role of Companies Act in accounting

- The Companies Act casts a responsibility on auditors to see that corporate accounts are in order.
- Auditors can choose not to sign the accounts if their concerns are not addressed by the management.
- The Companies Act also allows auditors to report to the Centre if they believe an offence involving fraud is being committed.

- This could be by the company, by its officers or the employees.

Powers of NFRA

- NFRA will comprise a chairperson, three full-time members and a secretary.
- It can investigate into professional matters or misconduct of any member or a firm of chartered accountants.
- It can issue summons and examine on oath.
- It can also inspect any book, registers and documents of any professional/firms probed.
- It may impose penalties, and is even empowered to debar a member of a firm.
- Across the world, there have been instances of scams involving the help of Auditors.
- In India, this situation is worse as there is no reliable audit regulator.
- Union government's recent move is to fill the reliability gap in audit regulation.
- Setting up the NFRA indicates, to an extent, the lack of trust in ICAI (Institute of Chartered Accountants of India) to effectively address malpractices.

Significance of NFRA

- The NFRA was brought into the Companies Act on the specific recommendations of the Standing Committee on Finance.
- Its jurisdiction will cover investigation of chartered accountants and their firms covering both listed and unlisted public companies.
- The inherent regulatory role of the ICAI as provided for in the Chartered Accountants Act, 1969 will continue but its threshold limits will be modified.
- NFRA could thus significantly help oversee the functioning of the Institute of Chartered Accountants of India (ICAI).
- It will also ensure credibility in financial reporting.

Measures Needs to be taken

- The Government need to and other agencies must involve in setting standards, monitoring compliance and, most importantly, suggesting measures for improvement in quality of audits.
- The structural and operational mechanisms that ensure following things must be made
- 1. The body remains operationally independent and its decisions are subject to scrutiny and are transparent.
- 2. Members maintain highest level of independence and prohibiting conflicts of interest.
- 3. Clarity in the inter-se relationships with the professional bodies, clear distinction in the respective roles and responsibilities.
- Best practices of various countries need to be used by NFRA and that will be instrumental in ensuring a robust, world-class oversight mechanism.
- Thus the overarching objective of a regulator is to enhance audit quality which, in turn, will enhance investor protection and public interest.

ICAI functional lacuna

- **Overall Record** - ICAI has for long been serving the individual self interests of its top brass rather than the collective image of the auditing profession.
- It has long been ignoring the blows dealt to its reputation by fellow member's lapses and even downplayed them in the face of public anger.
- Notably, of the 1,972 disciplinary cases considered by the ICAI till now, only the auditors of Satyam have been permanently disqualified from membership.
- In a majority of cases where members have been found guilty, they've been merely reprimanded.
- **Specific Cases** - Stock market regulator SEBI has alleged that ICAI hasn't cared to investigate the role of auditors in suspected stock price manipulation.
- Notably, SEBI had referred multiple cases to ICAI as early as 2015, for which action hasn't been taken.
- Also, Serious Fraud Investigation Office (SFIO) had referred 34 chartered accountants for suspected involvement in money laundering.
- In this reference too, there has been minimal action, with investigations commencing only against 5 auditors.
- The PNB fraud was indeed the pinnacle of failure as it got through multiple parallel audits like - the branch audit and statutory audit.
- **Structural Flaw** - Self Regulation is a concept where the regulated elect the regulator that governs the entire setup.

- This model works well only if there is a sense of collective accountability in the sector, which clearly seems missing here.
- Hence, the current state of affairs was completely crafted by ICAI's own making, which hence justifies calls for an external regulator.

Recap Plan to Revive PSU Banks

In News: Union government has announced a new recap plan for revival of Public sector Banks.

new plan about

- Under the recent recap plan, the Centre simply borrows from the banks to meet their capital requirements.
- The Centre will raise money by issuing recapitalisation bonds to public sector banks.
- This money will be funnelled back as equity capital into the same banks.
- In effect, banks get to convert their liabilities into capital to absorb losses and fund their growth.
- The Centre's much touted differentiated recap approach is based on the premise that while stronger and non-PCA (Prompt Corrective Action) banks have been given capital to fund their growth.
- PCA banks have been provided with funds to primarily meet their regulatory capital requirement.
- Due to sharp slippages reported by PSU Banks, some of these banks did need the extra cushion to tackle their financial burdens.
- Sharp slippages, mostly out of banks' restructured accounts has also rightly drawn the RBI's attention.

concerns

- Earlier Union government has announced an infusion of a whopping Rs 88,000-odd crore of capital into ailing public sector banks, which has created furore.
- After all, it was depositors' money being used to bail out these banks.
- Depositors were irked by the infamous 'Clause 52' of the FRDI Bill that empowers the Resolution Corporation overseeing bank defaults to invoke bail-in and cancelling any/all of the bank's liabilities.
- It is unclear why many banks under PCA have been given capital, way above that needed to just meet the norms.
- Hence, while in the past, the Centre has been pumping taxpayers' money (ironically also depositors') into PSU banks.
- This time around, with a bit of financial jugglery, depositors have in effect stepped in to bail out their banks.

Commercial Coal Mining Reforms

In News: Cabinet Committee on Economic Affairs approved a methodology to auction coal blocks for commercial mining.

Background

- The productivity of Indian coal sector has improved over the years.
- But it remains below global standards.
- This can be addressed if the assets auctioned are large, accessible, and ready for development.
- The Government's move to commercial coal mining is a recognition that developing coal blocks on end-use basis is inefficient.
- There are challenges in design and handover.
- But, mainly, the end-user industries lack expertise, scale and incentive to do anything more than source their own needs.
- This changes entirely with commercial mining where real productivity gains can be achieved and passed on to consumers.

significance of this reform

- It is the most ambitious coal sector reform since the nationalization of the sector.
- It offers ample room for a competitive coal supply.
- The move from "an era of monopoly to competition" holds many strategic implications for an entire set of industries and companies.
- Already, large global and local mining majors have expressed interest in this landmark deregulation,

- It will allow mining and sale of coal without curbs on quantity, end-use or pricing.

expected outcomes

- The expectation is that the mining majors will set new benchmarks in terms of mechanisation, automation, mining practices, etc, and drive up productivity.
- Distressed assets, in particular, will use this option to draw up a plan for turnaround after the debt recast.
- The opportunity will get larger as new commercial miners take full advantage of deregulation.
- They can offer
 - short-term contracts for seasonal needs (to serve utility demand or via the merchant market)
 - adopt more flexible pricing
 - supply higher quality blends to substitute imports
- It is also expected that the current coal producers too will respond with innovation and customer orientation.
- The immediate beneficiaries are power generators.
- As, they can improve utilization and margins by sourcing commercial coal selectively.
- It makes it possible for new vertically integrated companies to own coal mining, to power generation, to distribution and retail supply.

concerns

- The downstream power utilities will gain from this, but are simultaneously faced with a major competitive threat.
- As the output from commercial coal mines comes on line, it will have a sustained, moderating influence on energy prices.
- The manufacturing sector is already diversifying its power procurement by buying from third-party sources and on the power exchange.
- They will now have access to lower cost electricity with limited price volatility.
- Similarly, as commercial miners target large energy users with captive power plants, discoms will lose the advantage of cross-subsidy.

Measures to be Taken

- Electricity regulators have to implement tariff reforms.
- Cross-subsidy should also be rationalized to levels at which discoms can still hold on to large energy users.
- This may not impact the smaller and lifeline consumers, as the State governments will channel the premium earned from auction of commercial coal to extend direct subsidy.
- The success of this new policy will depend on incorporating lessons from the previous auctions, and deregulating it fully to allow efficiency and competition in the primary energy sector.
- If this is ensured, there is good reason to expect the commercial coal auctions to become a success on sector reforms.

80:20 Scheme and Bank Frauds
Context:

- The recent PNB fraud caught the public attention towards the credibility of banks.
- In this backdrop, it is alleged that the 80:20 (gold import) Scheme was designed to help jewellers such as Nirav Modi.
- A 2016 CAG report has also observed that the scheme had resulted in a loss of over Rs 1 lakh crore to the exchequer.

80:20 scheme

- The scheme was introduced in August 2013.
- Under the scheme, 80% of gold imports under the scheme could be sold in the country.
- And at least 20% of imports had to be exported before importers could bring in new consignments.
- The permission to import the next lot was to be given upon the fulfilment of the export obligation.
- India is one of the biggest importers of gold globally.
- In 2013, the country's macroeconomic indicators, especially the current account deficit, were weak.
- The rising gold import and its impact on the current account deficit was further a cause of concern.

- It posed a risk of capital outflows and further weakening of the rupee.
- Coupled with this, the high crude oil prices forced the authorities to implement preventive measures.
- The 80:20 schemes thus aimed to discourage gold imports to rein in the widening current account deficit.
- Subsequently, the rupee recovered after the RBI announced a slew of measures to boost inflows and stabilise the currency.

Eased in rules

- Jewellers, bullion dealers, authorised dealer banks and trade bodies approached the Finance Ministry.
- They requested for a relaxation of the policy.
- Crude oil prices also dropped to a four-year low in 2014.
- The 80:20 scheme was thus relaxed in May 2014 by the RBI at the behest of the Finance Ministry.
- The rules were apparently eased to facilitate gem and jewellery export, which had declined following the curb on gold import.

outcome

- Initially, only state-owned banks and firms were permitted to import gold.
- These banks and their nominated agencies were allowed to provide gold loans for domestic use to jewellers and bullion traders.
- However, the easing of rules allowed more agencies to import gold.
- In its May, 2014 review, the central bank allowed star and premier export houses to import gold subject to some restrictions.
- 6 to 7 private sector trading firms were also permitted to import gold under the scheme.
- These private firms accounted for 40% of the total gold imports in April-September that year.

concern

- The relaxation of the rules is now questioned based on the CAG's 2016 report.
- The report indicated that the scheme was misused by jewellers including Nirav Modi.
- Particularly, it was used for round tripping of black money and money laundering.
- In November, 2014 months after the change of government in the Centre, the scheme was scrapped.
- It has been decided by the Government to withdraw the scheme and restrictions placed on the import of gold.
- The legal import of gold declined in the following months.
- In all, sources claimed that the 80:20 Scheme was encouraging smuggling and was also misused by many traders.
- A sub-committee of the PAC recently asked the Revenue Department to share details of the scheme and its alleged link with the Punjab National Bank fraud case.

Action Plan for 'Champion Services'

In News: The Union Cabinet has recently approved a Rs 50 billion fund to promote 12 "Champion Services".

Key proposal

- An action plan for 12 champion services sector was identified by the Ministry of Commerce and Industry.
- A Rs 5,000-crore fund is proposed to be established to activate the plan for realising the full potential of the sector.
- The funds will be used to create services-specific plans.
- The sectors identified for special focus are:
 1. IT and IT enabled services (ITeS)
 2. tourism and hospitality
 3. medical value travel
 4. transport and logistics
 5. accounting and finance
 6. audio visual
 7. legal
 8. communication

9. construction and related engineering
10. environment
11. financial
12. education
- Ministries responsible for these sectors have to come up with the implementation timelines and a monitoring mechanism.
- This is done under the overall guidance of the Committee of Secretaries (CoS) under the Cabinet Secretary.

Objectives

- **Growth** - Services sector now accounts for over half of India's gross domestic product (GDP).
- The move is expected to promote this further.
- Through these focus sector, the government also targets raising the gross value added (GVA).
- Services sector share in GVA is envisioned to be increased from about 53% in 2015-16 to 60% by 2022.
- **Exports** - The share of India's services sector in global services exports was 3.3% in 2015 as against 3.1% in 2014.
- The present proposal envisages a goal of 4.2 % to be achieved by 2022.
- Increased productivity and competitiveness of the champion service sectors will further boost exports.
- **Jobs** - Consequently, it is also expected to create more jobs.

Significance

- The decision reflects recognition of the critical role of the services sector.
- Manufacturing has not delivered the kind of employment potential that the government had hoped for.
- A dynamic services sector, on the other hand, holds out far greater promise in this respect.

Concerns

- The issue of the foundations on which to build a strong services sector is uncertain.
- Services, by definition, are people-intensive.
- But the present scenario is that basic functions are increasingly automated.
- Naturally, job opportunities will only lie higher up in the value chain of the knowledge economy.

Way Ahead

- Opportunities from the kind of relatively sophisticated services have to be maximized.
- It demands a far higher standard of basic social infrastructure than India has at present.
- **Education** - India urgently needs to improve the all-round standard of education.
- This is essential to provide for the knowledge workers to support India's IT and ITeS expansion.
- Setting aside the IITs and IIMs, the delivery of most vocational and professional education lies in the private sector domain.
- However, the quality standards of these are widely varying.
- Spending funds on creating an "IIT/IIM" education model for these "champion services" could be a good start.
- **Enabling environment** - Merely creating superior knowledge workers will be a zero-sum game if the enabling environment remains constrictive.
- India's long experience with brain drain stands as a proof for this.
- **Regulations** - The whole exercise should also involve streamlining rules and regulations.
- Increasing protectionism and regulations that restrict foreign investments should be given a relook.
- Championing services demands a hard look at such micro-issues too.
- Besides, the Champion Services programme would do well to build on this experience for other sectors of the economy too.

Protecting Indian Farmers from Corporates

In News: The Competition Commission of India (CCI) is examining the India's stand on the merger between Bayer and Monsanto.

concerns about this merger

- There is a proposed acquisition between Monsanto's entire shareholding by Bayer, which brings together two global giants in the seeds and agro-chemical markets.

- If approved, the merger will lead to tight oligopoly of three multinational giants, which will control almost two-thirds of the global production in seeds and agro-chemicals as well as the valuable big data and IT platforms.
- This will lead to price rise for seeds and pesticides and also will lead to control of the global food value chain.

global reactions

- The European Commission (EC) has identified preliminary concerns in the following three areas, namely,
 1. **Pesticides** - Due to limited competition between Monsanto's portfolio of biological pesticide and Bayer's portfolio of chemical pesticide products, and the parties' overlapping activities.
 2. **Seeds** - Due to the parties' high market share in the breeding and licensing of vegetable seeds for several field crops such as oilseed, rape seeds and cotton seeds, and in the research and innovation programmes for wheat.
 3. **Traits** - Due to Monsanto's dominant position in several traits markets worldwide and Bayer being one of the few competitors, which has notably developed alternative herbicide tolerance traits to Monsanto's.
- The EC will further investigate whether competitors' access to distributors and farmers could become more difficult if Bayer and Monsanto were to bundle or tie their sales of pesticide products and seeds, notably with the advent of "digital agriculture".

corporatesVs Indian Farmers

- In India, Bayer has 60-65 per cent market share and Monsanto enjoys 15-20 per cent market share in corn insecticides in both the upstream market for seed treatments and downstream market for sale of seeds.
- Monsanto abused its market power by using royalties for its GMO seeds, particularly in cotton which is often linked to farmer suicides in cotton belts.
- Unlike in the US, Monsanto didn't sign any individual contracts with Indian farmers, due to the absence of a patent.
- Monsanto locked 28 Indian seed companies through one-sided licence agreements to collect hefty royalties on its behalf.
- The same issue of the likely abuse of dominance in charging high trait fee by Mahyco Monsanto.

expected consequences for India

- The proposed merger will affect the innovative efforts in the next few decades besides increasing the dependence of Indian agriculture on the three global giants.
- In India post-merger "Baysanto" will have a dominant platform in cotton seeds, vegetable seeds (cabbage, cucumber, onion, hot pepper, tomato) as well as in insecticides for rice, cotton and corn and will face insignificant competition.
- The Bayer do not seem to have adequately answered many antitrust issues, for instance, the strong possibility of "bundling" by leveraging its dominance in one product line to force purchases in another.

Way Ahead

- For this cause recently CCI has invited public comments on the merger.
- The Indian subsidiary of Monsanto challenged before the CCI, on complaints filed by various Indian seed associations and a reference by the ministry of agriculture.
- CCI needs to consider the remedies sufficient to allay the risk of competition law concerns.
- This remedy must deal with the possible adverse effects on innovation of germ plasm, traits, breeding technologies, crop protection, big data and digital farming.
- CCI need to keep in mind that the peculiar vulnerability of poor and illiterate Indian farmers and their lack of bargaining power.
- CCI also needs to consider cooperating closely with other competition authorities in the US and other affected countries.

INTERNATIONAL AFFAIRS

Turbulence in Chinese Political Administration

In News: The Central Committee of the Chinese Communist Party has announced an amendment to its constitution.

Proposed Amendments in Chinese constitution

- The Central Committee of the Chinese Communist Party has proposed removing a clause from the country's constitution added during the Deng Xiaoping era.
- Which limits both the presidency and vice presidency to two five-year terms.
- Undoing this restriction essentially lines Present President Xi up to be "President for Life."
- Another proposed change would enshrine "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era" in the constitution's preamble, following Marxism-Leninism, Mao Zedong Thought, and Deng Xiaoping Theory.

present political conditions in china

- These proposed constitutional revisions are the latest and most historically consequential power grab by the self-assured Chinese president.
- Xi has seized upon his moment of accrued political capital to cement his hold over the country for as long as he desires.
- The revisions also reflect push for a greater emphasis on what he calls "law-based governance".
- The Chinese President Xi Jinping vanquished all his political rivals in China and he pointedly did not nominate a successor at the Communist Party Congress.

China's reactions

- The two-term ceiling was introduced in 1982 by visionary leader Deng Xiaoping to prevent a repeat of the social and institutional destruction by Mao Zedong that culminated in the Cultural Revolution.
- The recent amendment move was welcomed by Chinese Military administration.
- Political Sceptics are also pointing that "absolute power corrupts absolutely," something that could undercut China's stability.
- But Chinese administration denied it by declaring that the amendment "does not mean a life-long term system".

global concerns with China's move

- The amendment potentially clears the way for Xi to be China's President for indefinite period.
- It also leaves the world facing a hard-line ruler who intends China to be the preeminent global power.
- China under Xi has also been aggressively challenging India's role as the pre-eminent power in the Indian Ocean region.
- China's growing ties with Pakistan Mandarin has now been made an official language in Pakistan is also a cause for concern.

Myanmar - Deferred Signing Border Pact

In News: Myanmar has indefinitely deferred signing the border pact with India.

About pact

- Earlier in the year, the Union Cabinet had approved the agreement between India and Myanmar.
- This is in relation to streamlining the free movement of people within 16 km along the border.
- The arrangement on land border crossing is to enhance economic interaction between people of the two countries.
- As per the proposal, there would be no restrictions on the movement of people across the borders.
- However, the domiciles would be allotted border passes.
- Those going across for agriculture, work or to meet relatives should carry the pass at all times.

India keen on signing the pact

- India and Myanmar share a 1,643 km unfenced border.
- Both countries permit a 'free movement' regime upto 16 km beyond the border.
- The present border arrangement is proposed in the light of the issue of movement of extremists and smugglers freely across the border.
- Army convoy attack in 2015 in Manipur's Chandel district involved suspected militants escaping to Myanmar along the free border.
- India is thus keen on signing border pact to regulate and streamline free movement along border.

Border Pass

- Arunachal Pradesh, Nagaland, Manipur and Mizoram are the four states that share the unfenced border with Myanmar.

- The Centre had asked these 4 States to distribute “border pass” to all the residents living within 16 km from the border.
- This is to give shape to the agreement approved by the Cabinet.

Myanmar issues

- The Memorandum of Understanding (MoU) has been deferred twice in the past seven months.
- Myanmar has cited “domestic compulsions” for its reluctance to sign the agreement.
- It is feared that signing the pact would make them adhere to the international agreement.
- It has asked more time before the agreement is sealed.

Making peace with Taliban

Context:

- The Afghan President Ashraf Ghani has been trying to initiate a peace process with sections of the Taliban.
- This initiative runs the inherent risk of intensifying divisions in the country’s ruling coalition.

Importance of timing for peace

- One of the most difficult moments in any war is identifying the perfect timing for making a bid for peace.
- If bid from a weak position, it would imply a tacit defeat.
- Also, if bid from a strong position, it would mean settling for a compromise when a comprehensive victory was very much in the offering.
- It hence needs to be appropriately timed in order to help in accelerating a positive shift in the structure of the conflict.
- While Afghan President Ashraf Ghani has made a peace offer to the Taliban, there is no clarity on where this might lead to.

present ground situation

- **Rising Taliban** - Taliban’s clout has steadily expanded in recent years and it is now said to be prominent in nearly 50% of the Afghanistan’s territory.
- The Taliban, with its sanctuaries in Pakistan, has been able to mount spectacular terror attacks in Kabul and elsewhere at ease.
- Mr. Ghani had vowed to exterminate Taliban only a few months ago, in the aftermath of a string of massive attacks within high security zones.
- Hence, the current offer for unconditional talks was a surprise and many observers are also sceptical as they believe it is a tactical acceptance of defeat.
- Notably, Taliban persists in its refusal to engage the government in Kabul, which it considers illegitimate and prefers to negotiate directly with the U.S.
- **U.S. Position** - U.S. is a major player in the war against Taliban and has been steadfast in preventing a military victory of Taliban over the Afghan regime.
- It has also been mounting pressure on Pakistan to crack down on elements within Pakistan that are contributing to destabilising Afghanistan.
- Taliban wants a complete U.S. withdrawal, as U.S. presence is its biggest impediment to recapture power, but the U.S. only recently increased its troops.
- **Afghani government** - Mr. Ghani’s own position within Kabul’s ruling coalition at the national and provincial governments is steadily waning.
- Many also worry that any significant concessions to the Taliban will further intensify the divisions within the ruling coalition and usher in instability.

contours of the peace offer made

- Mr. Ghani unveiled a peace in Kabul last week, which without a speck of doubt is the most comprehensive and generous offer made since war began in 2001.
- **Provisions** - It includes a ceasefire, release of prisoners, recognising the Taliban as a legitimate political force, and a review of the constitution.
- By offering unconditional talks, Kabul seems to be suggesting that it is willing to negotiate a transition to a new political order to replace the current one.
- The offer is a clear recognition of Taliban’s renewed relevance for the political future of Afghanistan, which wasn’t accorded thus far.
- **Considerations** - The war in Afghanistan, now in its 17th year, doesn’t seem winnable by either side despite large military interventions.

- As the U.S. would have to eventually pull out, it is only prudent for Kabul to start negotiating with the Taliban to end the stalemate and ensure stability.
- Notably, the Pakistani government too has welcomed Ghani's peace offer and has promised "wholehearted support" to the peace process.

Emergency in Sri Lanka

In News: Sri Lanka declared an island-wide state of emergency.

- This was to curb growing anti-Muslim violence in the country's Central Province.
- The ongoing anti-Muslim violence reflects the long existing trend of ethnic politics and majoritarian triumphalism.

situation in Sri Lanka

- The violence, according to police sources, was triggered by the death of a 41-year-old man.
- He succumbed to injuries inflicted by a group of Muslim men, following a road rage incident.
- The suspects were arrested immediately after the incident and remanded.
- However, the incident triggered a series of anti-Muslim attacks.
- The violence is provoked reportedly by Sinhala-Buddhist extremist group.
- A series of arson attacks targeted dozens of mosques and Muslim-owned shops and homes in Kandy, located in the Central Province.
- Two mosques and shops were vandalised in Ampara.
- Ampara is a district with a near equal population of Muslims and Sinhala-Buddhists.

Background

- There were concerns of mishandling of the whole situation.
- The police and the Special Task Force were accused of a delayed and inadequate response.
- The Sri Lankan government was criticised for "pandering to extremist forces" in the Sinhala majority community.
- The move to declare emergency is seen as a "confidence-building measure".
- The emergency allows the government to deploy the army in case of any violent clashes.
- Procedurally, the emergency will lapse in two weeks unless the parliament votes to extend it.

significance

- This is the first time that emergency had been reimposed after it was in force for 40 years from 1971 during the civil war.
- The latest unrest underlines the new political and ethnic dynamics in Sri Lanka.

Muslim political consciousness

- According to the 2011 Census, Muslims are slightly more than 9% of Sri Lanka's around 20 million population.
- On the other hand, Sinhala Buddhists comprises of 75% and Tamils 11%.
- The language of Sri Lanka's Muslims is Tamil.
- The majority of Muslims still live in the East which was part of the LTTE's (Liberation Tigers of Tamil Eelam) vision of Tamil separate State.
- Until 1990, the Muslims believed they had common cause with Tamil political aspirations.
- But in 1990, the Indian Peace Keeping Force's (IPKF) made departure from Sri Lanka.
- It led to a newly resurgent LTTE, which drove out nearly 100,000 Muslims.
- These Muslims moved from their northern citadel of Jaffna and other parts of northern Sri Lanka.
- The eviction took place overnight and people left behind their houses, lands, shops, and possessions.
- They became a new set of internally displaced people in Sri Lanka's conflict.
- That was when the Sri Lankan Muslim found a new political consciousness.

Evolution of Buddhist-Muslim hatred

- Within a decade of its formation, the Sri Lanka Muslim Congress was seen by Sinhala political parties as a "kingmaker" party.
- It won seats in Parliament from the predominantly Muslim areas and the community was in the thick of national politics.
- It has always sided with the ruling party, and is even now part of the coalition government.

- Once the war against the LTTE was over, it was almost as if Sinhala-Buddhist extremism needed a new enemy.
- Muslims have emerged as that enemy.
- The rise of Islamist terrorism provided a convenient handle with which to demonise the community.
- Sri Lanka's Buddhist extremism has found an ally in Myanmar's hardline Buddhist monks.
- Both countries practise the Theravada variant of Buddhism.
- Extremist Buddhists in Sri Lanka have clearly taken inspiration from the anti-Rohingya movement in Myanmar.

Effect of change in government

- The majoritarian sentiments were encouraged by the previous Mahinda Rajapakse regime.
- Since then, certain sectarian groups which openly profess hatred for Muslims as well as Christians emerged.
- Rajapakse's defeat in the presidential election led to a de-escalation of Buddhist-Muslim tensions.
- But the incidents began occurring again towards the end of 2016.
- The Muslims, who were displaced from northern Sri Lanka during the war, began going back to reclaim their lands in villages.
- Around the same time, the Buddhist outfits began a campaign against the arrival of a group of Rohingya in Colombo.
- The Rohingya group had been taken into custody by the Navy after they attempted to land on the Sri Lankan coast.
- They were ordered to be kept in the safehouse under UN protection.
- A Buddhist monk led an attack on a UN-maintained safehouse for the Rohingya in Colombo.
- The group that attacked the safehouse alleged that Rohingya had killed Buddhists in Myanmar.
- The clash between Buddhists and Muslims took serious turns.

larger concern

- The current violent situation in Sri Lanka is seen as a direct outcome of majoritarianism among Sinhala Buddhist majority.
- In all, the ongoing violence in Sri Lanka is more an echo of post-war Sinhala triumphalism.

ENVIRONMENTAL AFFAIRS

Tiger Sander's Report

In News: The Conservation Assured | Tiger Standards (CA|TS) recently published a report titled 'Safe Havens for Wild Tigers'.

About report

- CA|TS report was on the results of a survey of site-based tiger conservation across Asia.
- The survey assessed the current management methodologies at 112 sites located in 11 tiger-range countries, including India.
- The survey is the first and largest rapid assessment of site-based tiger conservation across Asia.
- It has been driven by 11 conservation organisations and tiger-range governments that are part of the CA|TS coalition.
- The results show whether or not governments are investing sufficient funds into tiger conservation.
- This study also shows the reality of the progress made under the *St Petersburg Declaration*.

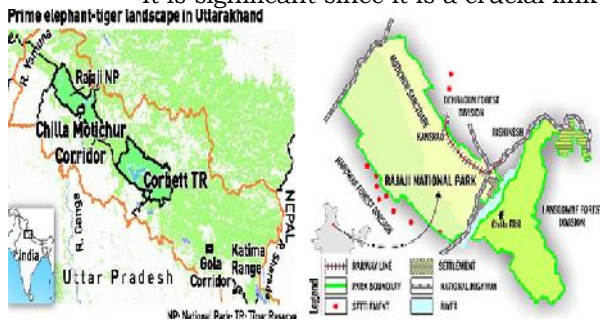
key findings

- Only 13% of the tiger conservation areas met the global standards of an accreditation system.
- Of the 112 global sites surveyed, only 12.5% was currently able to meet the full CA|TS criteria.
- Nearly half of the assessed sites reported fairly strong management, although improvements are needed.
- South Asian and East Asian countries like Bangladesh, Bhutan, China, India, Nepal and Russia had management plans.
- The remaining 35% did not have management plans and showed relatively weak management.
- Notably, a majority of these are in Southeast Asia, including Cambodia, Indonesia, Malaysia, Myanmar and Thailand.

- Three of the 13 tiger range countries, Laos, Vietnam, and Cambodia have lost all their tigers.
- **Basic needs** remain weak for all tiger conservation areas surveyed.
- These include enforcement of laws against **poaching**, engaging local **communities** and managing **conflicts** between people and wildlife.
- **Staff capacity** to patrol the sites effectively and **anti-poaching** enforcement remain weak, despite the serious threat of poaching.
- Only 16 of 112 sites had intelligence-driven anti-poaching processes in place.
- Ineffective management of tiger conservation areas had led to the **extinction** of tigers from certain key areas.

accredited sites

- To date, only three sites have been awarded CA|TS Approved status.
- These are
 - **Lansdowne Forest Division in Uttarakhand, India**
 - Chitwan National Park in Nepal
 - Sikhote-Alin Nature Reserve in Russia
- Lansdowne Forest Division, Uttarakhand, accredited in May 2017, is the third CA|TS accredited site globally and the first in India.
- It is significant since it is a crucial link between the Rajaji and Corbett tiger reserves.



Analysys

- Low investment from governments in Southeast Asia was one of the reasons for the lack of management.
- Thus, long-term investment in tiger conservation areas is called for.
- This is absolutely essential to halt and reverse the decline of wild tigers.
- The tiger-range governments should thus take the lead responsibility.

Conservation Assured | Tiger Standards (CA|TS)

- CA|TS is an important tool in the achievement of the Convention on Biological Diversity - CBD's Global Aichi Targets.
- CA|TS is a management tool which sets basic criteria such as the minimum standards for effective management of tiger conservation reserves.
- It also applies to other conservation reserves and protected areas which have tiger populations.
- It contributes to the implementation of the Programme of Work on Protected Areas.
- The CA|TS team has been working closely with the IUCN.

St Petersburg Declaration

- In November 2010, the first "Tiger Summit" in St Petersburg, Russia, endorsed a Global Tiger Recovery Programme.
- The programme aimed at reversing the rapid decline of tigers, and doubling their numbers by 2022.
- India was one of the 13 tiger range countries that participated in the gathering.
- The leaders committed to drawing up action plans to -
 - strengthen the tiger reserves
 - crack down on poachers
 - provide financial assistance to maintain a thriving tiger population

Tiger Range Countries

- The Tiger Range Countries (TRC) are the countries where tigers still roam free i.e. in the wild.

- The 13 tiger range countries are Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam.
- Sometimes North Korea is also included.
- While there have been no recent tigers sightings in North-Korea, it is the only country listed which has not ratified CITES.

Climate Change Threats for India

In News: The India Meteorological Department (IMD) has warned of an exceptionally hot summer this year.

About warning

- According to India Meteorological Department (IMD) the temperature will be more than 1 degree Celsius above normal across half the country in the March-May period.
- The monsoon is likely to be normal, the IMD believes, in the absence of other large-scale signals during the March-May period”, the rise forecast can be attributed to global warming.

climate change concerns for India

- The Economic Survey 2018 pointed out that climate change will reduce agri-productivity and pull down farm-incomes by 15-18% overall and by as much as a quarter in unirrigated areas.
- The Centre for Science and Environment has pointed out that excessive rainfall unevenly spread over the monsoon period in some areas skews the overall monsoon data by offsetting the deficiency in others.
- Between June 1 and August 28, 2017, nearly 37% of the districts in India had received rainfall that was classified by IMD as a large-deficiency or deficiency.
- Thus climate change will also cause rain deficiencies in many areas as well as give rise to newer and perhaps harder pests.

global concerns

- In 2018, a heatwave in the Arctic, during its sunless winter, has caused wild snowstorms in Europe.
- This has forced climate scientists to revise downwards even their worst forecasts of climate change.
- Scientists argue current and projected efforts like Paris accord may not be enough to stem perilous climate change.
- Given global trends in economic and population growth, there is only a 5% chance of the planet being able to stave off the 2 degree Celsius rise in temperature predicted at the end of the 21st century.

measures taken by India

- India must gear up to respond to drastically altered climate scenarios as much as focus on tackling climate change.
- India, which has made responsible commitments under the Paris accord, already recognises the various threats it faces.
- Apart from this India need to actively promote GM technology to develop drought-resistant and pest-resistant crops, India need to work on with a GM policy for this.
- Flooding and rain-deficiency are problems that can be solved with efficient water-management like creating more reservoirs.
- Linking such reservoirs to water-stressed cities, could also curb loss of water and lessen the dependence on a river.
- Union government also need to pursue a mitigation strategy on war-footing, perhaps announcing a Swachh Bharat-like central scheme on responsible use and harvesting of water.

IMD's Annual Summer Forecast

In News: India Meteorological Department (IMD) has recently released its annual summer forecast.

Key Aspects

- **Summer** - ‘Normal’ temperatures refer to the mean temperatures during a particular period (months) between 1981 and 2010.
- IMD has forecasted a “warmer” than normal summer months from March-May.
- **Heat Waves** - The IMD’s climate summary in January said that 2017 was the “fourth warmest year on record since 1901”.
- Several parts of India, from Palakkad in Kerala to Mumbai, reported heat wave conditions.

- They recorded day time temperatures greater than 35°C.
- Increasing trends in the frequency and duration of heat waves over the country is also indicated.
- This is attributed to increasing trends in the greenhouse gases emission.
- The warming of the sea surface temperatures over the equatorial Indian and Pacific oceans is also a reason.
- **Regions** - A harsh summer is awaiting certain states, with mean seasonal temperature-spikes likely to be greater than 1 °C.
- These are J&K, Punjab, HP, west and east Rajasthan, Uttarakhand, west and east UP, west and east MP, Vidarbha, Gujarat and Arunachal Pradesh.
- Certain parts would witness temperature rise between 0.5°C and 1°C from their historical normal.
- These include Tamil Nadu, south interior Karnataka and Rayalaseema.
- **La Nina** - La Nina is a weather condition that generally brings heavy rains to India.
- Currently, the sea surface temperature conditions over equatorial Pacific suggest moderate La Nina conditions.
- The IMD forecast indicates that La Nina conditions are likely to be moderate till spring (May-end).
- They are likely to start weakening after spring.
- But even if La Nina weakens, it is sure that El Nino (which negatively effects monsoon) will not immediately develop.
- Given these, the prospects of a normal monsoon are more.
- However forecasts before spring are prone to error, with better accuracy after May.

Forecast's significant

- A scientific estimate of annual mortality attributable to heat waves between 2010 and 2015 ranges between 1,300 and 2,500.
- For many States, the summer of 2018 may pose a public health challenge.
- Even a marginal rise above the normal may lead to enormous heat stress for millions of Indians, given the deprived conditions of life.
- A heat event can lead to fatal heat stroke in some, and exhaustion, cramps and fainting in many.
- Moreover, there are distinct groups at particular risk for health-related problems during a heat wave.
- These include senior citizens and people with pre-existing disease, mental illness or disability.

Way Ahead

- The IMD's forecast is a timely alert for State authorities to review their summer preparedness.
- **Interventions** - States must facilitate for community-level interventions.
- This is to deal with heat stress and particularly to help the vulnerable groups.
- All stakeholders, including the health-care system, should be prepared to deal with the phenomenon.
- **Alerts** - The World Health Organisation recommends that countries adopt heat-health warning systems.
- This includes daily alerts on weather conditions.
- This could ensure that people are in a position to deal with adverse weather, starting with reduction of exposure.
- **Water stress**- Water stress is a common and often chronic feature in many States.
- Arrangements should be made by the State authorities to meet possible water scarcity.
- **GHG** - The average temperature caused by climate change and the frequency and intensity of extreme weather events are perceivably linked.
- Thus, taking a long-term view, India has to pursue mitigation of greenhouse gases.

La Nina

- La Nina is associated with the cooling of the eastern equatorial Pacific Ocean.
- It favourably impacts the four-month long (June to September) south-west monsoon in India.
- This is particularly critical to the rain-fed farming season which begins in June.

BIO/ HEALTH ISSUES

Dropping Sex Ratio at Birth

In News: NITI Aayog's report has claimed Sex ratio at birth (SRB) has dropped in India.

About report on SRB

- The SRB is the number of girls born for every 1,000 boys, in natural circumstances, the SRB hovers around 952 girls for every 1,000 boys.
- According to NITI Aayog's report sex ratio at birth (SRB) nationwide had dropped from 906 in 2012-2014 to 900 in 2013-2015.
- In all, 17 of 21 large Indian States saw a drop in the SRB, with Gujarat performing the worst, declining 53 points.

brief account on dropping sex ratio

- In 2016, a report from the Asian Centre for Human Rights noted that between 1994 and 2014, 2,266 cases of infanticide were registered in India.
- Against 2,021 cases of abortion under the PC-PNDT, even though abortions outnumber infanticides today.
- While this is a highly disturbing trend, it isn't new for India, which has seen a consistent lowering of the SRB since the 1970s.
- In the Seventies, sex selection technologies like amniocentesis came about, in which doctors can test the amniotic fluid around a developing foetus for genetic abnormalities.
- But people soon realised this method could be used to determine the child's sex and to abort it, if female.
- Other technologies, including the cheaper and less invasive ultrasound, followed, allowing more people to use them.

concerns with low SRB's

- In India SRB is far lower than 952 because of the preference for the male child, this means India is killing girl children in the womb.
- As on today, around 63 million girls are estimated to be 'missing' in India because of such actions.
- Low SRBs starting from the Seventies have led to large numbers of "surplus men" today in countries like India and China.
- There are concerns that skewed sex ratios lead to more violence against both men and women, as well as human-trafficking.
- In India, some villages in Haryana and Punjab have such poor sex ratios that men "import" brides from other States.
- This is often accompanied by the exploitation of these brides.

measures taken in this regard

- In 1994, the government took notice and introduced the Prenatal Diagnostics Techniques Act which punishes healthcare professionals for telling expectant parents the sex of a child with imprisonment and hefty fines.
- In 2003, when technologies that allowed gender-selection even before conception became available, the act was amended to become the Prenatal Conception and Prenatal Determination Act (PC-PNDT), but this Act has been a failure.
- But due to major gaps in the training of personnel implementing PC-PNDT, this act failed.

reforms needs to be taken

- India must implement the PC-PNDT more stringently, but must also dedicate more resources to fighting the preference for boys.
- The Drugs Technical Advisory Board has recently decided that ultrasound machines should be included in the Drugs and Cosmetics Act, so that their import can be regulated.

MISCELLANEOUS

Neanderthals

In News: A recent study found that Europe's cave paintings might have been drawn by Neanderthals.

Neanderthals

- Neanderthals were archaic humans that became extinct about 40,000 years ago.

- They seem to have appeared in Europe and later expanded into Southwest, Central and Northern Asia.
- Neanderthals, were long thought to have been the archetypal cavemen, brutish and intellectually un-evolved.
- In early 1900s, scientific findings described Neanderthals as gorilla-like beasts, an extinct branch of humanity that could not compete with slender, brilliant humans.

findings of the recent study

- Earlier research shows that modern man and Neanderthals mated may have had the “cognitive capacity to create art”.
- It is also believed that they were capable of using sophisticated technology (for prehistoric times) and showed social behaviour previously thought complicated for them to exhibit.
- Recent studies shows that they were much more intellectually capable, the first cave-paintings, it turns out, could have been made by them.

evidences for the recent findings

- Dating experts and archaeologists now agree that the simple paintings from three caves in Spain, outline of a hand, an array of lines and a painted cave formation are more than 64,800 years old.
- Thus, these pre-date the arrival of the H. sapiens in Europe by at least 20,000 years.
- The cave paintings and their possible link to Neanderthals means that the gap between human and Neanderthal intellectual faculties may not be as wide as believed.

counter arguments

- While some believe humans and their extinct cousins were cognitive equivalents, others believe that the latter definitely had sophisticated intelligence but their “cultural achievements fell short of modern humans”.
- Cave art, with certain exceptions, was notoriously difficult to date until very recently and thus modern humans have been historically assumed to have created them.
- Neanderthal art may be comparable to the art and symbolism of modern man across Africa, painted egg shells and minerals attributed to “our direct ancestors” have been found and these date back some 80,000 years.

2ND WEEK OF MARCH

POLITY, GOVERNANCE AND PUBLIC POLICY

Amendments to Major Port Authorities Bill 2016
In News:

- Union government has approved official amendments to the Major Port Authorities Bill 2016.
- The amendments are based on the recommendations of the department related parliamentary standing committee.

MPA 2016 Bill

- Under the Major Port Authorities Act 1963, 12 major ports had been created in India.
- All major ports are managed by the respective Board of Port Trusts.
- Trusts have members appointed by the central government.
- The MPA, 2016 Bill provides for the creation of a Board of Major Port Authority for each major port.
- The Boards will succeed the existing Port Trusts.
- The proposed Board will comprise of a Chairperson and a deputy Chairperson.
- Both of them will be appointed by the central government on the recommendation of a select committee.
- Besides, the Bill allows for more Private-Public partnership and market based tariff fixing for generating revenues.

Present Amendments

- The Cabinet has recently accepted some of the recommendations of the Standing Committee on the Bill.
- The number of the Labour representatives to be appointed in the Port Authority Board among the serving employees of the Port has been increased from one to two.

- This is to represent the interests of the employees.
- The focus is also being emphasized on re-skilling the workforce.
- After commencement of the Act, for PPP projects, the concessionaire shall be free to fix the tariff based on market conditions.
- Presiding Officer and Members of the Adjudicatory Board shall be appointed by the Central Government.
- This would be on the recommendations of the Selection Committee.
- Central Government shall have the power to remove the Presiding Officer or any member of the Adjudicatory Board following the prescribed manner.

Existing Concerns in Ports

- Trust boards have turned into fiefdoms of bureaucrats and politicians.
- The development of ports has suffered, with decisions not being taken in an objective, transparent manner.
- India's ports account for over 70% of India's international trade by value.
- It's necessary to address inefficiencies such as high turnaround time of ships by stepping up modernization and grappling with careless management.
- Specialized cargo handling berths have a higher scope for PPP, mechanization and improved efficiencies.

Significance of the Bill

- The Bill comes as a measure for addressing the technical and governance issues in the ports.
- It paves the way for **governance reform** in the management of 11 out of 12 major ports in India that now run as trusts. Notably, the Ennore port is a company.
- The Centre acts as both regulator and service provider in these.
- Under the provisions of the Bill, the **government** would only **regulate** the services provided by private players.
- It will **not** be a **service provider** itself. It thus addresses the issue of **conflict of interest**.
- The new Bill marks an effort to promote **ease of doing business**. With 'authority' status, ports will have a smaller **management** board.
- This enables **expedient decisions** on modernization and use of port trust lands in the public interest.

Parliamentary Committee Recommendations

- **Port governance structure** - The Bill provides for the creation of a Board of Major Port Authority for each major port. Under the 1963 Act, all major ports are managed by the respective Board of Trustees.
- It noted that the Bill provides the government more flexibility and power to allow private players in the port sector.
- It recommended that the Ministry should address stakeholder concerns regarding the possible full **privatization** of ports in future.
- It advised the Ministry to ensure that the administrative, managerial and financial control of the port remains with the Board of Major Port Authority.
- **Board Composition** - Other than the Chairperson and deputy Chairperson, the committee recommended having other members in the Board of Port Authority.
- These include members from the respective state governments, the Defence Ministry, the Customs Department, few independent members who are experts in port activities.
- It emphasized the need for a better representation of employees of the port on the Board.
- It thus recommended appointing a minimum of two labour representatives, one of whom should be a serving employee.
- **Voting Powers** - The bill provides that all questions will be decided by a majority of votes of the members present and voting.
- The Chairperson or the person presiding will have a second or casting vote in case of equal votes.
- The Committee recommended deleting this provision because it would impact the functional and strategic independence of the Board.
- **Land Contracts** - The 1963 Act prescribes certain maximum value and a maximum period of 30 years for contracts dealing with port land.
- It deals with acquisition, sale or lease of immovable property.
- Any contract extending that value needs prior approval of the government.

- However, the recent Bill allows the Board to use its property, assets and funds as deemed fit for the development of the major port.
- Also under this, the contracts on sale or lease of immovable property can be for a maximum term of 40 years exceeding which would require a prior approval of the government.
- The Committee noted that this provision does not provide clarity on the extent of land ownership of the Port Authorities.
- It thus recommended retaining the provisions of the earlier Act itself.
- **Raising loans** - The Bill provides for the ports to raise loans even from institutions outside India that is compliant with all the laws.
- However, the Committee has noted that raising loans from private or foreign financial entities may give such entities control over the port management.
- It recommended that the provision should be amended to ensure that the administrative control of the Port Authority always remains with the government.
- It also recommended that any loans obtained from entities other than the government must be approved by the central government and RBI, and be notified.
- **Others** - The committee recommended that while handing over port related activities to private operators, national security and safety should not be compromised.
- This is particularly in reference with ports handling defence cargo.
- It recommended that no new ports must be established in the 100 km vicinity of an existing major port, without the authority's permission.
- This is because new ports that come up in the vicinity of major ports affect their business and profitability.

Rejection of "special status" for Andhra Pradesh

In News: The Centre has rejected the Andhra Pradesh (AP) government's demand for Special Category Status for the state.

Special category status

- **Rationale** - The Constitution does not have any provision for categorisation of any state as a Special Category Status (SCS) State.
- But the Centre has assisted some states with funds in the past, since 1969.
- This was as allocated by the former Planning Commission body called the National Development Council (NDC).
- The assistance was in consideration of the historical disadvantages of certain states when compared to others.
- **Criteria** - The NDC granted this status based on some features such as:
 1. hilly and difficult terrain
 2. low population density and/or the presence of sizeable tribal population
 3. strategic location along international borders
 4. economic and infrastructural backwardness
 5. non-viable nature of State finances
- **Advantages** - The SCS states would receive funding for Centrally Sponsored Schemes in the 90-10 ratio i.e 90% of the funds would come from the Centre as against 60% for normal category states.
- The remaining would be funded by the state governments.
- **States** - The NDC first accorded SCS in 1969 to Jammu and Kashmir, Assam and Nagaland.
- Over the years, 8 more states were added to the list.
- They are Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Tripura and, in 2010, Uttarakhand.
- These 11 states got the benefits of SCS until 2014-15 when the 14th Finance Commission proposed major changes.

14th Finance Commission's recommendations

- 14th Finance Commission headed by YV Reddy submitted its report in 2014.
- It redefined the financial relationship between the Centre and the states for the five-year period ending 2019-20.
- The Commission notably did away with the 'special category' status for states, except for the Northeastern States and 3 hill states (J&K, Himachal Pradesh and Uttarakhand).
- Instead, it suggested that the resource gap of each state be filled through 'tax devolution'.

- It thus urged the Centre to increase its share of tax revenues to the states from 32% to 42%.
- If devolution alone could not cover the revenue gap for certain states, the Centre could provide a revenue deficit grant.
- The Commission stated that Andhra Pradesh would end up as a revenue deficit state.
- It thus recommended that the Centre provide a revenue deficit grant for the period of the 14th Finance Commission.

AP Reorganisation Act

- The state of Andhra Pradesh was bifurcated in 2014 under the Andhra Pradesh Reorganisation Act, 2014.
- The Act does not mention 'special category'.
- But it does mention that the Centre would help Andhra Pradesh bridge any resource gap.
- Under the 'Revenue Distribution' section, the Central Government may make appropriate grants.
- It may ensure that benefits and incentives in the form of special development package are given to the backward areas of that State.
- But notably, apart from the legislation, the former PM had in the Rajya Sabha assured that AP would be granted special category status.
- It was said that Special Category Status would be extended to the successor state of Andhra Pradesh for a period of 5 years.
- But the successor government (NDA) has been emphasizing that the 14th Finance Commission did not provide for such treatment.

Centre's stance for AP

- The Union government is of the view that SCS category did exist when the state was bifurcated in 2014.
- But after the 14th Finance Commission's award, such treatment was "constitutionally" restricted and so cannot be accorded.
- The Centre however stated that it was willing to provide the "monetary equivalent" of a special category state.
- As an additional measure, the Centre has agreed to fund all externally aided projects in Andhra Pradesh in the 90-10 ratio.

AP's stance

- AP reiterates that Telugu sentiments and emotions had been hurt and only special category status could assuage them.
- It is also maintained that the CM had only been asking for what was provided for in the AP Reorganisation Act.

Special Status/Special Provisions for States

- It is to be noted that the Special Category Status (SCS) states are different from states with Special Status/Special Provisions.
- Special Category Status deals with economic, administrative and financial aspects.
- On the other hand, Special Status/Special Provisions empowers legislative and political rights and is offered by constitutional provisions under Part XXI.
- **Article 370** grants Special Status to the State of **Jammu and Kashmir**.
- **Art 371 to 371-J** contains Special Provisions for eleven states as given below.
- **Art 371** specifies the "Special responsibility" to Governor to establish "separate development boards".
- This is in respect of "Vidarbha, Marathwada, and the rest of **Maharashtra**", and Saurashtra and Kutch in **Gujarat**.
- The other special provision states are as follows:
 1. **Nagaland** - Art 371A by 13th Amendment Act, 1962
 2. **Assam** - Art 371B by 22nd Amendment Act, 1969
 3. **Manipur** - Art 371C by 27th Amendment Act, 1971
 4. **Andhra Pradesh & Telangana** - Art 371D by 32nd Amendment Act, 1973; substituted by the Andhra Pradesh Reorganisation Act, 2014
 5. **Sikkim** - Art 371F by 36th Amendment Act, 1975
 6. **Mizoram** - Art 371G by 53rd Amendment Act, 1986
 7. **Arunachal Pradesh** - Art 371H by 55th Amendment Act, 1986
 8. **Karnataka** - Art 371J by 98th Amendment Act, 2012

- **Art 371E** allows for the establishment of a university in Andhra Pradesh by a law of Parliament.
- But this is not really a 'special provision'.
- **Art 371I** deals with Goa, but does not include any provision that can be termed 'special'.

Prohibition of Unlawful Assembly Bill

In News:

- The draft Prohibition of Unlawful Assembly (Interference with the Freedom of Matrimonial Alliances) Bill, 2011 was proposed by the Law Commission.
- It has long been pending, and the Supreme Court is now expected to frame guidelines on this.

objectives

- Community opposition to inter-caste, inter-community and inter-religious marriages have long been a social concern.
- The current penal law lacks direct application to the illegal acts of such caste assemblies.
- The Bill is thus meant to penalise honour killings in the name of upholding community honour or family honour.
- The legislation primarily aims at preventing the unlawful interference from caste panchayats.
- It is intended to uphold the right of consenting adults to marry persons of their own choice.

key provisions in the Bill

- **Definitions** - "Unlawful assembly" refers to a group of persons who condemn a marriage.
- This is particularly for alleged reasons that the marriage had dishonoured the caste or community tradition.
- "Marriage", under the draft legislation, includes "proposed or intended marriage."
- **Punishments** - The punishments are meted out in a phased manner.
- All offences under the proposed Act will be cognisable, non-bailable and non-compoundable.
- The offences include:
 - participating in any unlawful assembly
 - making exhortations (persuasion, advice) that endanger the liberty of a couple
 - criminal intimidation of the couple or their relatives or supporters
- The punishments for the offences range from 6 months to 7 years.
- The fine ranges from Rs. 10,000 to Rs. 30,000.
- The maximum punishment of 7 years of imprisonment is in the case of actual harm or injury caused.
- The provisions under the proposed law do not negate the offences under IPC but only adds to them.
- **Special Courts** - The cases will be tried in Special Courts presided over by a sessions judge or additional sessions judge.
- The special courts will be set up by states in consultation with the High Courts.
- It will have the power of a Sessions Court.
- It can take cognisance of any offence upon receiving a complaint of facts, or upon a police report of such facts.
- It can also take suo motu cognisance of the cases.
- The court can take cases without the accused being committed to it for trial.
- **Authority** - The Collector or the District Magistrate is entrusted with the responsibility for the safety of the persons targeted.
- This is in case any illegal decision is taken by the khap panchayat.
- He/she shall take necessary steps to prohibit the convening of such illegal gatherings.

Law Commissions' observations

- **IPC** - The Commission has rejected the government's proposal to amend Section 300 of the Indian Penal Code.
- The proposal was to include 'honour killings' within the definition of murder in IPC.
- However, Law Commission observed that the definition of murder in Section 300 of the Indian Penal Code would suffice.
- As, this would be adequate to take care of the situations leading to overt acts of killing or causing bodily harm to the targeted person.
- **Khap Panchayats** - Nevertheless, the Law Commission proposed the fresh legislation.

- It seeks to declare khappanchayats unlawful.
- As, khappanchayats have long been handing down punishment to couples who go for 'sagotra' or inter-caste marriage.
- In this regard, the Commission also observes that the Hindu Marriage Act did not prohibit 'sagotra' or inter-caste marriages.

Way Forward

- So far, 23 States have responded to the Bill with suggestions.
- The other six states have not responded yet.
- The Supreme Court has now stepped in to fill this legislative vacuum.
- The SC is expected to frame guidelines on this, in a judgment to protect adult couples from the fury of the mob.

Roster Management in Judiciary

In News: The Supreme Court has recently made public its Judges Roster, by posting it on its official website.

- Moreover, the CJI will hear all PILs and cases related to elections, criminal cases, social justice and the appointment of constitutional functionaries.

Significance of the roster

- Roster lists out the allocation of case categories to different judges.
- A fine-tuned roster will prevent two different benches from hearing the same kind of case.
- It thus prevents taking divergent views at the same time.
- Conflicting interpretations by different benches have earlier forced the SC to set up larger benches to resolve.
- Secondly, roster will allow for effective case management.
- Judges in India are not specialists in any specific areas of the law.
- But they will be in a better position to dispose of cases, the more they handle the same kind of cases.
- E.g. the SC has constituted a dedicated tax bench.

Importance of the SC's move

- The ongoing crisis in the higher judiciary came to light with 4 senior-most judges of the SC.
- Their unprecedented press conference indicated their loss of faith in the Chief Justice of India (CJI).
- It related precisely to the manner of allocation of cases.
- In this backdrop, making public the Supreme Court's roster is a welcome step towards greater transparency.
- Four large high courts — those of Allahabad, Bombay, Delhi and Karnataka — also make their rosters available on their websites.
- It is unfortunate that not all high courts have followed this lead.
- The SC's move could help encourage the other high courts to do so.

Concerns

- How far will making roster public address the ongoing crisis of credibility in the Supreme Court is highly doubtful.
- **Mechanism** - The roster existed even prior to the one made public and was largely being followed.
- But the issue here is the absence of any norms or transparency in the mechanism.
- The CJI exercising the discretionary power to go beyond the roster and allocating specific cases to specific benches is the concern.
- This continues to be a bone of contention, despite the roster being made public.
- **Roster management** - The SC's roster allocation is far less detailed when compared to those of the 4 high courts mentioned.
- E.g. In the Delhi High Court, cases are divided between benches on the basis of not just the subject matter but also by date.
- In the Allahabad High Court, writ petitions are divided among the benches based on which local law they are concerned with.
- The SC's roster, on the other hand, is just a list of case categories allocated to certain judges.
- No classification or division has been made between the benches.

- It is quite clear that roster management is a bit better in the high courts than in the SC.

Concern with PILs

- The fact that the CJI's court will be the only one to hear Public Interest Litigations is also problematic.
- To be fair, PILs constitute a very small number of the total cases in the SC.
- No more than 1% of cases in the SC are PILs.
- This is even after including appeals from judgements of high courts in PIL cases and PILs filed in the SC itself.
- Nevertheless, PILs also, than most other case types, raise important issues.
- Given this and questions over CJI's integrity and independence, only the CJI hearing PILs is unlikely to inspire much confidence.

Way Forward

- The continuing concern calls for laying down clear and specific norms to guide the CJI's exercise of discretion.
- This is also the demand that the four senior-most judges made.
- They have asked for a panel, instead of the roster being determined by the CJI alone.
- Proper procedures and norms for the preparation of the roster should be put in place.
- An internal mechanism, instead of just the individual CJI, can also ensure some level of continuity and consistency.

Criminal Laws (Rajasthan Amendment) Bill, 2018

In News: Rajasthan recently passed a Bill providing for death penalty to those convicted of raping girls of 12 years and below.

About the Bill

- The Bill seeks to amend the Indian Penal Code with the insertion of new provision.
- The Bill had inserted **two new sections**, 376-AA and 376-DD, in the IPC.
- **Section 376-AA** provides for capital punishment or rigorous imprisonment ranging between 14 years and lifelong incarceration.
- **Section 376-DD** makes a similar provision for gang-rape of a girl child.
- It lays down death penalty or imprisonment from 20 years to lifelong incarceration for those convicted of the offence.
- Each of the persons constituting the gang will be deemed to be guilty of the offence.
- The Bill will become a law after it gets the Presidential assent.
- Rajasthan became the second State, after Madhya Pradesh, to pass such a Bill.

Need for the bill

- Offences relating to child rape and child gang-rape are taking place every now and then.
- National Crime Records Bureau's 2016 report highlights a steady increase of cases of crimes against children in Rajasthan.
- The State recorded around 4,000 such cases in 2016, which was 3.8% of the crimes against children registered across the country.
- The legislation is said to aim at protecting the girl child by laying down a deterrent punishment, including death sentence, to the offenders.

Drawbacks

- How far will institutionalizing capital punishment really act as a deterrent remains a long-pending debate.
- The demand for the death penalty in a rape case puts forth the idea of ultimately equating rape with death.
- Progressive groups and individuals condemn sexual violence but oppose death penalty.
- They argue that patriarchal notions of 'honor' lead society to believe that rape is the worst thing that can happen to a woman.
- Rape is a tool of patriarchy, an act of violence, and has nothing to do with morality, character or behavior of the woman.
- There is a thus a need to strongly challenge this stereotype of the 'destroyed' woman who loses her honors and who has no place in society after she's been sexually assaulted.
- In this line, the Justice Verma Committee ruled against recommending death penalty even in the rarest of the rare rape cases.

- Justice Verma Committee was formed in 2013 to look into crimes against women after the infamous Delhi gang rape case.
- The committee also rejected the suggestion of chemical castration, saying it would violate human rights.
- As, mutilation of the body is not permitted under the constitution.
- It would be unconstitutional and inconsistent with basic human rights treaties to expose any citizen without the consent to potentially dangerous medical side effects.

Way Ahead

- The mandatory minimum sentences for sexual offences have already been increased by the POCSO Act and the Criminal Law Amendment Act, 2013.
- So the need of the day is successful prosecutions, an increase in number of convictions and social awareness.
- It is the lack of fear of being caught which drives most criminals and rapists.
- Thus, a robust criminal justice system would act as a more effective deterrent against rape or sexual violence.

Departmentalizing Reservations in Teacher Recruitment

Context:

- University Grants Commission (UGC) has recently decided to implement reservation for teaching positions by treating 'individual departments' as units.
- This is socially regressive as this approach is expected to substantially reduce the number of SC, ST and OBC intake.

Background

- UGC has recently decided to implement reservation "department wise" instead of considering the university as a whole.
- Union HRD ministry has approved UGC's decision and has claimed that the new intake formula was based on the directives of the Allahabad High court.
- But it has been contested by some, who claim that this would reduce the number of SC, ST and OBC candidate intake substantially.
- Notably, despite the tardy implementation, reservations in education and jobs are the ones that have proven effective in uplifting the depressed classes.
- Also, it is a reality that if reservations are absent, even eligible candidates from these groups would be discriminated against on castist grounds.

category-wise breakdown of teaching staff

- As per the UGC's annual report for 2016-17, there were a total of 14.7 lakh teachers in colleges (89%) and university departments (9%).
- The report gives the category-wise teaching positions of SCs, STs and the OBCs in the 30 central and 82 state public universities.
- Of the total 31,446 teaching positions in these universities that are currently filled, the combined total of SCs, STs and OBCs were 9,130.
- This is merely 29.03% of the positions as against their combined reservation of 49.5% that is granted to these groups in the central list.
- More importantly, of the 9,130 people - 7,308 (80%) were assistant professors, 1,193 (13%) associate professors and barely 629 (7%) were of professors.
- While these figures are only for universities and category wise break-up for colleges has not been given, the trend can't be very different there either.
- The Rajeev Gandhi National Fellowship, which was implemented in 2005, saw the grant of 2000 fellowship annually to SCs and STs doing MPhil and PhDs.
- While at least 15,000 such fellows would've successfully graduated, the current recruitment scenario for universities gives them little hope for securing a job.

issues with the new policy

- If vacancies are this high when universities are treated as a whole, then departmentalisation of reservations would only exacerbate this.
- Further, departmentalisation would mean more impediments for the reserved in promotions, and consequently curtail career progression.
- Hence, the new rules for departmental reservation are only going to worsen this situation, which hence needs immediate correction.

- Also, Privatisation in education is reducing the share of the reserved staffers as there is lesser compliance with reservation policies in private institutions.

Flawed Quota Provision

- Telangana Government passed a bill to enhance reservation for Muslims and Scheduled Tribes to 12% and 10% respectively.
- However, the Department of Personnel and Training (DoPT) has said that the provisions of the Telangana legislation are in violation of a 1992 Supreme Court order that capped quota at 50%.
- In the Indra Sawhney case 1992, the Supreme Court ruled that clause (4) of Article 16 of the Constitution speaks of adequate representation and not proportionate representation.
- Article 16 ensures equality of opportunity in matters of public employment.
- Particularly, clause 4 of Article 16 empowers the state to make provisions for reservation of appointments or posts for inadequately represented backward classes.

Death Penalty for Child Rape

Context:

- Rajasthan and Madhya Pradesh have passed Bills introducing death penalty for rape of a girl below the age of 12 years.
- A legal backing for death penalty demand in child rape cases needs a relook on both social attitude and government's responsibility.

Rationale behind the legislation

- Firstly, there is the belief that harsher punishments will deter people from committing child rape.
- Also, justice for child survivors demands that the law provide for the death penalty.
- Lastly, the disgust for the crime makes the perpetrator 'deserving' of death penalty.

Flawed arguments

- **Deterrence** - The deterrence argument puts forth that fear of harshest punishment will prevent individuals from committing child rape.
- But social, economic, cultural, psychological and other factors in one's life interact in far more complex ways.
- Various studies have proved the uncertainty of death penalty in being an effective deterrent.
- Moreover, in the context of child rape, many preventive measures and policies do have a definitive impact on preventing child rape.
- These may include risk assessment and management, cognitive behavioral treatment and community protection measures.
- Diverting resources to the death penalty, is more like taking away from developing these strategies that have greater preventive potential.
- **Justice** - The argument of death penalty as justice to the child survivor seeks to cover-up the real reasons preventing justice.
- Notably, the conviction rates are low under the Protection of Children from Sexual Offences Act, 2012.
- There are some grave concerns over the manner of investigations and criminal prosecutions under the POCSO Act.
- There is lack of specialized investigators, prosecutors, judges, mental health professionals, doctors, forensic experts and social workers.
- Inadequate child protection and rehabilitation services, lack of compliance with child-friendly legal procedures are some other concerns.
- Furthermore no real system of positive measures to reduce vulnerabilities of children in this context has been developed.
- Working on these shortfalls is the need of the hour to ensure justice for child survivors.
- **Under-reporting** - A large proportion of perpetrators are family members or those close to or known to the family.
- This results in massive underreporting of such crimes.
- This concern will only intensify with death penalty, as the child's family risks sending a family member or a known person to the gallows.
- **Attitude** - The abhorrence or disgust associated with the crime and perpetrators of such crimes lies at the core of this legislation.
- This social attitude drives the sentiment that such individuals 'deserve' death penalty.

- Ideas like 'human rights are meant for humans and not devils who are involved in heinous crimes' need assessments.
- **Legal** - Under the Constitution, legislation has to always give a sentencing judge the option to choose between life imprisonment and death penalty.
- Death penalty cannot be declared as the only punishment for any crime.
- The sentencing judges will have to make this choice in the context of child rape too.
- **Arbitrariness** - Arbitrariness in imposing death sentences has been explicitly discussed in judgments of the Supreme Court.
- It has also led the Law Commission to recommend the gradual abolition of the death penalty in one of its reports.
- The arbitrariness concern will only worsen in child rape cases, when judges decide on death sentence based on the 'rarest of rare' standard.
- It must be ensured that it does not become a judge-centric exercise with individual predilections of a judge taking over any rule of law.
- Arriving at measures and standards to decide certain instances of child rape as worse than others is a questionable exercise.
- **Vulnerability** - The arbitrariness of the death penalty in India also arises from the discriminatory impact of the choice of what constitutes 'rarest of rare'.
- The Death Penalty India Report of 2016 found that over 75% of death row prisoners were extremely poor.
- They belong to marginalized groups with barely any meaningful access to legal representation.
- Thus, in most cases, the weakest sections of the society bear the burden of the death penalty.
- It is important to understand this implication, in the discussion on death penalty for child rape.

WayAhead

- Measures that the governments ought to take are different from steps meant to convey public abhorrence.
- The social menace of child rape requires sustained planning, engagement, and investment of resources by the government.
- Death penalty for child rape is a counterproductive diversion and an easy way out on the issue.

Demands of Adivasi Farmers in Maharashtra

In News: A predominant number of Adivasi farmers had protested outside Maharashtra state assembly claiming various demands.

Demands of the farmers

- Farmers demanded a broader debt waiver program after some of them failed to qualify for any financial relief under the Maharashtra government's initiative in 2017.
- The demands were also extended in including a better prices for their crops, changes in a river-linking program in the state to ensure that tribal villages are not submerged.
- Farmers protested to halt the acquisition of farmers' lands for the bullet train and the super highway projects.
- They also demanded proper compensation for losses due to pest attacks and hailstorms.
- Apart from this farmers also demanded for the union government's promise to ensure a 50 percent return over production costs before the national election in 2019.

Reasons behind farmer distress

- Maharashtra is the country's second-biggest producer of cotton and sugar cane and third-biggest grower of pulses.
- Bumper harvests, boosted by good rain in 2016 and 2017 after back-to-back droughts, have hurt farmer incomes due to a supply glut.
- In Maharashtra costs of farming have become unsustainable, and it's no longer feasible for farmers to live in villages and sustain their families.
- For this reason farmers wanted to draw the government's attention to their plight.

Problems faced by Adivasi farmers

- The 50,000-odd peaceful yet determined men and women who protested were predominantly poor tribal farmers from the Adivasi pockets of northern Maharashtra.

- These farmers have been seeking a legal title to forest land being occupied and cultivated by them for generations.
- This problem is something that's specific to Adivasi farmers' people who are traditional forest dwellers, but whose rights over such land are not officially recognized.
- In the absence of recorded titles their lands technically belong to the forest departments and due to this these farmers cannot access institutional credit.
- Since such farmers rely on moneylenders, who typically extend credit for input purchases against delivery of the former's harvested produce to them, they face severe consequence.

Task lies before the government

- As of now the protests has been called off, Maharashtra government should honour its promise of resolving the issue of forest land transfer rights.
- Proper implementation of the Forest Rights Act, 2006, will allow Adivasi farmers who are today practically landless laborers or, at tenants at will to claim ownership over their traditionally cultivated lands, subject to verification by the Gram Sabhas concerned.
- There is need to do away with such intermediaries in tracts already being farmed for generations by traditional forest dwellers.
- It will, then, incentivize them to invest in land improvement, which contributes to its long-term productivity, and farm without fear of eviction or having to bribe forest department officials.

SC's Ruling on Foreign Law Firms

In News: The Supreme Court has ruled that foreign law firms or foreign lawyers cannot practise law in the country.

SC's Directives

- **Practice** - Foreign law firms or foreign lawyers cannot practise law in the country either on the litigation or non-litigation side.
- This means overseas lawyers or firms -
 - cannot open offices in the country
 - cannot appear in courts or before any authority
 - cannot render other legal services, such as giving opinions or drafting documents
- **Temporary** - However, there is no bar on foreign law firms or foreign lawyers visiting India for a temporary period on a "fly in and fly out" basis.
- This could be for giving legal advice to their clients on foreign law or their own system of law and on international legal issues.
- The expression 'fly in and fly out' will only cover a casual visit not amounting to 'practice'.
- The Court added that any dispute in this issue would be decided by the Bar Council of India.
- **International Commercial arbitration** - The SC also ruled on arbitration proceedings and disputes arising out of contracts relating to international commercial arbitration.
- Accordingly, the foreign law firms and lawyers also do not have an "absolute right" in this regard.
- However, they might not be debarred from conducting arbitration in India arising out of international commercial arbitration.
- But they would be governed by the code of conduct applicable to the legal profession in India.
- **BPO** - The court said Business Process Outsourcing (BPO) companies, providing a range of services, would not come under the Advocates Act.
- The services include word processing, secretarial support, transcription and proof reading services, travel desk support services, etc.

Background

- It comes as an effort to keeping India's legal market exclusively for Indians.
- The ruling settles a long-standing argument on whether foreign firms or attorneys should be allowed to enter the Indian legal market.
- **Lawyers' Concern** - Sections of the legal fraternity have been opposing the entry of foreign firms for nearly two decades.
- There were petitions seeking legal action against 30 foreign law firms that were "illegally practicing" in the country.
- The Commerce Ministry, setting up earlier in 2005 a committee to consider opening up legal services, was opposed by bar associations.
- Lawyers were against the country succumbing to international pressure.
- Their main objection was that Indian law firms would not be able to compete with foreign firms.

- As, the latter had greater money power and may control the legal market.
- **Other Countries** - Indian advocates were not allowed to practice in the U.K., the U.S., Australia and other nations.
- They are allowed only on fulfilling onerous restrictions like qualifying tests, experience and work permit.
- It was thus argued that foreign lawyers should not be allowed to practice in India without reciprocity.
- **Non-litigious Practice** - Non-litigation market has seen an exponential increase after globalization.
- The services include drafting of documents, preparation for litigation, etc.
- In particular, international commercial arbitration has taken off in a big way.
- The foreign law firms had argued that there was no bar on a company carrying on consultancy or support services.
- But the Bar Council of India contended that even non-litigious practice came under the term 'practice of law'.
- Thus even these could be done only by those enrolled under the Advocates Act in the country.

Implications

- Successive governments were considering permitting foreign law firms to practice law in matters not involving litigation and on a reciprocal basis.
- In 2011, the Union Law Ministry held consultations with the Bar Council of India to consider amending the Advocates' Act for the purpose.
- However, the SC's ruling has included both litigation and non-litigation services in 'practice of law', laying down restrictions.
- The Centre may thus be not able to throw open the legal services sector to overseas players.
- Moreover, the court has recognized only limited access to foreign players in arbitration.
- It should be limited to matters governed by an international commercial arbitration agreement, and code of conduct applicable to the legal profession in India has to be followed.
- This could be a considerable hurdle in India's ambition to be a global arbitration hub.

ECONOMIC AFFAIRS

Mitigating the Concerns of Angel Tax

Context:

- Indian business community is disappointed due to the Angel tax which is regressive in nature.
- Union government need to design a tax such that it will not affect the cash flow for a start-up.

Angel Tax

- In India an angel tax was introduced in Union Budget of 2012 under the Finance Act 2012.
- It is a 30.9 % tax levied on investments made by external investors in start-ups or companies.
- Under this tax the entire investment is not taxed only the amount that is considered above "fair value" valuations of the start-up, classified as 'income from other sources' in the Income Tax Act of India.
- The tax will be charged both on cash investments as well as on share premium paid to acquire new shares in a company that the tax authorities regard as excessive.
- Angel Tax was introduced in 2012, it was when the general public was convinced that the entire administrative machinery of the Government was steeped in corruption.
- At that time every facet of public policy had come to be clothed with the miasma of personal profit rather than genuine public interest.
- This was after all the era of the Commonwealth Games scam, the 2G scam, the coal-block allotment scam and so on.
- The income tax department considers that the present value of all future cash flows in the business is a lot less and therefore seeks to impose a tax on such perceived excess premium.
- That a tax on invested capital is against all accepted notions of what constitutes a tax on income, and is beyond dispute.

concerns with Angel taxes

- The problem arises because start-ups are often valued subjectively on the basis of discounted cash flows, without taking into account intangibles like goodwill.

- This can cause differing interpretations of “fair value” and leave start-ups vulnerable to unduly high taxes because the taxman feels the investment is too high over their valuation.
- Angel taxation is a major thorn in the side for many ventures and has forced many angel investors to shy away from offering financial support to start-up dreams.

Way Forward

- Government need to design a system around the provisions of an ‘angel tax’ regime with none of the cash flow implication that such a tax entails:
 1. That excess share premium, such as it is, will be recognized as income.
 2. The resultant figure of tax will however not trigger any cash pay-out but instead will be recognized as a deferred tax liability in the books of the enterprise.
 3. The outstanding tax obligation may be permitted to be liquidated against actual fixed capital expenditure or incremental working capital needs through suitable accounting entries.
- Thus the venture capital industry hopes for an emphasis on adverse cash flow consequences of the proposal be mitigated in some way.

Prospects and Pitfalls of E-NAM

e-NAM

- National Agriculture Market (NAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
- It is managed by Small Farmers' Agribusiness Consortium (SFAC) under Department of Agriculture, Cooperation & Farmers' Welfare.
- The NAM Portal provides a single window service for all APMC related information and services.
- It currently links 450 APMCs from across 13 states, different commodities including staple food grains, vegetables and fruits are currently listed in its list of commodities available for trade.
- Traders and exporters need to get themselves registered with the portal to access its services.
- This includes commodity arrivals & prices, buy & sell trade offers, provision to respond to trade offers, among other services.

Mechanism Prior to e-NAM

- Agriculture marketing is administered by the States as per their agro-marketing regulations.
- Under which, the State is divided into several market areas, each of which is administered by a separate Agricultural Produce Marketing Committee (APMC) which imposes its own marketing regulation (including fees).
- This fragmentation of markets, even within the State, hinders free flow of agri commodities from one market area to another without commensurate benefit to the farmer.

Working mechanism of e-NAM

- Under e-NAM willing States to accordingly enact suitable provisions in their APMC Act for promotion of e-trading by their State Agricultural Marketing Board/APMC.
- States to undertake reforms prior to seeking assistance under the scheme in respect of
 1. Single license to be valid across the State.
 2. Single point levy of market fee (i.e. on the first wholesale purchase from the farmer will be charged).
 3. Provision for electronic auction as a mode for price discovery.
- Only those States/UTs that have completed these three pre-requisites will be eligible for assistance under the scheme.
- Besides the State Marketing Boards/APMCs must enable the promotion of the e-auction platform.
- The States will need to ensure that the mandis that are integrated with NAM makes provision for requisite online connectivity, hardware and assaying equipment.
- The payment to the farmers will be provided to the farmers with valid license linked with Aadhaar through DBT by state APMCs.

Advantages of e-NAM

- A unified market through online trading platform, both, at State and National level and promotes uniformity, streamlining of procedures across the integrated markets.
- E-NAM removes information asymmetry between buyers and sellers and promotes real time price discovery.

- It uses estimations based on actual demand and supply, promotes transparency in auction process.
- It allows farmers to access a nationwide market with prices commensurate with quality of his produce.
- It also allows online payment and availability of better quality produce and at more reasonable prices to the consumer.

Challenges Facing by e-NAM

- State agricultural departments have been finding it difficult to convince all stakeholders like farmers, traders and commission agents to move to the online platform.
- The platform is not fully functional in any State as there are no scientific sorting/grading facilities or quality testing machines.
- Lack of technical expertise and internet facility at the State Agricultural Departments has also delayed the setting up of grading/assaying facilities.
- The huge share of the trade recorded in the e-NAM portal was actually carried out offline and the values were fed into the portal to make it look like genuine online transactions.
- This completely defeats the purpose as the main objective of an online auction portal is to help price discovery.

RBI's Move on LoUs and LoCs

In News: The Reserve Bank of India (RBI) has decided to discontinue the issue of Letters of Undertakings (LoUs) and Letters of Comforts (LoCs).

LoUs and LoCs

- **LoUs** - These are assurance given by one bank to another to meet a liability on behalf of a customer, which is usually valid for 180 days.
- It is used for overseas import remittances and involves four parties an issuing bank, a receiving bank, an importer and a beneficiary entity overseas.
- LoUs are conveyed from bank to bank through "Society for Worldwide Interbank Financial Telecommunication" (SWIFT) instructions.
- **LoCs** - A letter of comfort is a written document that provides a level of assurance that an obligation will ultimately be met.
- In its traditional context, a letter of comfort is given to organizations or persons of interest by external auditors regarding statutory audits, statements, and reports used in a prospectus.
- The letter of comfort will be attached to the preliminary statements as assurance that it will not be materially different from the final version.

significance of these instruments

- LoUs and LoCs offer exporters a source of cheap and dynamic working capital in a banking system that is clogged with high interest rates and complex procedures.
- When mobilised legally with appropriate margin money and bank guarantees logged into the bank's formal transaction recording system LoUs have proven to be more convenient sources of funding than the conventional letters of credit (LoCs).

shortfalls of this move

- RBI seems to be to have overreacted on the PNB scandal which involved the infringement of LoU protocols.
- Depriving exporters of this instrument can have a disruptive effect on the buyers' credit market and several adverse consequences for the economy at large.
- It would raise borrowing costs by between 0.5 percentage point and 1 percentage point.
- Exporters will also be forced to access the dollar market for funds, exerting pressure on the rupee just as oil prices are hardening.
- Apart from other anxieties this ban comes at a time when disruptions caused by the goods and services tax (GST) are yet to be sorted out, as many exporters have been waiting for months for offset dues from the Integrated GST to materialise.

What needs to be done?

- A racehorse sector such as gems and jewellery, which accounts for roughly 16 per cent of India's exports and employs over 5 million workers, could be a particular victim of this move.
- Although only about 5 per cent of jewellers utilise the LoU/LoC route, these are usually the bigger players that account for the bulk of exports, India being the world's largest exporter of cut and polished diamonds.

- RBI must consider the fact that the prime factor of the recent scam is not LoUs, its noncompliance of the state owned bank with CBS (core banking system) and SWIFT.
- Thus this integration should be the focus of the RBI's concerns for all banks that are involved in export finance so that disclosure is institutionalised rather than dependent on the integrity of a bank executive.
- Besides no instrument, whether LoU or LC, can be considered 100 per cent safe so banning one in preference to another demands much more serious examination of RBI.

INTERNATIONAL AFFAIRS

China's Expansion into the Arctic

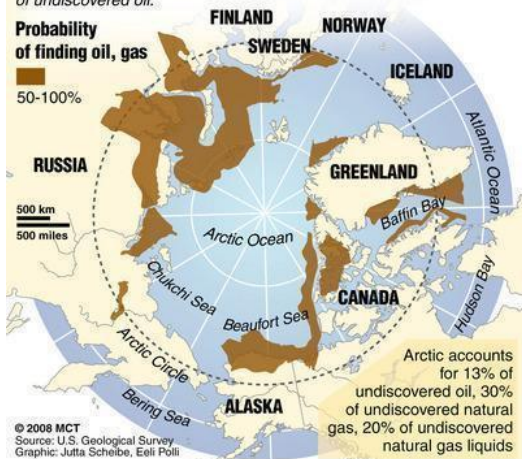
In News: In a recently released white paper, China announced that it would develop a Polar Silk Road (PSR).

Development in the Arctic region

- **Climate Change** - The unintended consequences of climate change are contributing to the transition of the arctic region.
- Rising temperatures are melting some of the thick sheets of ice of the Arctic Ocean.
- This is exposing and making usable, some of the hitherto blocked up potential.
- **Navigation** - That, in turn, is opening channels through which ice-breaking ships can pass.
- Once it becomes navigable, commercial ships will be able to move through the Arctic, opening shorter shipping routes.
- The 'northeast passage' of the region will open up towards Europe.
- The 'northwest passage' will head towards the U.S. and Canada.
- **Resources** - It is estimated that beneath the layers of ice, highly prized reservoirs of minerals exist.
- The Arctic is said to possess 30% of the world's undiscovered natural gas and 13% of its undiscovered oil reserves.

Oil and gas in the Arctic

Area north of the Arctic Circle has an estimated 90 billion barrels of undiscovered oil.



China's Role

- **Exploration** - China's 360-degree hunt for resources and new trade routes is taking new turns.
- The new development in the Arctic is reinforcing China's interests in the region.
- China's obsession with becoming a leading, and advanced, industrial heavyweight is increasingly driving Beijing towards the Arctic.
- It has become unrelenting and undeterred by obstacles posed by geography, politics or technology.
- **Projects** - The **Polar Silk Road** (PSR) and Belt and Road Initiative (BRI) initiatives aim at industrializing Eurasia.
- This is aimed through massive infrastructural development and network of trans-continental connectivity.



- China is also focusing on **cyber-connectivity**.
- This is displayed by its embrace of the **digital economy**, demonstrated by the rise of the global e-commerce giant Alibaba, or Wechat.
- Talks are on in Chinese government to build a 10,500 km **fibre-optic undersea link** across the Arctic Circle.
- The enterprise, called the **Northeast Passage Cable Project**, will provide China a new high-speed digital traffic link.
- The proposal also involves Finland, Japan, Russia and Norway as partners in this undertaking.
- China will get increasingly connected with European financial and data hubs.
- **Long term Planning** - Beijing's forays in the Arctic are a result of its long-term planning for deeper engagement with the Arctic.
- China has invested in Iceland following the 2008 financial crisis.
- Eight years later, Chinese company Shenghe Resources purchased 12.5% of Greenland Minerals and Energy.
- China has also signalled its interest in two Iceland ports, as well as Norway's Arctic Kirkenes port.

Russia's role

- Among its littoral countries, Russia claims the largest slice of the Arctic Ocean.
- Coupled with its massive mineral reserves in Siberia, Russia is fast becoming China's chief natural-resource ally.
- Russia is thus seen as a key to China's success in the Arctic.
- The state-owned China Development Bank is set to invest in the Russian energy company Novatek.
- Novatek is heading the Arctic LNG II project.
- The deal would provide China access to the Arctic's liquefied natural gas.
- Significantly, the agreement would open up areas within Russia's Exclusive Economic Zone in the Arctic where the Chinese can carry out explorations.

US's Tariff Increase on Imports

In News:

- US administration has announced heavy tariffs on steel and aluminum imported from all countries except Canada and Mexico recently, which had less impact on India.
- Following that move US Federal reserve is planning to hike interest rates, which is likely to have impact on India.

new tariff plan

- Trump has recently signed two proclamations on levying increased import duties.
- They impose a 25% tariff on steel and a 10% tariff on aluminum imported from all countries except Canada and Mexico.
- The tariffs will take effect in 15 days.
- The US has used the national security clause of the Trade Expansion Act to increase duty.
- The US is both an exporter and importer of these items.
- Notably, it meets 70% of its requirements from the domestic sources.
- So there is no obvious threat to national security from imports as claimed by the US.

US's WTO commitments

- **Bound Duty** - The WTO makes member countries notify the bound duty (the ceiling duty) for each product.
- A country cannot increase its import duty for a product above this level.
- In fact, the actual import for a product takes place at the applied duty, which is generally lower than the bound duty.
- The **difference between the bound and applied duty** is called '**water**' in trade language.
- **US's commitments** - For the US, the 'water' is less than 1% on most items.
- So, if the applied duty on a product in the US is 3%, the country can increase it up to 4% and not higher than that.
- This low 'water' is the suomoto commitment taken by the US at the WTO.
- This was taken with the conviction that low import duties are a must for national development.
- Since the US cannot increase duties under this, it has used the WTO security exception for the present duty increase.
- Clearly, the decision of choosing a low water policy by the earlier US governments has restricted Trump's policy options.
- He had earlier expressed his dissatisfaction with the trade deals and reasoned it for US's trade deficit.
- **Other Countries** - The EU, Japan, and most other developed countries have also chosen for less than 2% water.
- However, most of the developing countries did not agree with the US on this then.
- They chose to retain high water for most products, so as to raise the applied duty up to the level of bound duty when needed.
- As a result, if India raises duty on steel from 10% to, say, 20%, it does not violate the WTO law, as the bound duty on steel is 40% for India.

Implications in General

- **Cost** - Trump's decision has domestic and trade costs. A 25% duty on steel will increase the domestic steel price by 5%.
- This could lead to an increase in the input cost for some industries, further leading to high cost of their products for consumers.
- This may create inflationary pressure, leading to high-interest rates and dollar appreciation.
- This may have negative impact on both the economy and exports.
- **Industries** - Many steel and aluminium user industries may not compete at higher costs.
- They may have to shut down, leading to job losses.
- **China** - The largest supplier of steel and steel products to the US is China and not Canada or Mexico as widely reported.
- China could retaliate by making import restrictions from the US, which may become disadvantageous for the US firms.
- It has already started investigations into the billion dollar imports of the grain sorghum from the US.
- China could also dump some of the \$4 trillion US Treasury bonds it holds, creating disruption in the US market.
- **Other Countries** - The affected countries are already talking about taking retaliatory measures.
- Countries may also take the US to dispute settlement at the WTO.
- The duty decision is potential of further weakening the multilateral trade architecture.
- **Steel Sector** - The US duty on steel and aluminium also mean that the global surplus would have to be dumped in some other countries at a lower price.
- The steel sector already plagued with excess capacity would face more turmoil.

implications for India

- The protectionist measure by the US and potential counter-measures by other countries might hurt the steel industry globally.
- This might put downward pressure on steel and aluminium prices.
- This is a cause of worry for Indian metal companies as manufacturers have to look for newer markets.
- Indian metal producers with exposure to Europe and the United States already warned of increased costs and lower sales.

- This might affect the recent recovery in the volume growth and profitability of metal producers.
- A downward pressure on the stock price of metal companies would also make it tough to raise fresh equity capital for debt-repayment or capacity expansion.

India's Concern

- Trade Expansion Act of 1962, which gives the US the right to investigate whether certain imports, or high levels of certain imports, pose a threat to its national security.
- Based on this act US has imposed high tariffs on imported steel and aluminium, and the US administration also plans to expand this act further to other metals.
- As of now India's steel exports to the US is at less than 1% of the total Indian production, and aluminium exports are just 2%.
- Thus USA's decision may not have any immediate or direct impact on the Indian metals sector.

Expected Federal Reserve reforms

- Within the US domestic economy, higher inbound steel and aluminium escalates the threat of higher consumer prices caused by importers passing on their increased costs for raw materials.
- This could then force the Federal Reserve to raise rates faster than it would have done otherwise.
- The Fed is also slated to pursue its scheduled reversal of the easy money policy, or the so-called quantitative easing of the last decade, going ahead.
- The American central bank had also announced that it would start shrinking its balance sheet by selling the treasury bonds and mortgage-backed securities in order to inject liquidity in the markets.
- The sale of such securities is slated to go up in the coming months; with this the Fed would gradually wind down the \$ 4 trillion in holdings that it acquired during the phase of quantitative easing.

Impacts of hiked interest rates for India

- The three external risk factors higher tariffs, rising interest rates and elevated bond sales come at a time when the domestic banking system is grappling with a renewed stress of bad loans in India.
- An increase in interest rates in US has implications for emerging economies such as India, both for the equity and debt markets.
- Already the Indian government securities market has been falling for the past seven months on cues of rising US yields and projections of increased local inflation.
- Higher US rates lead to outflows from emerging market bonds and equities as investors look to chase higher returns in their home country.

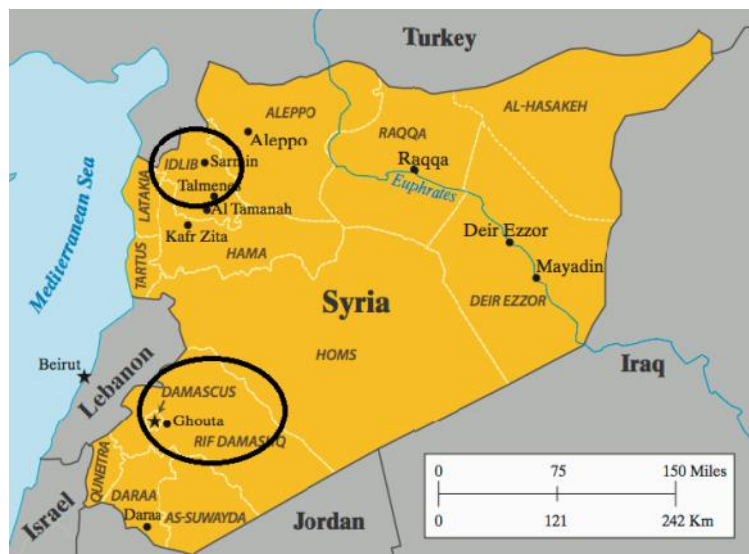
Saving Syria's Ghouta

Context:

- An agreement was reached between armed groups in Eastern Ghouta and a UN delegation to evacuate some militants from the besieged enclaves.
- This is the first major deal reached since the attack on the city began, and more such deals are to be clinched to reduce casualties and bring peace.

Present Situation

- Ghouta is a suburb which lies close to the Syrian capital Damascus, which came under rebel control since early in the civil war (that began in 2011).
- The territory recently came under attack by government forces to flush out the multiple rebel groups that have their presence.
- As Ghouta is one of the last rebel strongholds and houses close to 4 lakh civilians, the battle is proving to be brutal and catastrophic.
- Recently, the city came under virtual siege and essential supplies were cut, and reports of rebels deploying people as human shields also emerged.
- More than 1000 people were estimated to be killed in the past week alone but Syrian Government and its Russian backers seem unrelenting in vigour.
- UN Security Council unanimously called for a cease fire, which helped in reducing the intensity and helped start a dialogue with the rebels.



Negotiation's Out Come

- UN peace makers have struck a deal with the main rebel group 'Jaish al-Islam', to facilitate the evacuation of militants belonging to "HTS" from Ghouta.
- 'Hayat Tahrir al-Sham' (HTS) was formerly an Al-Qaeda front and is an internationally designated terrorist group.
- Notably, despite endorsing ceasefire in the UN Security Council, Russia has been justifying its assaults on Ghouta by sighting the presence of HTS.
- HTS evacuees are expected to proceed to Idlib, which is another rebel held town in north-western Syria (see map).
- The deal has come after more than a month of protracted negotiations even as the rebels stayed stubborn in the face of intense government bombardment.

Way Ahead

- The evacuation of HTS militants removes a hurdle for Syrian regime and Russia to cease hostilities and engage the other armed groups diplomatically.
- Notably, besides Jaish al-Islam - "Faylaq al-Rahman", an affiliate of the Free Syrian Army is also a major player in Ghouta.
- The rebels in Ghouta currently do not have any meaningful support coming from outside that could allow them to resist regime forces.
- The sooner the government forces and the armed gangs reach an agreement to end hostilities, the better it is for all sides.

Towards an Independent Nepal

Context: The transition by Nepal to being uninfluenced by external factors is seen to be not so smooth or quick either.

Recent development in Nepal

- For long, Nepal's internal politics, the making of the constitution and the peace process have kept it far from smooth governance.
- These issues have been dictated by the international community, mainly India, the European Union, the US and the United Nations.
- The new government in Nepal is armed with all the powers and a majority in Parliament.
- These give it the mandate to confront the external forces more firmly than before.

Present government's stance

- The new government led by K P Oli in Nepal has asserted that Nepal would no longer accept interference by outsiders in its internal politics.
- He has conveyed to the international community that Nepal would pursue an independent foreign policy.
- The Nepali PM directly supervises many of the government departments.

- These include the state intelligence and the social welfare council which issues permits to NGOs to operate in Nepal.
- The PM has asserted that any NGO or donor indulging in local politics or working against Nepal's national interests will be expelled.
- As, donors too are suspected to be promoting corruption.

Transition difficult

- **NGOs** - Recently, around 30 philanthropists from the UK, US and other western countries assembled in Nepal.
- They were there to explore how best they could spend a part of their wealth for the good of Nepal.
- The aim was to fund the fight against "modern slavery".
- The group decided not to get into political issues, and work for children, women and oppressed groups trapped in "slavery".
- But this indirectly meant supporting "liberation" or "secessionist" movements in parts of Nepal, including the Tarai.
- **Violations** - There were widespread human rights violation by the state and the Maoists during the decade-long conflict.
- The peace process and the investigations into these human rights violation cases are incomplete.
- Maoists, a key ally in the coalition government, are keen to have general amnesty granted in such cases.
- This is possible only if these are handled exclusively by national agencies.
- Oli tries to make these an internal affair and outside the gaze of international actors, which could prove to be a huge challenge.
- **Foreign relations** - Indian ambassador visited to meet with the Nepal PM.
- Oli hosted Pakistan PM ShahidKhaqanAbbasi with full state honours.
- Both sides agreed to "convince" India that the SAARC summit be held in Islamabad.
- Abbasi's visit was part of "Pakistan's pro-active diplomacy" and its desire to extend trade, commerce and defence relations with Nepal.
- Pak PM expressed hope that the belt and road initiative of China would enhance connectivity and advantage in the neighbourhood and beyond.
- Notably, Nepal and Pakistan are signatories to the initiative.
- The visit of Pakistan PM, Nepal's growing proximity to China, substantial investment of the international community in Nepal, all demonstrate the inescapable fact of external influence.
- Key external forces appear to be in a withdrawal mood, at least for now.
- But it is unlikely for Nepal to be free from the influence of external player, at least not any time soon.

India in the New World Order: ISA Summit

Context:

- Given the increasing protectionism worldwide across sectors, it is indeed difficult to push for liberalizing trade in solar.
- Nevertheless, the urgency of environmental concerns demands platforms like International Solar Alliance (ISA) to work for easing solar related trade.
- Notably, tariffs and other forms of trade protectionism are hindrances to the faster spreading technology.

International Solar Alliance

- Several countries had taken ambitious steps to combat climate change and India for its part has initiated the International Solar Alliance (ISA).
- Recognizing the huge potential, India along with France, launched ISA during the Climate Conference in Paris in November 2015 (COP21).
- ISA's objective is to undertake joint efforts to reduce the cost of solar technology and further investments in solar (\$1 trillion targeted by 2030).
- India has set a domestic target to install a 100 GW of solar energy capacity by 2022 to augment its power needs.
- Notably, Of the ISA member countries located in the sunshine belt between the Tropics, only 27 were found to be providing 100% electricity access.

- Additionally, in 49 countries (mostly in Africa), electricity access rate was less than 70%, which demands for rapid expansion of solar infrastructure.
- While ISA has been mobilising resources for projects, it also needs to work for easing trade barriers in solar equipments and services trade.

India's Role

- India is a founding-member of the alliance.
- Besides, it plays a significant role in terms of being a host as well as a major contributor to the achievement of the target.
- The ISA is the first international body that will have a secretariat in India.
- India, with a target to produce 100 GW of solar energy by 2022, would account for a tenth of ISA's goal.
- India will also provide 500 training slots for ISA member-countries and start a solar tech mission to lead R&D.

India's Unique proposal

- The basis for ISA is global equitable sustainable development.
- It suggests a 'third' way to the inequality and environmental damage characterising the current U.S. and China-led models.
- This vision follows from India's call for 'climate justice'.
- Notably, India's approach to climate justice reframes climate change as a social and not a physical problem.
- The shift fills the gap in the thrust of the 'Chinese dream' and 'America first' both of which ignore sustainable development.
- India is thus considered as a balancing factor in this regard, especially by countries in the South-east Asian region.
- This is also why China and the U.S. are seeking to work with India.

Protectionist behaviors in solar sector

- Import duties (tariffs) and other protectionist clauses are detrimental to cost-effective solar deployment, which disincentivises solar investments.
- While the cost of solar installations has been declining worldwide, it still remains high in many of the ISA economies.
- This is mainly due to their lack of manufacturing capacity and high tariffs (35-40% in some countries) on solar PV products and related services.
- For most African countries, this is the case, despite they having a remarkable potential to promote innovative programs like off-grid solar.
- Also, while India has 0% tariff on most solar trade lines, it was ironically embroiled for imposing domestic content requirements for projects.

ISA and solar trade

- As ISA is a recognised international organisation, it has the potential to mobilise international support for liberalising solar trade among its members.
- **Action** - ISA could nudge its members to voluntarily reduce import tariffs and non-tariff barriers on solar-related products and related services.
- In case there is a domestic industry that would be hit, a gradual reduction of tariffs over a period of time could be worked out.
- This would result in a plurilateral voluntary trade deal (sector specific deal) on solar energy goods and services, and benefit both trade and the environment.
- **Firstly** - This will help in capitalising on global supply chains and economics of scale, and allow for massive deployment of affordable solar projects.
- This would result in rapid reduction of applied tariffs along the solar supply-chain even without the conclusion of a binding trade agreement.
- Notably, an "Environmental Goods Agreement" (EGA), for reducing tariff lines in order to promote green technologies has been in discussions since 2014.
- **Secondly** - This would reduce chances of disputes over what goods to be included in ISA's targeted push as there would be more domain knowledge.
- Even if some of the goods may have dual-use and can be deployed for non-solar applications, dispute resolution would be easier under ISA.
- **Finally** - Opportunities to integrate into global solar value-chains may be opened up for developing countries through international partnerships.

- Devising investment norms, facilitating technological know-how, and bettering trade objectives could be considered by ISA.

way forward for India

- The inaugural International Solar Alliance (ISA) summit underlines India's place in the new world order.
- India has to take advantage of the **transforming global trends**.
- The challenge at this juncture is to push infrastructure, e-commerce, human capital and technology **development**.
- These are essential for India to position itself in the emerging global scenario, where economy, ecology and cyber space are defining the place.
- In the new world order, India should give primacy to rules that will chart a path for its **own sustainable prosperity**.
- This does not mean India should move away from **multilateral groupings**.
- But rather, in 2018, India will have to make **hard choices**.
- E.g. India should not reject collaboration in the Belt and Road Initiative (BRI), which is the framework for a new order.
- But existing political and economic order suggest that India should work with China to jointly set the **new multilateral rules**.
- The two sides, India and China, have just recognised sensitivity to each other's concerns, interests and aspirations.
- Also, as part of this dynamics, India must consider longer-term and not immediate interests in Regional Comprehensive Economic Partnership.
- This approach should reflect in other areas like the BRICS, Shanghai Cooperation Organisation, etc, for establishing **non-hierarchical relations**.
- In terms of maritime trade routes, India should organise platforms which include China and Japan.
- This is to allow for the development of **Indian Ocean-centric rules** of engagement.

French President Visits India

In News: French President Emmanuel Macron is currently on bilateral visit to India.

- Agreements on deepening mutual cooperation across sectors like - Defence, Solar and Nuclear Power were sealed.
- The comprehensive 'Joint Statements' and stress on strategic cooperation in 'Indian Ocean Region' highlighted the growing importance of the relationship.

major outcomes

- The pioneering agreement for "India-France strategic partnership" was signed in 1998, and relationships have been in good shape since.
- Currently, a "Joint Vision Statement" on the Indian Ocean Region was issued, which clearly aimed at countering China's growing presence in the region.
- A "reciprocal logistics support" agreement (Defence) was also signed, which is an indication of the diversifying strategic partnerships for both countries.
- While multiple previous deadlines have slipped, a recommitment for starting the "Jaitapur nuclear power plant" has now been made.
- Commitments towards the "International Solar Alliance" (ISA) and joint ventures on climate change cooperation were reiterated.

prospect of (ISA)

- ISA was proposed jointly by India and France in the backdrop the "Paris Climate Talks" or CoP 21.
- With 61 countries already onboard the ISA, India and France are clearly promising an alternative leadership model for the less developed world.
- This is significant in the face of U.S. pullout from the Paris Climate Accord and the greater vulnerability of poorer countries to climate change.
- ISA is oriented towards sunshine countries (between the tropics), and it focuses on Project financing and technical assistance.
- While it has been estimated that \$1 trillion is needed to meet the ISA targets, India and France have thus far committed \$1.4 billion and \$1.3 billion, respectively.

- **Challenges** - India's solar power tariff is around Rs. 2.40 a unit, which makes Solar a costly option domestically.
- While India has targeted a solar capacity addition of over 100 GWs by 2022, this seems unviable unless various solar components become cheaper.
- Also, addition of new thermal power plants (as they produce more stable output) is a hindrance to solar deployment.

Historic of the relationship

- There were limits to bilateral cooperation during the cold war period as France was a NATO member.
- After the end of cold war, India-France Strategic Partnership was launched in 1998 to boost bilateral ties, and two eventful decades have passed since.
- Cooperation in diverse fields covering - defense, space, counter-terrorism, education, culture, economics, climate change, culture, urban development, science and technology have taken shape over the years.
- After India went nuclear in 1998, France was the first major power to open dialogue and display greater understanding of India's security compulsions.
- It was also the first P-5 country to support India's claim for a permanent seat in an expanded and reformed UN Security Council.

Cooperation in the security

- **Arms Trade** - Cooperation began in the 1950s when India started sourcing high-end military hardware (aircrafts, helicopters) from France.
- An agreement for building six Scorpène submarines in India with French help was signed in 2005 and one has already been commissioned (INS Kalveri).
- The government-to-government agreement for 36 Rafale aircraft recently moved forward after prolonged negotiations.
- An ambitious offset target of 50% of the Rafale deal (25,000 crores approx) for reinvestment in India could possibly boost India's budding aerospace industry.
- Also, technology sharing and acquisitions of short range missiles and radar equipment were concluded recently.
- **Working Partnership** - "Strategic Dialogue" has been established, to enhance cooperation in defense, intelligence sharing and counter-terrorism.
- MoUs were signed for reciprocal logistics support to each other's armed forces, and exchange and reciprocal protection of classified information.
- Terror strikes in recent years have enlarged the scope of counter-terrorism cooperation to include cyber security and discussions on de-radicalization.
- Joint exercises between the air forces and the armies were instituted in 2003 and 2011, respectively and joint navel exercise "Varuna" dates back to 1983.
- **Indian Ocean Region** - There has been a growing convergence of interests in maritime cooperation in this region due to the expansionist Chinese foray.
- Also, French overseas territories in the Indian and the Pacific Oceans provide it with the second largest exclusive economic zone globally.
- Notably, France has long maintained bases in Reunion Islands and Djibouti and established one in Abu Dhabi in 2009.

Other aspects of mutual cooperation

- **Space** - French assistance for the construction of "Sriharikota Launch Site" in 1960 marked the beginning of ties and both are now big players in the sector.
- Currently, many Joint missions for space awareness, earth observation with applications in meteorology, oceanography and cartography are undertaken.
- Inter-planetary exploration and space transportation systems are cutting edge science and technology areas that have also been identified.
- **Energy** - An agreement was for building six pressurized nuclear reactors with a capacity of 9.6 GW was sealed a decade ago, but little has progressed.
- The current bilateral has reiterated the commitment for the Jaitapur nuclear power plant in Maharashtra, and it is hoped that there will be progress.
- Climate change and renewable energy resources (particularly solar), has also emerged as an important sector in the bilateral cooperation.

- The multilateral initiative “International Solar Alliance” (ISA) was launched on the sidelines of Paris Climate Talks and currently has 61 members.
- **Urban Development** - Planning, construction and management of services like housing, transport, water, and sanitation is also a domain of convergence.
- Under the Smart City Mission, France has tied up with the corporations of Chandigarh, Nagpur and Pondicherry for various projects.
- For a wider partnership, strengthening business-to-business and people-to-people relationships is essential and this needs to be facilitated.
- **Trade** - While bilateral trade has grown in recent years, it currently stands at merely \$10 billion, which provides ample scope for trade enhancement.
- Private sector seems to have recognized this as agreements worth \$16 billion were signed at the recently held business summit.
- Notably, more than 1000 French companies operate in India and 100s of Indian enterprises have sprouted up in France in recent years.
- Also, while U.K. has traditionally been the entry point for most Indian companies to E.U. markets, Mr. Macron has now pitched France as a suitable alternative entry destination in the post-Brexit scenario.
- **Educational** - Currently about 2,500 Indians go to France annually to pursue higher education, compared to more than 250,000 from China.
- By 2020, France has envisioned to host 10,000 Indian students and agreements for mutual recognition of academic degrees is also in the pipeline.
- **Tourism** - France has targeted to attract 1 million Indian tourists and India on has aimed for 335,000 French tourists by 2020.
- These targets are modest considering that France has an intake of 80 million tourists and India takes 9 million annually.
- These numbers should be viewed in the present context where Indo-French direct people to people contact is current very low.

Russia's Murderous Covert Operations

In News:

- Recently, a former Russia agent Mr. Sergei Skripal (now living in exile in U.K.) was attacked by unknown persons with a poisonous nerve agent.
- The attack is suspected to have a high-profile Russian government involvement and has hence resulted in tensions.

Sergei Skripal

- Mr. Skripal is a former Army Colonel who was part of the Russian army's intelligence wing and then worked in the Russian Foreign Ministry in Moscow.
- Skripal was a double agent, who betrayed fellow army veterans, and provided information to Britain that considerably damaged Russian intelligence.
- He was arrested in Moscow in December 2004 for spying for Britain, and sentenced to 13 years in prison in August 2006.
- In July 2010, a spy swap was facilitated, which freed Mr. Skripal and exiled him to UK, where he has been living quietly since.
- He and his daughter were recently attacked with a poisonous nerve agent, and the act is suspected to be a Russian state sponsored one.
- This violates the “Cold War era espionage etiquette” of not disturbing pardoned spies and could also potentially escalate Russia - U.K. tensions.

credence to the suspicion

- The nerve agent used belongs to a family of deadly substances called Novichok, which is believed to have been developed by the Soviets in the 1970s.
- Additionally, number of high-profile deaths linked to Russia has taken place in Britain and also Russia has had a history of murdering betrayers.
- Several other high-profile defectors currently live in the UK and there have already been instances of similar high profile attacks on them.
- **1978** - Bulgarian dissident Georgi Markov (erstwhile USSR) was poisoned and killed in London with a pellet containing ricin.

- **2006** - Alexander Litvinenko was a former officer of Russia's Federal Security Service and fierce critic of President Vladimir Putin.
- He died due to radioactive polonium poisoning of his tea, but identified his killer as Russian MP Andrei Lugovoi (former KGB officer).
- **2012** - Alexander Perepilichny was a Russian businessman and whistleblower who died while jogging near London under suspicious circumstances.
- An enquiry into his death is under way.
- **2013** - Boris Berezovsky is an exiled Russian billionaire was found hanging in his apartment in Berkshire in southeast England.

Global reaction

- **UK** - Reactions to most previous attacks was muted for the fear of escalating tensions with Russia and thereby losing out on massive Russian investments.
- But the current episode has stirred a hornet's nest as there has been a clear and targeted string of attacks that has been going on unabated.
- British PM Teresa May gave out a strongly worded statement and has called for stringent actions if the Russians don't cooperate in the case.
- **Russia** - The Kremlin spokesman denied that his country had any role in the Skripal incident or the other previous murders.
- Russia has maintained that the crime had taken place in British territory and that they have knowledge of the act to support an investigation.
- Further, the spokesperson condemned the British PM's speech as irresponsible and unnecessarily provocative.

ENVIRONMENTAL AFFAIRS

Committee on HT Cotton

In News: The Department of Biotechnology in Ministry of Science and Technology has constituted Field Inspection and Scientific Evaluation Committee (FISEC) to investigate matter of illegal cultivation of Herbicide Tolerant (HT) or BG-III cotton in four states.

Key fact:

- The committee was constituted after there were several media reports and complaints regarding illegal or unauthorized cultivation of HT cotton in Andhra Pradesh, Telangana, Gujarat and Maharashtra.
- The cultivation of HT cotton (BG-III) is not approved by country's biotech regulator, Genetic Engineering Approval Committee (GEAC) of Ministry of Environment.
- The unofficial estimates put the extent of unauthorized cotton to be about 20% in the country.
- The commercial cultivation, sale, cultivation and seed production of unapproved HT cotton is punishable offence under Seeds Act 1966, Seed Rule 1968, Seeds (Control) Order 1983 with regard to Environmental Protection Act, 1986 and Environmental Protection Rules, 1989.
- HT Cotton Herbicide-Tolerant (HT) Cotton also known as BG-III cotton is innovation in Bt Cotton as it takes care of weeds problem at much lower cost as compared to physical labour required for weeding.
- It contains Round-up Ready and Round-up Flex (RRF) gene.
- The RRF herbicide-tolerant trait was developed and commercialized by US-based multinational seed giant Monsanto.

Harmful effects

- The herbicide-resistant gene in HT cotton can spread through pollen into biodiversity system leading to transformation of weeds into super weeds on large-scale.
- It will threaten growth and yields of all crops in future and also increase cultivation costs and lead to health hazards.

BIO/ HEALTH ISSUES

Bridge Course for Enhancing Medical Pluralism

In News: A "bridge course" provision in the National Medical Commission (NMC) Bill 2017 has been introduced in the Lok Sabha.

concerns in Indian healthcare sector

- India has only one allopathy doctor for approximately 1,613 people as against the WHO's norm of 1 : 1,000 ratio
- This assumes that 80 per cent of the 10.23 lakh doctors registered with the Medical Council of India or State medical councils are in active service.
- But Indian Medical Register does not reflect doctors who have retired, left the country or passed away.
- Therefore, the total universe of doctors in the country might actually be smaller than the official figures.
- The shortage is compounded by the concentration of medical colleges in Southern States, as well as the reluctance of doctors to serve in rural areas despite measures such as compulsory rural internships.

significance of AYUSH doctors

- AYUSH includes Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy system of medicine.
- In India nearly 8 lakh AYUSH practitioners in the country have been providing primary healthcare in several areas.
- Students of homoeopathy, for instance, are trained in almost every subject that an MBBS student is taught during their five-and-a-half-year undergraduate course.
- It is often the case that textbooks, faculty and even the lecture halls where students of MBBS and Bachelor of Homoeopathic Medicine and Surgery (BHMS) are taught, are the same.
- Like their MBBS counterparts, BHMS students also undertake an internship, including a six-month stint at a hospital.
- When compared with public healthcare allopathy doctors the AYUSH doctors performed better in terms of time spent with patients, as well as adherence to medical history checklists.

About bridge course provision

- The NMC Bill, 2017 attempts to facilitate integration of the different systems of medicine in a much broader sense.
- The Bill calls for a joint sitting of the NMC, the Central Council of Homoeopathy (CCH), and the Central Council of Indian Medicine (CCIM), at least once a year and proposes "specific educational modules or programmes to develop bridges across the various systems of medicine".
- According to the provision, doctors of Indian systems of medicine and homoeopathy (AYUSH) will be allowed to prescribe limited allopathic medicines upon passing the course.
- The bridge course will only be introduced if all the members present at a joint sitting of the NMC.
- The bill also specifies that the members present in the joint sitting can spell out the health conditions for which AYUSH practitioners will be allowed to prescribe certain allopathic medicines.

need for the bridge course

- In accordance with the Drugs and Cosmetics Act Rules, some State governments have issued orders allowing AYUSH doctors to prescribe allopathic medication.
- The validity of such orders has been upheld by the Supreme Court.
- In this scenario enhancing the supply of allopathic doctors is undoubtedly the main goal but achieving the ideal doctor-population ratio could take decades.
- For that cause India wants to achieve Medical pluralism which is already a reality in several countries like China, Japan, etc.
- Thus the bridge course is aimed to serve an important part of a broader effort to empower and better utilise the capabilities of AYUSH practitioners for healthcare delivery.

TECHNOLOGICAL AFFAIRS

Perplexes with Geo-spatial Information Regulation Bill, 2016
Context

- Ministry of Home Affairs in 2016 had released the draft Geospatial Information Regulation Bill (GIRB).
- Strict regulations imposed on geospatial information by this bill has concerned tech services sector.

Geospatial information mean

- Geospatial imagery or data acquired through space or aerial platforms such as satellite, aircrafts, airships, balloons, unmanned aerial vehicles.
- Graphical or digital data depicting natural or man-made physical features, phenomenon or boundaries of the earth.
- Any information related thereto including surveys, charts, maps, terrestrial photos referenced to a co-ordinate system and having attributes.

The purpose bill

- After the January 2016 Pathankot attack, Ministry of Home Affairs made a regulatory attempt in the geospatial industry for maintaining national sovereignty over India's geospatial data.
- According to the draft, it will be mandatory to take permission from a government authority before acquiring, disseminating, publishing or distributing any geospatial information of India.
- In simple terms, any addition or creation of anything that has to do with any geospatial information within the territory of India will need the permission of the government.
- A Security Vetting Authority will be setup for this purpose, it grants licenses to organisations/individuals who want to use geospatial data.
- It will check the content and data provided and make sure it is well within national policies.

Limitations imposed by the bill

- **Illegal acquisition of geospatial information of India** - Fine ranging from Rs. 1 crore to Rs. 100 crore and/or imprisonment for a period up to seven years.
- **Illegal dissemination, publication or distribution of geospatial information of India** - Whoever disseminates, publishes or distributes any geospatial information of India shall be punished with a fine ranging from Rs. 10 lakhs to Rs. 100 crore and/or imprisonment for a period up to seven years.
- **Use of geospatial information of India outside India** - Fine ranging from Rs. 1 crore to Rs. 100 crore and/or imprisonment for a period up to seven years.

Few shortfalls

- The home ministry made its attempt to draft the bill soon after the 2016 Pathankot attack and it was drafted with a short sighted view.
- Usually any mapping process in India will be taken care by the Survey of India (SOI) and digital approaches regarding those lies with the department of science and technology (DST).
- This draft bill was made with a negligible role of SOI, but much of its initial framework comes from bureaucrats within the defence ministry.
- The MOD has a large number of grievances when it comes to mapping and geospatial data.

Concerns of tech industry

- In India, location services are very dynamic and the ecosystem is still evolving as most of the commuters solely believe in mapping and navigation apps for their day today commute.
- In this stage Satellite-makers, online map companies and GPS providers are bemused with the manner in which the draft GIRB was drafted.
- It is also said that once implemented the bill could negatively impact some of the key programmes of Union government which entirely rely on location based inputs.
- Thus the only demand of the tech industries is that any new regulation on location-based services should ensure that the pace of innovation is not impacted.

Newton-Bhabha Fund

In News: India-United Kingdom (UK) Joint Team has won Newton-Bhabha Fund for project on Groundwater Arsenic Research in Ganga River Basin.

- The project was undertaken by Department of Science and Technology (DST) in collaboration with Natural Environment Research Council (NERC), UK to find solutions to water challenges faced in pervasively arsenic-affected Ganga River Basin.

Key Facts

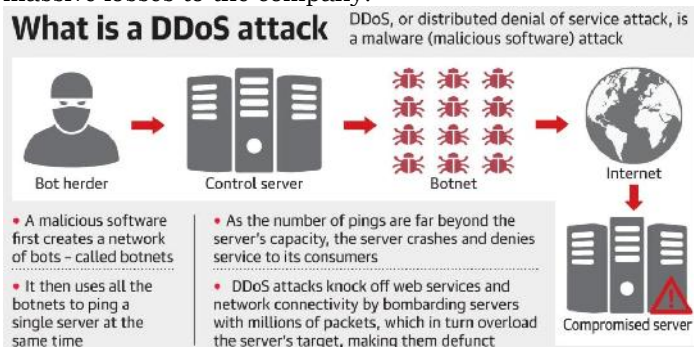
- The Indian team comprised representatives of Indian Institute of Technology (IIT) Kharagpur, National Institute of Hydrology, IITRoorkee and Mahavir Cancer Sansthan and Research Centre of Patna.
- The UK team consisted of representatives of University of Manchester, University of Salford, British Geological Survey and University of Birmingham.

- The project is aimed to assess problem of arsenic poisoning and to understand aggravation such situation in next 25 to 30 years and its influence on groundwater management practices and suggest water remedial technologies accordingly.
- It is conducted from three sites – Bijnor and Varanasi in Uttar Pradesh and Nadia in West Bengal. Newton Bhabha Fund,
- It is provided by the British Council.
- It aims to bring together UK and Indian scientific research and innovation sectors to find joint solutions to the challenges facing India in economic development and social welfare.
- Arsenic Contamination Arsenic is natural component in the earth's crust.
- It is widely distributed throughout the environment in the air, water and land.
- It is highly toxic in its inorganic form.
- Arsenic contaminated water used for drinking, irrigation of food crops and food preparation poses the greatest threat to public health from arsenic.
- Long-term exposure to arsenic from drinking-water and food can lead to chronic arsenic poisoning.
- It can cause cancer, skin lesions, developmental effects, cardiovascular disease, neurotoxicity and diabetes.
- Arsenic Contamination is a high-profile problem in the Ganges Delta, due to the use of deep tube wells for water supply.
- The groundwater in these tube wells has high concentrations of arsenic in deeper levels.

Saposhi: Threat of new malware

In News: Cyber security agencies have detected a new malware called Saposhi that can take over electronic devices and use them for Distributed Denial of Service (DDoS) attacks.

- Saposhi Malware is capable of taking over electronic devices and turning them into bots (device taken over by malware) which can then be used for any purpose, including DDoS attacks which, with enough firepower, can cripple entire industries.
- Key Facts
- Computer Emergency Response Team (CERT), a Central government body that deals with cyber-attacks has so far has not issued any alert regarding Saposhi malware.
- Saposhi is similar in its intensity to Reaper malware, which was taking over millions of devices at rate of 10,000 devices per day.
- In October 2017, CERT had issued alert about Reaper which is highly evolved malware capable of hacking devices like Wi-Fi routers and security cameras and also hiding its own presence in bot.
- Distributed Denial of Service (DDoS) attacks In DDoS attacks, malware first creates network of bots — called botnet and then uses botnet to ping single server beyond its capacity at same time.
- As number of pings are far beyond server's capacity, server crashes and denies service to its consumers.
- Malwares like Saposhi, Reaper and Mirai are primarily are used for DDoS attacks.
- For example, if large botnet attacks server of fleet cab provider, its server will crash, and scores of consumers will be unable to avail of its services, causing chaos in daily commuting as well as massive losses to the company.



- Recent DDoS attacks In July 2016, small and medium internet service providers in Maharashtra had fallen prey to DDoS attack.
- This had caused disruption in services of several Internet Service Providers (ISPs) in state.
- Mirai malware using botnet of 5 lakh devices, had caused servers of Dyn, a leading domain name service provider, to crash, affecting services of popular websites like Netflix, Twitter and Reddit.

Surveying Solar Energy Potential of Rooftops

In News: Bengaluru sets out an aerial mission to collect data on the solar energy potential of its rooftops.

About the mission

- Bengaluru sent helicopter which hovered over the rooftops of the city.
- The aim was to collect data on the solar energy potential of the city's rooftops.
- This is being executed by the Centre for Study of Science, Technology and Policy (CSTEP).
- It offers support to the Bangalore Electricity Supply Company (Bescom).
- The data will also be put in the public domain.

Working

- It employs the 'web-based rooftop photovoltaic tool using aerial LIDAR (Light Detection and Ranging) project'.
- The helicopter has a camera that emits laser pulses.
- Reflections from the ground get captured, creating a rough 3D map.
- This raw data will be sent to the Defence Ministry for vetting.
- After this, the process of shadow analysis and creation of a model city map will begin.

Benefits

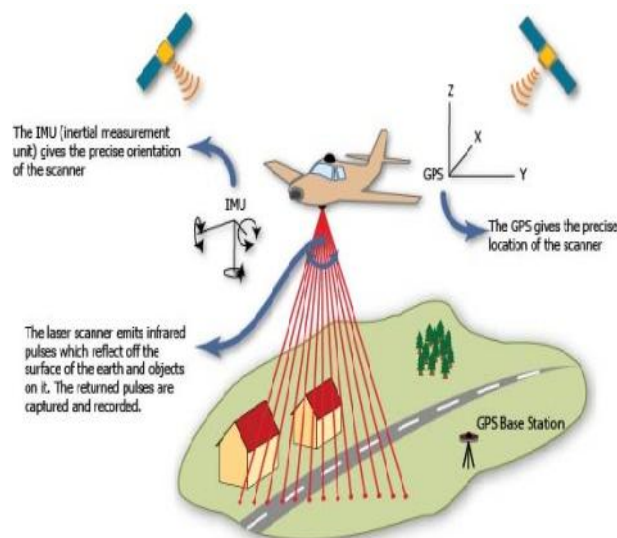
- **Bescom** - The Bangalore Electricity Supply Company will be equipped with a map of the most lucrative rooftops to generate solar power.
- Bescom will move to achieve the 1 GW solar targets for 2021-22.
- **Resource assessment** - It helps assess how much of the city's power needs can be met through rooftop solar installations.
- The survey helps determine usable rooftops, separating them from green spaces.
- It thus helps analyses the quality of the solar resource.
- **Investments** - With urbanization, solar maps help electricity utilities come up with good business cases and investment vehicles.
- They can also give residents an opportunity to become partners in the effort.
- People can make money by consuming and/or selling the solar energy generated.
- **Solar Target** - Moreover, scaling up rooftop solar installations is essential to achieve the solar target of 100GW by 2022.
- It is aimed at creating 40GW of power capacity through rooftop solar panels alone by 2022.

Limitations

- The industry is apprehensive that the favorable scope could diminish for the solar sector during the current year.
- Impact of factors such as imposition of safeguard duty and anti-dumping duty on imports should be evaluated.
- The levy of the goods and services tax on photovoltaic modules also needs an assessment.
- Major solar projects that connect to the grid often face the challenge of land acquisition and transmission connectivity.
- This has led to a delay in planned capacity coming on stream during 2017.
- Notably, nearly 3,600 MW did not get commissioned during the last quarter, out of a scheduled 5,100 MW.

Way Forward

- The domestic policy has to be attuned to the overall objective of augmenting solar capacity.
- The Centre should come up with incentives to utilize the investment potential.
- The southern States and Rajasthan host the bulk of national solar infrastructure on a large scale.
- These regions should continue to lead by adding rooftop capacity, with some forward-looking policymaking.
- Initiatives such as the Bengaluru mapping project can contribute to assessments of real potential.
- Surveys to map usable rooftops for solar power must be undertaken on a nationwide scale.



DAR

- LiDAR (Light Detection and Ranging) is a monitoring system.
- LiDAR works by projecting laser beams towards the sky.
- The light interplays with the objects falling on its path through absorption, reflection and scattering.
- This helps determine the composition of suspended particulates.
- It is used for mapping and modeling in micro-topography, forestry, agriculture, meteorology and environmental pollution.

Linking FASTags with GST e-Way Bills

In News: Union government has proposed to link FASTags with GST e-way bill.

FASTag

- The fast tag (FASTag) is a Radio Frequency Identification Card (RFID) pasted to the windscreen of the vehicle.
- These tags store data such as vehicle registration, class of vehicle, engine and chassis number, etc., these details will help to arrive at the exact toll to be charged.
- The system operates on the lines of a prepaid phone card, which enables electronic payment at tolls on national highways.
- An RFID reader which is installed few meters from the toll plaza will act a sensor and verify tags validity and the account balance.
- If the amount is available with the prepaid card, the vehicle may pass through.
- Where there is a discrepancy in the card the vehicle will be alerted to eject from the lane, and pass through the eject lane.
- The vehicle can pass any number of toll plazas, all over the country, as long as there is amount in the account, and it can be recharged once the amount gets depleted.

Significance

- The unique number embedded in FASTags will be linked with the e-way bill generated by the Goods and Services Tax Network (GSTN).
- The move will effectively prevent chances of vehicles transporting goods to places other than those declared.
- FASTags can apprise the GSTN and other State enforcement authorities of the route that the vehicle is taking on the national highways, and whether it is as declared.
- This move will helpful when any vehicle is stuck mid-way for some reason, an application for extension of time can be expected in advance.
- At the same time if the transporter asks for an extension of dates in the e-way bill, the data can be cross-checked.

GST 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 by GSTN, with every consignment having value exceeding INR 50,000.
- E-way bill generated will have origin and destination of vehicle, time at which vehicle has to depart, and the number of days it will take to reach its destination, among other particulars.

IN-SHORT

Ranthambore Tiger Reserve

- The tiger reserve, named after the Ranthambore fort, is situated in Karauli and SwaiMadhohpur districts of Rajasthan.
- The reserve is located at the junction of Aravallis and Vindhyan ranges.
- The reserve was established in the year 1969.
- It was earlier the private hunting grounds of Maharajas of Jaipur.
- The reserve comprises Ranthambore national park and two sanctuaries namely SawaiMansigh and Keladevi.
- Poaching, habitat loss and fragmentation are the threats to the reserve.
- Tiger populations in Ranthambore are smaller, isolated populations.
- This makes them less genetically diverse due to lesser intermixing of different populations.

National Tiger Conservation Authority

- The National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change.
- It was constituted under enabling provisions of the Wildlife (Protection) Act, 1972.
- The objectives of the NTCA are
 1. Providing statutory authority to Project Tiger so that compliance of its directives becomes legal
 2. Fostering accountability of Center-State in management of Tiger Reserves
 3. Providing for an oversight by Parliament
 4. Addressing livelihood interests of local people in areas surrounding Tiger Reserves
- The main function of NTCA is to approve, co-ordinate, research and monitor tiger, co-predators, prey habitat, related ecological and socio-economic parameters and their evaluation.
- NTCA gave a statutory backing to Project Tiger.

SwatantraSainikSammanYojana (SSSY)

- The Union Cabinet chaired by the Prime Minister has approved the continuation of SwatantraSainikSammanYojana (SSSY) during 2017-2020 beyond the 12th Five Year Plan.
- In 1969, Government of India introduced the 'Ex-Andaman Political Prisoners Pension Scheme'.
- This was to honor the freedom fighters who had been incarcerated in the Cellular Jail at Port Blair.
- Later, a liberalized scheme, namely the 'SwatantrataSainikSamman Pension Scheme, 1980' was implemented.
- From the financial year 2017-18 onwards, the nomenclature of the Scheme has been changed as 'SwatantrataSainikSammanYojana'.
- Besides the freedom fighters, spouses (widows/widowers), unmarried and unemployed daughters and parents of deceased freedom fighters are eligible for pension under the scheme.
- The scheme is implemented by the Division of Freedom Fighters and Rehabilitation under the Ministry of Home Affairs.

Pritzker Prize

- BalkrishnaDoshi became the first Indian to receive the Pritzker Prize also dubbed as 'architecture Nobel'.
- The international Pritzker prize is awarded each year to a living architect/s for significant achievement.
- It was established by the Pritzker family of Chicago through their Hyatt Foundation in 1979.
- It bestows laureates with \$100,000 along with a bronze medallion.
- **BalkrishnaDoshi** is a pioneer of low-cost housing design, committed to sustainable architecture that brought modernist design to a country rooted in traditionalism.
- His noted works include Life Insurance Corporation Housing in Ahmedabad, Vidhyadhar Nagar in Jaipur, Aranya Low cost Housing in Indore.

Parker Solar Probe

- NASA is inviting people around the world to submit their names online to be placed on a microchip aboard its Parker solar probe.
- Parker Solar Probe is a historic mission, as it is flying into the sun's atmosphere (or corona) for the first time.
- The corona is the outermost part of the sun's atmosphere that is unstable, producing the solar wind, flares and coronal mass ejections.
- In 2017, NASA renamed the spacecraft from the Solar Probe Plus to the Parker Solar Probe in honor of astrophysicist Eugene Parker.
- The spacecraft will travel directly into the sun's atmosphere about 4 million miles from the star's surface.
- Parker Solar Probe has three detailed science objectives:
 1. Trace the flow of energy that heats and accelerates the solar corona and solar wind.
 2. Determine the structure and dynamics of the plasma and magnetic fields at the sources of the solar wind.
 3. Explore mechanisms that accelerate and transport energetic particles.

Radiation Technologies in Agriculture

- Department of Atomic Energy (DAE) and Bhabha Atomic Research Centre (BARC) in particular are engaged in extensive research on use of radiation processing.
- Irradiation is very effective process in treating agricultural produce to enhance its shelf life.
- Unique advantages of radiation processing of products (including fruits, vegetables, cereals, pulses, spices, sea foods and meat products) are:
 1. Cold and clean process
 2. Effective elimination of harmful bacteria and insects/pests
 3. Treatment after final packaging to avoid recontamination
 4. Significant increase in shelf life
- DAE has developed crop varieties with desirable traits such as higher yield, seed size, improved agronomic and quality traits, early maturity and resistance to biotic and abiotic stresses.
- These were achieved using radiation induced mutation (and conventional) breeding.
- Two technology demonstration plants were set up based on R&D carried out at BARC:
 1. KRUSHAK at Lasalgaon, Nashik, Maharashtra
 2. Radiation Processing Plant at Vashi, Navi Mumbai, Maharashtra
- These plants are set up under the guidance of Board of Radiation & Isotope Technology (BRIT) under the Department of Atomic Energy.

CoMaD at Central Marine Fisheries Research Institute

- Marine Biological Association of India (MBAI) is to organize a national conference to draw an action plan to control marine debris (CoMaD – Conference on Marine Debris) at the Central Marine Fisheries Research Institute.
- There are 5.25 trillion pieces of plastic debris in the ocean, of which 269,000 tonnes float on the surface.
- Further, four billion plastic microfibers per sq km litter the deep sea.
- In India, micro and macro plastics have been observed at all tropic levels from sardines to tunas and sea birds.
- The Central Marine Fisheries Research Institute was established by Government of India on 1947 under the Ministry of Agriculture and Farmers Welfare.
- Later it joined the ICAR family in 1967.
- Kochi is the head quarter of the Institute.

ChinduBhagavatham

- ChinduBhagavatham is an art form dating back to second century BC.
- It is popular in the Nizamabad district, Telangana.
- Chindu is derived from the artistes' caste - ChinduMadiga - a sub-caste of Madiga among the Scheduled Caste community.
- The ChinduBhagavatham is also called ChinduYakshaganam, as it is similar to Yakshaganam of Karnataka.
- The Chindu artistes lead a nomadic life.

- They camp in a particular place for about eight months where they stage plays and during rainy days they work as agriculture laborers.

e- Jagrata

- e-jagrata is a novel initiative to ensure safe, secured and effective Internet usage by schoolchildren.
- It was launched by the district administration of Ernakulum.
- The project is being implemented with the support of Tata Consultancy Services (TCS) and State Bank of India (SBI).
- Students of standards eight and nine from government schools and aided schools will be trained under the program.
- The current training phase will cover cloud computing, android development, ethical hacking, robotics, and Internet payment among other topics.
- The previous phases focused on basic IT and safe and responsible usage of Internet.

Ranganthittu Bird Sanctuary

- The Forest Department and Mysore Bird Watchers' group will soon conduct the first bird census at Ranganathittu Bird sanctuary.
- Ranganathittu Bird Sanctuary is situated in Srirangapatna of Mandya district, Karnataka.
- Ranganathittu Bird Sanctuary located on the islands of river Cauvery.
- It is an example of riverine ecosystem.
- The flying fox, bonnet macaque, common otter, common mongoose, palm civet, marsh crocodile are found here.
- Rich avifauna includes the large cormorand, darter, spoonbill, open-billed stork, painted stork, egret, heron, and the lesser whistling teal.
- It is an Important Bird Area (IBA) that is identified by Birdlife International and Bombay Natural History Society.

SUVIDHA

- Government is set to launch 'SUVIDHA', under the PradhanMantriBhartiyaJanaushadhiPariyojana (PMBJP).
- SUVIDHA is a 100% Oxo-biodegradable Sanitary Napkin at a cost of Rs.2.50.
- Oxo-biodegradable product is made by blending a pro-degrading additive into it that causes breakdown by oxidation when exposed to heat or sunlight.
- The material will eventually be in a state where it can be digested by microorganisms.
- A similar special additive is added in the Suvidha napkin, which makes it biodegradable when it reacts with oxygen after it is used and discarded.
- It will be available at the JanaushadhiKendaras.
- It would ensure 'Swachhta, Swasthya and Suvidha' for the underprivileged women of India.
- This affordable sanitary pad will promote hygiene, ease of disposal as well as keep the environment clean.
- According to the National Family Health Survey 2015-16, about 58% of women aged between 15 to 24 years use locally prepared napkins, sanitary napkins and tampons.

PradhanMantriBhartiyaJanaushadhiPariyojana (PMBJP) Kendras

- PradhanMantriBhartiyaJanaushadhiPariyojana' is a campaign launched by the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.
- It aims to provide quality medicines at affordable prices to the masses through special kendra's known as PradhanMantriBhartiya Jan Aushadhi Kendra.
- Kendras have been set up to provide generic drugs, which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.
- Bureau of Pharma Public Sector Undertakings of India has been established under the Department of Pharmaceuticals, for co-coordinating procurement, supply and marketing of generic drugs through PMBJK.
- Earlier, only medicines manufactured by Central Public Sector Undertakings (CPSU) were being supplied to Kendra. Later medicines which the CPSU's not able to supply are being made from private manufacturers.

IIDEM

- The India International Institute for Democracy and Election Management (IIIDEM) is conducting a training program on 'Capacity Development for Election Management'.

- It is conducted under the Indian Technical and Economic Cooperation (ITEC) program of the Ministry of External Affairs (MEA).
- IIDEM is an advanced resource centre of learning, research, training and extension for participatory democracy and election management.
- The Institute is being developed in collaboration with the Government of India, United Nations, the Commonwealth and inter-governmental organizations like International Institute of Democracy and Electoral Assistance (IDEA).
- IIDEM has four components which are
 1. Training and Capacity Development,
 2. Voter Education and Civic Participation,
 3. Research, Innovation and Documentation
 4. International Projects and Technical Collaboration
- IIDEM will work for promoting democratic values and practices, enhancing voter education and awareness and developing efficient human resources.

European Bank for Reconstruction and Development

- India is to become the 69th member of the European Bank for Reconstruction and Development (EBRD).
- The London-headquartered EBRD is a multilateral development bank set up in 1991.
- It was set up after the fall of the Berlin wall to promote private and entrepreneurial initiative in emerging Europe.
- In 2017, the EBRD signed an accord to strengthen ties with the International Solar Alliance.
- The EBRD works closely with Confederation of Indian Industry (CII), and the Associated Chambers of Commerce and Industry of India (ASSOCHAM).

European Bank for Reconstruction & Development

- The Union Cabinet has approved India's membership for European Bank for Reconstruction and Development (EBRD).
- EBRD is an international financial institution founded in 1991 and headquartered in London.
- It is owned by 65 countries and two EU institutions, and US is the biggest shareholder.
- Besides Europe, member countries of the EBRD are also from other continents - North America (Canada and US), Africa (Morocco), Asia (Japan, China, South Korea) and Australia.
- EBRD's core operations pertain to **private sector development** in their countries of operation.
- The minimum initial investment towards the membership of EBRD will be approximately one million Euros.
- The EBRD is not to be confused with the European Investment Bank (EIB) which is owned by EU member states and used to support EU policy.

Albania's City of Ruins

- The ruins of Butrint are situated in Albania, Southern Europe.
- It was called as Buthrotum in ancient time.
- It was inhabited since pre historic times.
- The site has been under the control of Greeks, Romans and a bishopric (a district under a bishop's control).
- It is a UNESCO world heritage site
- The city of ruins is a part of the Butrint National Park.

Safe and Nutritious Food Initiative

- Food Safety and Standards Authority of India (FSSAI) has undertaken several initiatives under 'Safe and Nutritious Food' (SNF) for citizen guidance and behavioral change viz:
 - i) SNF@Home
 - ii) SNF@School
 - iii) SNF@Workplace
 - iv) SNF@Eatout
- The SNF portal serves as an online resource centre containing information pertaining to this initiative.
- Resource materials, interactive guides on understanding food safety and nutrition are developed by FSSAI.
- For the campaign it has published resource book regarding the steps to be taken,

SNF@Home	Pink book
SNF@School	Yellow Book
SNF@Workplace	Orange Book

Asiatic Lion (*Panthera leo persica*)

- India's endangered Asiatic lion population rose to 600, following the conservation efforts.
- The species, which was found in the South West Asian region, is now restricted to the Gir Sanctuary in India.
- Five protected areas currently exist to protect the Asian lion:
 1. Gir Sanctuary,
 2. Gir National Park
 3. Pania Sanctuary
 4. Mitiyala
 5. Girnar
- The lions face the usual threats of poaching and habitat fragmentation.
- Conservationists have suggested selective relocation of big cats to another sanctuary, to reduce human-animal conflict and avoid the risk of getting wiped out by disease or natural disaster.
- It is an endangered species according to the IUCN Red list.
- It is listed in Schedule I of Wildlife (Protection) Act 1972 and also in Appendix I of CITES.

CBRN emergencies

- National Disaster Management Authority conducted training program for CBRN emergencies at Mumbai airport recently.
- CBRN emergencies pertain to threats emanating due to Chemical, Biological, Radiological and Nuclear material.
- It is aimed at enhancing the preparedness of Airport Emergency Handlers (AEHs) to respond to CBRN emergencies at the airports.
- The training program is being conducted in collaboration with the Airport Authority of India (AAI) and Institute of Nuclear Medicine & Allied Sciences (INMAS).

Global Technical Strategy for Malaria 2016-2030

- The WHO Global Technical Strategy for Malaria 2016-2030 was adopted by the World Health Assembly in May 2015.
- It provides a comprehensive framework to guide countries in their efforts to accelerate progress towards malaria elimination.
- The strategy sets the target of reducing global malaria incidence and mortality rates by at least 90% by 2030.
- It emphasizes the need for universal coverage of core malaria interventions for all populations at risk.
- It highlights the importance of using high-quality surveillance data for decision-making.
- The WHO strategy was developed in close alignment with the Roll Back Malaria (RBM) Partnership's Action and Investment to defeat Malaria 2016-2030.

Multilateral Air Exercise 'Samvedna'

- A Multilateral Air Force exercise, 'Ex Samvedna', is being spearheaded by Indian Air Force.
- 'Samvedna' means 'Empathy' and it will ensure better understanding and sharing of response procedures between a numbers of friendly neighboring nations.
- It is the first composite HADR Air exercise in the South Asian region.
- The focus is on practicing Air Force centric HADR solutions in a Multi-national cooperative Disaster Management environment.
- Air Forces of Bangladesh, Sri Lanka, UAE and Myanmar had committed resources and personnel for the exercise.

Kidney related disease

- The Indian Council of Medical Research (ICMR) said the prevalence of kidney-related diseases has almost doubled in the past decade and is expected to rise further.
- The risk of developing chronic kidney disease (CKD) is at least as high in women as in men.
- The number of women on dialysis in India is lower than the number of men.
- The ICMR launched a Kidney Disease Prevention project for screening and creating awareness drives to identify the population at risk.

- Indian Medical Association is a representative voluntary organization of Doctors of Modern Scientific System of Medicine.

Threat to Coral Sediments

- According to journal Science, ocean acidification is eroding the coral reef systems.
- Coral reefs are formed by the calcium carbonate skeletons and also carbonate sediments which accumulate on them over thousands of years.
- Calcium carbonate skeletons are created by tiny animals called coral polyps.
- Ocean acidification is lowering of sea water's pH when it absorbs the excess, human-caused carbon dioxide from the atmosphere.
- It prevents polyps from building their stony skeletons.
- Coral reefs span 3,062 sq. km in India.
- Many coral species are included in the Schedule 1 of the Wildlife protection Act.

BioNEST

- University of Hyderabad (UoH) had launched the Bio-Incubator to facilitate start-ups and entrepreneurship ventures.
- The BioNEST (Bio-Incubator Nurturing Entrepreneurship for Scaling Technologies) was inaugurated on the occasion of 'National Science Day'.
- It was supported by the Biotechnology Industry Research Assistance Council (BIRAC), a unit of the Department of Biotechnology.
- The BioNEST will incubate start-ups and entrepreneurs in the life sciences, biotechnology, healthcare and allied areas of research.

Initiatives launched on International women's day

UdyamSakhi Portal

- It was for Women Entrepreneurs
- On the occasion of International Women's Day the Ministry of Micro, Small and Medium Enterprises(MSME) launched the portal for women entrepreneurs of India
- The portal is a network for nurturing entrepreneurship and creating business models for low cost products.
- The portal provides assistance through its platform for entrepreneurship learning tools, incubation facility, training programs

Women Entrepreneurship Platform

- It was launched by NitiAyog.
- The initiative is aimed at building an ecosystem for women across India to realize their entrepreneurial aspirations, scale-up innovative initiatives and chalk-out sustainable, long-term strategies for their businesses.
- the three pillars on which WEP is built:
 - Ichha Shakti (motivating aspiring entrepreneurs to start their enterprise)
 - Gyaan Shakti (providing knowledge and ecosystem support to women entrepreneurs to help them foster entrepreneurship)
 - Karma Shakti (providing hands-on support to entrepreneurs in setting-up and scaling up businesses).

WHO new guidelines on Tobacco Products

- World Health Organization has launched new guidelines on the role that tobacco product regulations can play.
- The focus is on reducing tobacco demand, saving lives and raising revenues for health services to treat tobacco-related diseases.
- The new guide, titled 'Tobacco product regulation: Building laboratory testing capacity' was included in the publication that was launched in the 17th World Conference on Tobacco or Health, 2018.
- The new guidelines provide practical, stepwise approaches to implementing tobacco testing.

Thundersnow

- It is a rare phenomenon which means thunder and lightning occur during a snowstorm.
- It is rare phenomenon as, unlike rain, snow mostly absorbs the light of lightning and the sound of thunder.
- Recently, New Yorkers and others on the East Coast of USA experienced the thundersnow in the middle of a macro-scale cyclone, Nor'easter, in USA.
- The ways in which a thundersnow can develop are as follows

1. Similar to thunderstorm – When warmer, moist air close to the ground rises and mixes with colder, denser air higher up, which is observed in central USA.
 2. As observed in great lakes - When a thunderstorm develops, in spite of a prevailing cold temperature, due to the relatively warm moist air that comes from the lakes.
 3. As recently observed in New York – When a low pressure of a powerful winter storm creates strong upward motions in the air that generates the atmospheric instability.
- A 2009 analysis found that only 0.07% of snowfalls are accompanied by thunder.

ICEGATE and e-SANCHIT

- ICEGATE stands for the Indian Customs Electronic Commerce/Electronic Data interchange (EC/EDI) Gateway.
- The national gateway is under Central Board of Customs and Exercise (CBEC).
- It is an e-commerce portal of the Indian Customs that provides e-filing services to the trade and cargo carriers and other clients of Customs Department.
- By this facility, the department offers electronic filing of the Bill of Entry, Shipping Bills and related electronic messages between Customs and the Trading Partners.
- e- SANCHIT was launched on a pilot basis by the Central Board of Excise & Customs (CBEC).
- It is mainly for paperless processing, uploading of supporting documents, to facilitate the trading across borders which will reduce the precious time and provide digital easing.

MILES 18

- The first-ever multi-nation naval exercise at sea, MILES-18, began at the Andaman Sea.
- 11 naval ships of 8 countries and nine Indian ships are participating in the three-day exercise.
- The exercise aims to hone search and rescue procedures, maritime interdiction operations, and core operational skills and exercise a variety of maritime security scenarios.

Student Suicides

- Around 75,000 students committed suicides in India between 2007 and 2016.
- Student suicides in the country have increased 52 per cent – from 17 every day (6,248) in 2007 to 26 every day in 2016.
- Maharashtra (1350) reported the most student suicides in 2016, followed by West Bengal (1,147) and Tamil Nadu (981).
- Failure in examination accounted for 25 % of all the suicides
- India has one of the world's highest suicide rates for youth aged from 15 to 29, according to a 2012 Lancet report.

Northern River Terrapin

- In Bengal, U.P., M.P. and Assam conservation steps are taken to save the Northern River Terrapin.
- The terrapin is one of the most threatened freshwater turtles among the world's 50 most-threatened turtles.
- The terrapin is also called as Batagur and Four-toed Terrapin.
- Turtle Conservation Coalition, a consortium of conservation organizations, accounted its fragile state in the 'Turtles in Trouble' Document.
- India's top five turtles at risk are

Turtles	Location	IUCN Status
Northern River Terrapin (Batagurbaska)	Sunderbans	Critically Endangered
Red-Crowned Roof Turtle (Batagurkachuga)	National Chambal Sanctuary, spread across Uttar Pradesh, Rajasthan and Madhya Pradesh.	Critically endangered
South Asian Narrow-Headed Softshell Turtle (Chitraindica)	Gangetic river system	Endangered
Black Softshell Turtle (Nilssonianigricans)	Temple ponds in Assam and Bengal.	Extinct in Wild
Asian Giant Softshell Turtle (Pelochelyscantorii)	In the eastern part of the country	Critically Endangered

- Turtle habitat is being lost due to development, expansion of agriculture, land and water pollution and consumption of the animals and their eggs.

Femtech

- “FemTech” refers to software, diagnostics, products and services that use digital technology to improve women’s health.
- It is emerging as the next big disruptor in the global health care market, according to Frost & Sullivan.
- The following are the reasons for its emergence are
 1. 50 per cent of global health care customers are women
 2. They are the primary caregivers for the elderly and children
 3. 90% women are primary health care decision makers for their family and key influencers for friends
 4. 80 % of the household health care spending is done by women
- Earlier, women’s health was sidelined as a niche market but now it can attribute to the rise of the ‘she-economy’.

Project UNNATI

- Project UNNATI was launched by the Ministry of shipping in 2014.
- In nutshell it is a port transformation project.
- Under the project, the global benchmarks were adopted to improve the efficiency and productivity, Key Performance Indicators (KPIs) of major ports.
- The aims and objectives of Project, which is focused on 12 major ports, are as follows:
 1. Benchmark operational and financial performance of the major ports
 2. Undertake capability maturity assessment for key processes and functional capabilities
 3. Detailed diagnosis and root cause analysis for the identified opportunity areas to understand underlying reasons for performance bottlenecks.
 4. Develop practical and actionable solutions on the basis of root cause findings, and develop a comprehensive improvement roadmap

Swaminathan Committee

- Maharashtra Farmers protested for various demands, one among which was to implement the Swaminathan committee’s recommendation.
- In 2004, the government constituted the National Commission on Farmers (NCF), under the chairmanship of agriculture scientist and father of Green Revolution, M S Swaminathan.
- The reports were a comprehensive status paper on Indian agriculture, food and rural sector.
- It provided an elaborate explanation for the distress surrounding farming and ways to come out of it.
- The report focused upon land reforms, irrigation, credit and insurance, productivity in agriculture, food security and prevention of farmers’ suicides, competitiveness in farming, employment and bio-resources.
- For food security, NCF suggested universal public distribution system (PDS), National Food Guarantee Act, community food and water banks.

Pre-Iron Age Artifacts

- Archeological Survey of India discovered pre-iron age artifacts in Prachi valley, Jalalpur village, Cuttack District, Odisha, that sheds light on a cultural continuity from Chalcolithic to early Iron Age period.
- The discovery includes faunal remains, carbonized grains and stone and bone tools of early Iron Age to prehistoric period.
- In case of potteries the following were discovered: red ware, red slipped ware, grey and black wares, pots of different shapes, bowls.
- Prachi Valley civilisation predates that of Harappa and Mohenjo-Daro civilizations.
- The Prachi River, a tributary of river Mahanadi, is along the eastern coast of India is an important topographical as well as cultural landscape.
- Presently the parts of the modern day districts of Puri, Khurda, Cuttack and Jagatsingpur comprise the Prachi valley region
- The Prachi River is also called as the ‘eastern Saraswathi’.

Tuberculosis Free India Campaign

- The campaign will be launched by the Prime Minister during the The Delhi End TB Summit, at Delhi.

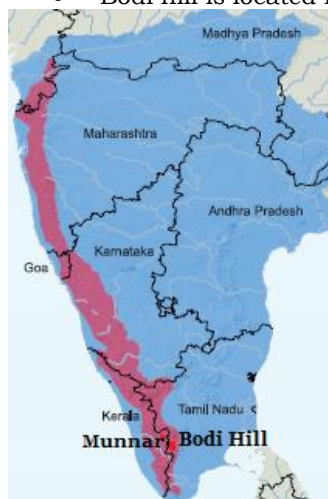
- The campaign will take the activities of National Strategic Plan for TB elimination forward in Mission mode.
- The vision to end TB by 2025, five years ahead of the SDG's has galvanized the efforts of the Revised National Tuberculosis Program.
- One of the new digital initiatives under the Revised National Tuberculosis Control Program is Comprehensive Management Information System for TB (NIKSHAY).

National Academy of Coastal Policing

- Union home ministry recently sanctioned the launch of the National Academy of Coastal Policing (NACP).
- It is to be situated in Gujarat's Fisheries Research Centre located in coastal Okha in Devbhoomi Dwarka district.
- It will be the country's first national academy to train police forces in effectively safeguarding the Indian shoreline.
- The Bureau of Police Research and Development (BPRD), Home ministries' policing think tank, will pilot the establishment and running of the academy.
- The Border Security Force (BSF), the navy and the Coast Guard will form the core to run the academy.
- The academy will sharpen the skills of marine forces of coastal States.

Bodi Hills

- A massive forest fire in Tamil Nadu's Theni district has claimed ten lives of trekkers who had gone mountain trekking in Kurangani hills in Bodi foothills.
- Bodi hill is located in the Theni district, Tamil Nadu bordering the state of Kerala.



- It is part of the southern Western Ghats.
- Munnar, the popular hill station is near to this region.
- West Bodi hill was selected as the site for the India's ambitious INO project.

What is the INO project?

- Neutrinos are tiny particles, almost massless, that travel at near light speeds.
- They are born from violent astrophysical events like exploding stars, nuclear fusion in the sun and gamma ray bursts.
- They are abundant in the universe, and can move easily through matter.
- They are very difficult to track down.
- The proposed INO project primarily aims to study atmospheric neutrinos in a 1,300-m deep cavern in the Bodi West Hills in Theni district, Tamil Nadu.
- If completed, it would house the largest magnet in the world.
- Neutrinos hold the blueprint of nature, which the INO project aims to use to understand some of the unsolved mysteries of the universe.

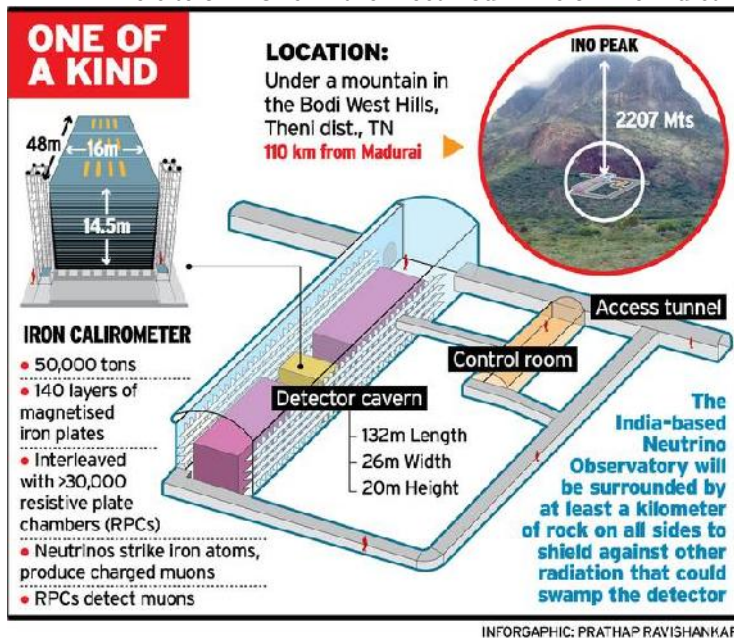
Ionizing Radiation

- Ionizing radiation is radiation with enough energy so that during an interaction with an atom, it can remove tightly bound electrons from the orbit of an atom, causing the atom to become charged or ionized.

- Ionizing radiation is a permanent feature of the upper atmosphere.
- At airlines' cruising altitude, particles periodically ejected by the sun and cosmic radiation coursing through the universe are 100 times more potent than down below.
- The protection at these altitudes is thinner compare to the natural protection at the ground.
- Airline employees face more radiation exposure than radiology workers or nuclear power plant engineers, according to the National Council on Radiation Protection and Measurements.
- Ionizing radiation exposure is measured using the Sievert
- A dose of 4 Sieverts or more at once is often fatal.

Indian-based Neutrino Observatory

- The India-based Neutrino Observatory (INO) project was granted environmental clearance by the Ministry of Environment and Forests (MoEF)
- The initial goal of INO is to study neutrinos
- Neutrinos are subatomic particles produced by the decay of radioactive elements and are elementary particles that lack an electric charge.
- The site of INO is in the West Bodi Hills of Theni district in the state of Tamil Nadu.



- The project includes
 - (a) Construction of an underground laboratory and associated surface facilities at Pottipuram in Bodi West hills
 - (b) Construction of an **Iron Calorimeter (ICAL)** detector for studying neutrinos
 - (c) Setting up of **National Centre for High Energy Physics** at Madurai, for the operation and maintenance of the underground laboratory, human resource development and detector R&D along with its applications.

Energy transition Index

- The Index is released by World Economic Forum.
- The report titled "**Fostering Effective Energy Transition**", ranks countries on how well they are able to balance energy security and access with environmental sustainability and affordability.
- The overall list was topped by Sweden, followed by Norway at the 2nd position and Switzerland at the 3rd rank.
- India has been ranked at 78th among 114 countries on the Energy Transition Index.
- India is ranked lower than its emerging market peers like Brazil and China.
- However the report stated that India has taken "bold measures" to improve energy access, energy efficiency, and to improve the deployment of renewable sources of energy.

Blue economy

- The government is implementing a Central Plan Scheme on "Blue Revolution: Integrated Development and Management of Fisheries".

- Its vision is to achieve economic prosperity of the country and the fishermen through utilization of full potential of water resources for development of fisheries in a sustainable manner.
- In addition, in 2017, Government has notified the 'National Policy on Marine Fisheries, 2017' (NPMF).
- The policy provides guidance for promoting 'Blue Growth Initiative' which focuses on ushering 'Blue Revolution' (NeeliKranti).

'Citizen Services' app

- The app was launched by National Crimes record Bureau on its 33rd Inception Day.
- It is a bouquet of 9 police related services, for the citizen.
- The services will provide smooth interface between Citizens and Police.
- Features of the app
 1. Citizens can file complaint and check its status it once the app is made available in the CCTNS platform.
 2. SOS provision is available to send emergency message to friends and family
 3. Locate Police Station feature to know about nearby police station details and route to approach using GPS technology.
 4. VahanSamanvay stolen vehicle Registration feature to verify the status of stolen/recovered vehicles, before purchase, re-registration, claim settlement etc..
 5. Talash/ Missing Person (Lost persons Registration) a web link in the App to provide a link to NCRB website displaying missing persons/ unidentified dead bodies and unidentified persons.
- The App is developed by in house team of NCRB.
- The Mobile App was tested & certified by CERT-In empanelled Company as per the compliance of MeitY directions.

North East Special Infrastructure Development Scheme

- In 2017, Government of India approved North East Special Infrastructure Development Scheme (NESIDS) for the period of 2017-18 to 2019-20
- The scheme is completely funded by the central government.
- The funds under the scheme, will be distributed among eight North Eastern States
- The distribution of funds will be on the basis of well-defined criteria on certain parameters e.g. Area, Population, Human Development Index, Road density, etc.
- The new scheme will broadly cover creation of infrastructure under following sectors:-
 1. **Physical infrastructure** relating to water supply, power, connectivity and specially the projects promoting tourism;
 2. **Infrastructure of social** sectors of education and health.
- In addition the scheme will also cover the projects that promote tourism.
- The scheme will act as a catalyst in overall development of the region.

Cyber Gram Project for Digital Literacy of Minority Communities

- The Ministry of Minority Affairs has launched a pilot project for minority Cyber Gram for digital literacy in a minority dominated village Chandauli in Alwar district of Rajasthan.
- The Ministry mainstreamed the Cyber Gram project with the Multi-sectoral Development Program in the year 2014-15 as a special initiative.
- The aim of the initiative is
 1. To provide hands on training in computers for students from minority community
 2. To enable them to acquire basic Information and Communication Technology (ICT) skills to become digitally literate
 3. To actively involve them in knowledge based activities, access financial, social and government services and to use internet for communications.
- The initiative covers students of Class VI to Class X belonging to notified minority communities residing in minority concentration areas indentified under Multi-sectoral Development Program (MsDP).
- Minority communities include Muslims, Sikhs, Christians, Buddhists, Parsis and Jains.
- The project is being implemented through Common Service Center (CSC) e-governance India Ltd- a company under Department of Electronics and Information Technology with support of States/UTs.

3RD WEEK OF MARCH**POLITY, GOVERNANCE AND PUBLIC POLICY****Need For Proper Implementation of FRA****Context:**

- Many forest dwellers across India are in vulnerable condition due to improper implementation of Forest Rights Act (FRA).
- Respective governments need to take measures in this regard.

Forest Rights Act

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or FRA was landmark legislation.
- It sought to restore the rights of forest dwellers over land, community forest resources and habitats, and the governance and management of forests.
- It concerns the rights of forest-dwelling communities to land and other resources, denied to them over decades as a result of the continuance of colonial forest laws in India.
- The Act grants legal recognition to the rights of traditional forest dwelling communities, partially correcting the injustice caused by the forest laws.

Significance

- The community forest titles enable all the villagers, including landless people, to access, use and sell minor forest produce and use other forest resources.
- There are evidences that after recognition of community forest rights, the household incomes from bamboo harvesting have increased.
- There are possibilities of reverse migration and reduced forest fires due to regular patrolling and monitoring by the villagers.
- Thus FRA can contribute to their livelihood and sustainable management of forests.

Implementation Status of FRA

- The Ministry of Tribal Affairs' latest database reveals that out of 41,89,827 claims for land rights made by forest dwellers, only 18,24,27 have been accepted by the authorities.
- In some cases titles have been given over less area than what was legitimately claimed by forest dwellers.
- Of the total forest rights titles issued so far, the majorities are of individual forest rights and only less than 4 per cent titles recognize community forest rights.
- Instead of addressing the implementation problems, governments across the country have introduced conflicting policies that go against the spirit of the FRA.
- Many of these rules place the governance of forests in the hands of committees that are constituted and controlled by the forest department.

Consequences of Non-Implementation

- There are land related conflicts galore across the country arising due to the non-implementation of the provisions of the Forest Rights Act.
- There were diversion of forests for industrial and development projects without settling forest dwellers rights and without their free and prior informed consent has been indiscriminately carried out.
- Majority of the land conflicts (two-third) in India are related to common lands rather than private lands.
- If unsolved these conflicts will increase and will impact hugely on the economic system if the government fails to address them in a rapid manner.

Measures Needs to be taken

- The government should realize that the Forest Rights Act can enhance the livelihood of people and promote sustainable forest management through collective action with legal sanction, scientific inputs and social process.
- Implementation of the Forest Rights Act will help to resolve many existing conflicts and uplift the economic and social status of forest dwellers.
- The government should understand the potential of the FRA to address rural distress and not subvert its provisions.

- The state governments across the country should bring amendments to their forest law, especially laws related to minor forest produce.

Farmer-Oriented Solar Power Scheme:KUSUM

In News:The Government of India is in the process of formulating a Scheme 'KisanUrjaSurakshaevamUtthaanMahabhiyan (KUSUM)'.

About KUSUM:

- It's a farmer-oriented solar power scheme that will allow setting up grid-connected solar plants in rural areas and off-grid solar pumps.
- Finance minister had announced the scheme in this year's budget that involves decentralized solar power production of up to 28,250 Megawatt (Mw) over five years.
- It aims at boosting farmers' income by allowing them to sell additional power to the grid through solar plants set up on
- It will also have provisions for solarization of tube wells and lift irrigation projects.
- The other benefits of the scheme include
 1. Reduction in transmission losses,
 2. Support the financial health of discoms by cutting the burden of agricultural subsidy;
 3. Supporting states in meeting their Renewable Purchase Obligation (RPO) targets;
 4. Promotion of energy efficiency; and providing water security to farmers.

Union Cabinet approves Ayushman Bharat

In News:The Union Cabinet on March 21, 2018 approved the launch of the centrally sponsored 'Ayushman Bharat -National Health Protection Mission (AB-NHPM)'.

Key Features

- The scheme will be known as Ayushman Bharat- National Health Protection Mission.
- It will integrate two on-going centrally sponsored schemes- RashtriyaSwasthyaBimaYojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS).
- The scheme has the benefit cover of Rs 5 lakh per family per year. This cover will take care of almost all secondary care and tertiary care procedures.
- The scheme aims to target over 10 crore families belonging to poor and vulnerable population based on Socio Economic and Caste Census 2011 (SECC) database.
- There will be no cap on family size and age in the scheme.
- The benefit cover will also include pre and post-hospitalisation expenses. All pre-existing conditions will be covered from day one of the policy.
- A defined transport allowance per hospitalization will also be paid to the beneficiary.
- The scheme allows the beneficiary to take cashless benefits from any **public or private empanelled hospitals across the country.**
- The payment for treatment will be done on package rate which will be defined by the Government in advance basis. The package rates will include all the costs associated with treatment.
- The States and UTs will have the flexibility to modify these rates within a limited bandwidth.
- For beneficiaries, it will be a cashless and paper less transaction.
- States will be required to form a State Health Agency (SHA) to implement the scheme and at the district level also, a structure for implementation of the scheme will be set up.
- To ensure that the funds reach SHA on time, the transfer of funds from Central Government through AB-NHPMA to State Health Agencies may be done through an escrow account directly.
- The scheme will work in partnership with NITI Aayog to operationalize a robust, modular and interoperable IT platform which will involve a paperless and cashless transaction.

Entitlement based scheme

- The AB-NHPM will be an entitlement based scheme with entitlement decided on the basis of deprivation criteria in the SECC database.
- Here are the **different categories of families** in rural areas that can be covered under the scheme:
 1. Families having only one room with kucha walls and kucharooof
 2. Families having no adult member between age 16 to 59Female headed households with no adult male member between age 16 to 59.
 3. Disabled member and no able bodied adult member in the family.
 4. SC/ST households.
 5. Landless households deriving major part of their income from manual casual labour.

6. The scheme will automatically include families in rural areas having any one of the following- households without shelter, destitute, living on alms, manual scavenger families, primitive tribal groups or legally released bonded labour.
7. For urban areas, 11 defined occupational categories are entitled under the scheme.

Empanelled Hospitals

- The beneficiaries can avail benefits in both public and empanelled private facilities.
- All public hospitals in the States implementing AB-NHPM, will be considered empanelled for the Scheme.
- Hospitals belonging to Employee State Insurance Corporation (ESIC) will also be empanelled based on the bed occupancy ratio parameter.
- While, the private hospitals will be empanelled online, based on defined criteria.

Co-alliance of States

- One of the major features of the scheme is that it will offer mutual federalism and flexibility to states. There is provision to partner the States through co-alliance.
- This will ensure appropriate integration of the scheme with the existing health insurance schemes of various Ministries and Departments and State Governments at their own cost.
- State Governments will be allowed to expand the scheme both horizontally and vertically.
- States can implement the scheme through insurance company or directly through Trust/ Society or through a mixed model.

Mission Council (AB-NHPMC)

- The scheme proposes to set up Ayushman Bharat National Health Protection Mission Council (AB-NHPMC) at apex level Chaired by Union Health and Family Welfare Minister.
- It will have an Ayushman Bharat National Health Protection Mission Governing Board (AB-NHPMGB) which will be jointly chaired by Secretary (HFW) and Member (Health) of NITI Aayog, Financial Advisor under Ministry of Health, Additional Secretary & Mission Director of AB-NHPM and Joint Secretaries of AB-NHPM and MoHFW as members.
- The CEO of Ayushman Bharat Scheme will be the Member Secretary and the State Secretaries of Health Department will also be members as per the requirement.
- It will establish an Ayushman Bharat - National Health Protection Mission Agency (AB-NHPMA) to manage the scheme at the operational level in the form of a Society. AB-NHPMA will be headed by a full time CEO.

Implementation

- At the National level, an Ayushman Bharat National Health Protection Mission Agency (AB-NHPMA) will be established.
- States and UTs will implement the scheme by a dedicated entity called State Health Agency (SHA).
- States and UTs can also implement the scheme through an insurance company or directly through the Trust/ Society or use an integrated model.

Payment of Gratuity (Amendment) Bill

- **In News:** The Parliament has passed the Payment of Gratuity (Amendment) Bill to empower the government to fix the amount of tax-free gratuity and the period of maternity leave with an executive order.

Background

- After the implementation of the 7th Pay Commission, the ceiling of gratuity amount for the central government employees has doubled to Rs 20 lakh.
- The payment of Gratuity bill is in tandem with the new pay commission.
- The amendment to the payment of gratuity law comes in the backdrop of Maternity Benefit (Amendment) Act, 2017 enhancing the maximum maternity leave period to 26 weeks.
- The amendment will benefit workers of private and public sector companies, as it will provide them with social security after retirement.

Gratuity

- It is a benefit received by an employee for services rendered to an organisation.
- For companies covered under the Gratuity Act, this benefit is paid when an employee completes five or more years of service with the employer.
- The Gratuity Act applies to establishments employing 10 or more persons.
- According to the current rules, the amount of gratuity is determined directly by the tenure of service and also by the last drawn salary.
- The gratuity is given at the rate of 15 days of salary for each year of service.

Key Highlights

- The bill moved by Union Labour Minister Santosh Kumar Gangwar was passed by a voice vote.
- The lower house of the parliament, Lok Sabha had given its approval to the important bill last week.
- The passing of the bill will enable the government to enhance the maximum limit of tax-free gratuity to Rs 20 lakh from the existing Rs 10 lakh for employees falling under the Payment of Gratuity Act.
- The bill will also allow the increase of cap from time-to-time in the gratuity amount without changing the law.
- It will also allow the government to fix the period of maternity leave for female employees as deemed to be in continuous service in place of the existing 12 weeks.

Amendments in Surrogacy (Regulation) Bill

In News: The Union Cabinet has given its approval for moving official amendments in the Surrogacy (Regulation) Bill, 2016.

- Once the Bill is enacted by the Parliament, the National Surrogacy Board will be constituted.
- While, the States and Union Territories will constitute the State Surrogacy Board and State Appropriate Authorities within three months of the notification by the Union Government.

Background

- The Surrogacy (Regulation) Bill, 2016 was introduced in the Lok Sabha on November 21, 2016.
- The Bill was later referred to the Parliamentary Standing Committee on Health and Family Welfare on January 12, 2017.
- After a thorough study, the Committee tabled its 102nd Report on Surrogacy (Regulation) Bill, 2016 in the Lok Sabha on August 10, 2017.

Provisions of the Bill

- The Bill proposes to regulate surrogacy in India by establishing National Surrogacy Board at the central level.
- It proposes to establish State Surrogacy Boards and Appropriate Authorities in the States and Union Territories.
- It ensures effective regulation of surrogacy prohibits commercial surrogacy and allows altruistic surrogacy to the needy Indian infertile couples.
- The Bill will apply to whole of India, except the State of Jammu and Kashmir.

Significance

- Once the Bill becomes an Act, it will legalise the surrogacy services in the country and will control the immoral practices in surrogacy.
- It will prevent commercialization of surrogacy including sale and purchase of human embryo and gametes.
- It will prohibit potential exploitation of surrogate mothers and children born through surrogacy.
- It will allow ethical surrogacy to the needy infertile couples upon the fulfilment of certain conditions and for specific purposes.
- It will protect the rights of surrogate mother and children born out of surrogacy.

NITI Aayog's SATH-E project

In News: NITI Aayog has released comprehensive roadmaps and detailed timelines for its initiative 'Sustainable Action for Transforming Human Capital in Education (SATH-E)' project.

Background

- In May 2017, the NITI Aayog wrote to all the states offering assistance for improving their health and education sectors, among which 16 states responded favourably.
- Following presentations and consultations with the Ministry of Human Resource Development, the three states of Jharkhand, Madhya Pradesh and Odisha were selected for the programme.
- This paved way for the Sustainable Action for Transforming Human Capital-Education (SATH-E) project.
- The project has been envisaged as a programme that aims to transform elementary and secondary school education across the selected three states.
- The SATH-E roadmap refers to a time-bound, goal-driven exercise that will reach its logical culmination by the end of the academic year 2020.

Objective

- The main objective of the SATH-E project is to make the entire governmental school education system responsive, aspirational and transformational for every child.

- It aims to create role model states for education and mainstream islands of excellence across the country to facilitate qualitative and quantitative transformation of learning outcomes.
- The project puts the states in the driver's seat to transform education.

Key Highlights

- The comprehensive roadmaps are for the coming two years, from 2018 to 2020.
- The prints lay out detailed interventions that will be taken up by the three participating states- Jharkhand, Madhya Pradesh and Odisha – which aim to become 'role model states' in school education.
- These roadmaps present the first-of-its-kind, customised, action-oriented programmes, outlining interventions at the individual, district and state level.
- The plans were jointly prepared by NITI Aayog, the three States and the knowledge partners of the SATH Initiatives, the Boston Consulting Group (BCG) and Piramal Foundation for Education Leadership (PFEL).

Funding of the Project

- The initiative will be funded through a cost-sharing mechanism between NITI Aayog and the participating states.
- The Boston Consulting Group (BCG) and Piramal Foundation for Education Leadership (PFEL) were chosen as knowledge partners for the project facilitating review, data collection and implementation.

Demand for Separate Lingayat religion

In News: The Karnataka government decided to recommend to the Centre to grant religious minority status to the Lingayat community.

state government decision

- Lingayats account for nearly 17 per cent of the state's population.
- The demand for separate religion tag and minority status is a long pending demand of the Lingayat community.
- The State Cabinet has decided to accept the recommendations of the state minority commission in this regard.
- The religious minority recognition will thus be granted under the Karnataka Minorities Act.
- The status will cover two factions of the community — Lingayats and VeerashaivaLingayats.
- The State Cabinet also decided to forward the demand to the Centre for notifying under the Central Minority Commission Act.

Lingayats

- The Lingayats are strict monotheists.
- They instruct the worship of only one God, namely, Linga (Shiva).
- 'Linga' here does not mean Linga established in temples.
- It is rather the universal consciousness qualified by the universal energy (Shakti).
- **Status** - Lingayats are currently classified as a Hindu sub-caste called "VeerashaivaLingayats".
- There is a general misconception that Lingayatism is a subset of Shaivism, which is itself a sect of Hinduism.
- There is also a misconception that the Lingayats are Shudras.
- But textual evidence and reasoning suggests that Lingayatism is not a sect or subset of Hinduism, but an independent religion.

Lingayat and Veerashaiva

- Recently, Karnataka government decided to recommend religious minority status to the Lingayat and Veerashaiva community.
- The tradition of Lingayatism has been founded by social reformer and philosopher Basavanna in 12th century Karnataka.
- Basavanna's vision of a societal order was based on human freedom, equality, rationality, and brotherhood.
- Emergence of the Lingayat sect can be located within Bhakti movements that had swept across South India from the 8th century AD onwards.
- Veerashaivism is a **Shaiva sect** within **Hinduism** and is predominantly located in Karnataka.
- Veerashaivas claim that Basavanna was not the founder of the Lingayat tradition, but rather a reformer of an already existing religious tradition which they call **Veerashaivism**.

Practice	Veerashaiva	Lingayat
The founder	Panchacharyas	Basavanna
Religious script	Vedas, Agama, <i>Siddhanta Shikhamani</i>	Vachana literature
Caste and gender equality	No equality. It puts Aradhyas at the top of the ladder, while there is no gender equality	Complete equality of men and women in religious, political and social practices
Worship	The statue of Shiva, and Shiva as envisaged in the Vedas with snake around the neck etc	Shiva (Ishta linga) as a formless, timeless entity that resides in each and every life form
Temples and priests	Has a system of temples and priests	Bans temple worship. Worships only ishta linga

Historical Aspect

- The community actually evolved from a 12th century movement led by social reformer and philosopher-saint Basavanna.
- It emerged as a reactionary force against Hinduism.
- In essence, Lingayats remain staunch worshippers of the Hindu God Shiva.
- But they strongly protest against Hindu social practices such as caste discrimination and wearing of the sacred thread.
- As, caste discrimination is central to the post-Manu Hinduism.
- Basavanna and his associates thus asked their followers to not observe it.
- The Basavanna movement helped downtrodden sections of Hindu society break the chains of caste and seek the truth themselves.
- A person undergoing initiation in Lingayatism will be given an ishtalinga.
- The person henceforth becomes superior and therefore, all Lingayats must be treated as equal.

demand

- The argument for Lingayats being a separate religion has existed in the mainstream for over seven decades.
- **Complexity** - The status is complicated because the Lingayats still ascribe to some of the aspects of Hinduism.
- The demand was also weakened by its subsumption within the Veerashaiva nomenclature.
- This happened after large number of Hindu Veerashaivas embraced Lingayatism while continuing to follow Hindu practices.
- **Relevance** - Writings by Basavanna 800 years ago prove that Lingayats were a religious entity separate from Hindus.
- But the teachings of Basavanna are slowly losing their distinct place in society.
- **Concern** - The increasing subsumption within the Veerashaiva and Hindu nomenclature, and decreasing importance for Basavanna's preaching are concerns among the Lingayats.
- The identification as a separate religion is thus seen as a crucial need at this juncture, for Lingayatism to survive.
- **Dichotomy** - In the Hindu Marriage Act, 1955 and Hindu Succession Act, 1956, Lingayats, Buddhists, Jains and Sikhs are included among Hindus.
- But Buddhists, Sikhs and Jains were identified by state and central governments as minority religions in 1993, 1963 and 2014 respectively.
- Only Lingayats remain unrecognised under a separate religious status.
- **Demand** - Several massive rallies and meetings are organised, calling for the status of an independent religion.
- There is a demand that the community be identified only as "Lingayat", and not "VeerashaivaLingayat" in caste certificates.
- Once recognised, Lingayats would be able to avail benefits under Articles 25, 28, 29 and 30 of the Constitution.
- The provisions under these deal with freedom of religion and rights of minorities.

ECONOMIC AFFAIRS

Increasing Trade Deficit in India

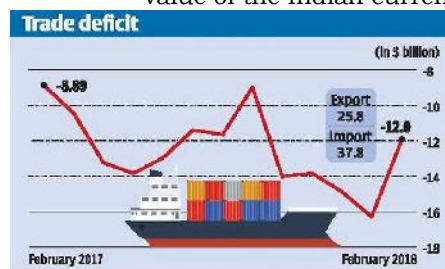
In News: Ministry of Commerce and Industry stated that India's trade deficit has increased.

Trade Deficit

- A trade deficit is an economic measure of international trade in which a country's imports exceeds its exports.
- A trade deficit represents an outflow of domestic currency to foreign markets.
- It is also referred to as a negative balance of trade (BOT).
- Trade Deficit = Total Value of Imports – Total Value of Exports

Status of India's Trade Deficit

- The Trade deficit of India for February 2018 was estimated at \$11,979.21 million, 25.8 per cent higher than the \$9,521.73-million deficit reported during February 2017.
- Exports from the country rose 4.48 per cent in dollar terms during February this year compared to the same month of the last fiscal.
- But, in rupee terms, export growth was flat with a mere 0.27 per cent rise, reflecting a dip in value of the Indian currency.



Source: Ministry of Commerce & Industry

Cause of increasing trade deficit

- In recent years there is an increase in imports of petroleum, crude & products, electronic goods, machinery, electrical & non-electrical, pearls, precious & semi-precious stones and coal, coke & briquettes among others.
- India's crude oil import bill during February 2018 stood at \$10,194.33 million, 32.05 per cent higher than the import bill of February 2017 on the back of a recovery in crude prices.
- This is also because the Global crude oil prices have increased 17.90 per cent in February 2018 compared to February 2017.

implications for India

- For India economic growth is on the back of higher exports of petroleum products, organic and inorganic chemicals, drugs and pharmaceuticals, rice and electronic goods.
- Exports during February 2018 has increased when compared during February 2017.
- But increasing deficit had weakened Indian currency, as the pace of overall exports has slowed down in February 2018 which is distressing.
- It is even more disconcerting that Indian exports faltering when the global economy is on an uptick.

Finance Bill Passed Without Discussion

Context

- The Guillotine provision was deployed, to pass all outstanding Demands for Grants in the Budget without "discussion".
- This has raised questions on the roles and responsibilities of the legislature in a democracy.

Guillotine provision

- In legislative parlance, to "guillotine" means to put together and fast-track the passage of financial business.
- After the Budget is presented, Parliament goes into recess for about 3 weeks.
- During this time, the House Standing Committees examine Demands for Grants for various Ministries, and prepare reports.
- After Parliament reassembles, the Business Advisory Committee (BAC) draws up a schedule for discussions on the Demands for Grants.

- Given the limited time, the House cannot take up the expenditure demands of all Ministries.
- The BAC therefore identifies some important Ministries for discussions.
- These may include Ministries of Home, Defence, External Affairs, Agriculture, Rural Development and Human Resource Development.
- This is when Members discuss the policies and working of Ministries.
- Once the House is done with these debates, the Speaker applies the “guillotine”.
- This is to put to vote at once, all the other outstanding demands for grants that have not been discussed.
- This usually happens on the last day earmarked for the discussion on the Budget.
- The purpose is to ensure timely passage of the Finance Bill, marking the completion of the legislative exercise with regard to the Budget.

Bills passed at present

- Owing to the disruption in Parliament due to various issues, all Demands for Grants were “guillotined”.
- The Finance Bill and Appropriation Bill (contained the consolidated Demands for Grants) with a spending plan of Rs 89.25 lakh crore.
- The Appropriation Bill details plans on how government ministries and departments would spend their money this fiscal.
- This, along with 21 amendments to the Finance Bill, which contains taxation proposals for 2018-19, was introduced.
- These were voted on, and passed by voice vote, all within 30 minutes.
- Procedurally, the government cannot be questioned as it is at the Speaker’s discretion to deploy the Guillotine provision.

concerns

- It was an unusual step because there were still 3 weeks left in the Budget Session.
- There is enough time for the Bills to have undergone “discussions” in the House.
- The government is technically right to fast-track legislative business but it seems to have silenced the voice of democracy and unfairly bypassed the convention.
- The clear majority of the ruling coalition in the Lower House guaranteed that the Bills would pass, without discussion.
- But beyond legislative majorities, democracy also functioned through debate, dissent, and accountability.
- One of the basic checks on the power of the executive in a democracy comes from the legislature’s oversight over funds.
- The refusal to discuss the Finance Bill is symptomatic of the steady decline in the prestige and position of Parliament.
- It is also a stain in the ideas that the Parliament embodies.
- Notably, this Budget Session has spent the least time “discussing” the Finance Bill since 2004.
- The government is registering the largest year-on-year decline in time spent on the Finance Bill.

way forward

- The responsibility for the healthy functioning of Parliament is something that must be shared by every party.
- The government, despite its electoral dominance and even because of it, must ensure that it encourages debate rather than circumvent it.

Revamping RBI's Regulatory Power

In News: The RBI Governor has highlighted some fundamental limitations existing in relation with RBI's regulatory power.

- This comes as a response to government blaming the RBI for the recent PNB scam.

government's response to the scam

- The government, soon after state-owned Punjab National Bank's fraud case, accused the RBI for its supervisory failures.
- It also blamed the bankers and auditors for their shortfalls.

RBI's concerns

- RBI governor made mention of RBI's warnings about possible risks, but said that the PNB's internal systems failed to take note of it.

- In response to the government's accusation, the RBI governor Urjit Patel pointed out the limitations to RBI's power.
- He highlighted the issues such as -
 - the absence of powers to remove the directors on the management of PSU banks who are appointed by the government
 - the lack of power to force a merger or trigger liquidation of a state-owned bank
 - the limited legal authority for RBI to hold these bank boards accountable
- The government, the owner of public sector banks, still control a dominant share of the country's banking business.
- RBI Governor pointed out that the banking regulatory powers were not 'ownership neutral' in India.
- This is possibly why the RBI could not fully exercise its powers to crack down on corporate governance issues at state-owned banks.
- A system of dual regulation, by the finance ministry in addition to RBI, has resulted in ineffective banking regulation.
- Patel urged the government to strengthen the Banking Regulation Act, 1949 to give RBI enough power to regulate PSU banks.

way forward

- The RBI's stance is valid, given the discomfort with knee-jerk reactions and the blame games since the fraud came to light.
- The greater challenge is governance reform in banks.
- The government should swiftly settle the issue of separation of ownership and regulatory control.
- It can consider making the regulatory powers of RBI fully "ownership neutral".
- Besides, privatisation does appear to be an easy option to address some of the concerns.
- But it is important to see whether such an option should be exercised during a crisis.

Extension of Urea Subsidy

In News: The government has approved a proposal to extend urea subsidy till 2020.

Measures taken

- **Urea** - Urea is made available to farmers at a statutorily controlled price of Rs 5,360 per tonne.
- The difference between the delivered cost of the fertiliser at farm gate and maximum retail price is given as subsidy to manufacturers.
- The Cabinet Committee of Economic Affairs (CCEA) has recently cleared the proposal of the Department of Fertilizers.
- Accordingly, the urea subsidy has been extended for 3 years till 2020.
- Normally, the ministry of chemicals and fertilisers takes approval for the urea subsidy on an yearly basis.
- However, this time it has received clearance for 3 years.
- **DBT** - The CCEA has also approved implementation of direct benefit transfer (DBT) for disbursement of fertiliser subsidy
- DBT would entail 100% payment to fertiliser companies.
- Continuation of the urea subsidy will facilitate smooth implementation of DBT scheme in fertiliser sector.

fertiliser DBT

- The direct benefit transfer (DBT) for fertilizers differs from the one implemented for LPG subsidy.
- For fertilizers, payment would not be transferred to a farmer's bank account.
- It would instead go to manufacturers and importers on actual sales made by a retailer.
- Currently, the company is eligible for subsidy payment after submitting invoices prepared on the basis of receipts at the district-level warehouses.
- This typically takes 45-60 days.
- Under DBT, the retailer will record the transaction on a point of sale machine authenticated with biometric information of the farmer.
- The fertilizer maker will be entitled to get 100% subsidy in 7 days.
- The government is pushing all companies to set up retail centers.
- DBT would set right some of the challenges faced by both the industry and the government such as -

- diversion of subsidized urea for industrial use
- delay in subsidy payments
- skewed usage of nutrients
- smuggling to neighboring countries

Concerns with urea subsidy

- Farmers tend to **use urea excessively** because of its low prices, made possible by the subsidy.
- This is ruinous for **soil health** and agriculture in the long-run.
- Moreover, a bulk of subsidized urea is cornered by a handful of **rich farmers**.
- Farmers with large land-holdings can show a **high urea demand**.
- This can become a route for both farmers and re-sellers to exploit the black market for urea.

Way forward

- Farmers should be aware of the effects of overuse of fertilizers on soil health.
- A far better approach would be to fix a **per hectare grant** in place of fertilizer subsidies.
- The grant could be mapped against the fertilizer requirement that, in turn, is assessed from soil health card sampling.
- This can ensure access to fertilizer and address urea leakages as well as curb its overuse.

Addressing Increasing Natural Gas Demand

Context:

- Most of the developed countries has a surge in Liquefied Natural Gas demand due to various reasons.
- Even in India there is increasing energy consumption, India need to create infrastructures for serving this purpose.

Global status of LNG demand

- Natural gas plays a major role in developed economies as a clean energy source.
- An Arctic blast recently lowered temperatures across the European Union (EU) and the UK, which flared up gas prices to a 12-year high in the UK markets.
- Significantly, citing supply outage for price surge, a key storage facility was shut down, which accounted for more than 70% of the UK's total gas storage capacity, in its coverage.
- In USA for past two decades there is a fluctuating demand for natural gas amidst relatively constant production levels.
- In these developed economies there is a need for an ability of the market mechanism to ensure utilities and consumers with the supply of natural gas at market clearing prices.

measures taken

- US Natural Gas Market's developed a competitive deregulated market supported by necessary market infrastructure to neutralise fluctuations in gas prices.
- LNG storages units played a significant role in curtailing volatility in the natural gas markets arising out of weather fluctuations.
- Enhanced transportation capacities also played a key role in ensuring round-the-clock availability of natural gas to domestic and industrial consumers.
- Open access mandate also led to the development of markets for gas storage with the ability of the players to reap arbitrage opportunities.

demand of natural gas in India

- With the government's active pursuit of developing India as a gas-based economy, India's gas imports (in the form of liquefied natural gas, or LNG) have been increasing supported by lower prices.
- Gas imports during FY17 have nearly doubled from imports seen in FY11.
- Estimates that LNG imports are expected to continue grow by 10% annually over the next five years, overtaking domestic production in 2019.

measures needs to be taken by India

- India has already started its efforts towards boosting domestic gas production and exploring transnational gas pipelines under projects like Urja Ganga.
- The development of a distribution network will increase accessibility to the cleaner source of energy.
- Development of storage facilities is equally critical to smoothen out the differences between unstable demand and supply situations.

- Consequently, availability of adequate storage facilities will help even out market volatility, besides maintenance of operational integrity of the pipelines, by ensuring that pipeline pressures are kept within the design parameters.
- About 90% of the industry respondents in India support the 'carrier first, commodity later' principle as the approach for gas sector development.
- In India enabling regulations must play an active role in promotion and development of infrastructure facilities such as pipelines and storage facilities to meet the forecasted growth of the sector.
- Thus for the successful transformation of the proposed natural gas markets there is a dire need for supporting infrastructure with optimum transparency and neutral outlook.

Benefits of Migration's for Home Country

In News: According to official sources global labour migration particularly in high-skilled jobs has escalated.

migration

- Migration is the movement of a person or a group of people, to settle in another place, often across a political or administrative boundary.
- It can be temporal or permanent, and it may be voluntary or forced.
- There are two important terms that relate to migration:
 1. **Immigration** -Immigration is when people move from other places into a place to settle, such migrants are called immigrants, to simply put people coming in from elsewhere.
 2. **Emigration** -Emigration is when people move out to new places, and the migrants involved are called emigrants, to simply put people leaving their home country.

status of global migration

- The number of migrants with a tertiary degree increased nearly 130% between 1990 and 2010.
- Migrants of other education levels doubled, and low-skilled (primary educated) migration grew 40%.
- Digital labour markets and internet-based platforms that connect workers worldwide have also grown.
- More than half of the high-skilled technology workers and entrepreneurs in Silicon Valley are foreign-born.
- Prominent firms with immigrant chief executive officers have included Google, Microsoft and Pfizer.
- Most high-skilled migrants have come from China and India, and the receiving countries have included the US, UK, Canada, and Australia.

benefits of migration

- Migration and resultant diaspora connections can be very important sources of brain gain as sending countries gain access to technical information.
- Impact of immigration on knowledge spillover to the countries of immigrants' origin has been shown for scientific publications and inventions.
- The availability of information and communication technologies, and easier access to the internet and smartphones, help individuals become facilitators of knowledge.
- Beyond knowledge diffusion, skilled migrants serve as effective conduits for many forms of global exchange in a networked world such as Investments, technology, and cultural norms.

Indian Diasporas contribution

- Indian Migration has promoted global diaspora networks, human capital investment, circular migration, and the transfer of technology.
- Many data support that the Indian diaspora has facilitated the outsourcing of jobs to India.
- Diaspora-based contracts mainly served to lower costs for the company contacts outsourcing the work, as the developers in India are paid about the market wage for their work.

measures India needs to take

- Immigrants arriving from their origin countries might be better at expressing knowledge in a way that is more easily absorbed in their former homeland.
- These factors suggest that the amount of knowledge disseminated due to immigration could go far beyond formal scientific knowledge.
- In this process, India need to understand that the mobility of skilled workers has become critical to enhancing productivity and economic growth.

- This can enable policymakers to better integrate immigration in both origin and destination countries.
- Thus improved people allocation can be as powerful as global trade in goods, and financial allocation.

Draft Agriculture Export Policy

In News: A new Draft Agriculture Export Policy was released recently by the Ministry of Commerce and Industry.

objectives

- The 'National Agriculture Export Policy' is formulated in line with the vision to double the farmers' income by 2022.
- It is also towards the goal of increasing the share of agricultural exports from present about USD 30 billion to over USD 60 billion.
- Getting to one of the top 10 exporting countries of agricultural products is also one of the goals.

concerns addressed

- **Trade** - India is today a leading global producer of foodgrain, dairy and several horticultural crops.
- But it holds a minuscule 2.2% share in global agri-exports.
- It is stuck at the lowest rung of the value chain, and India's farm exports are highly reliant on a handful of commodities.
- These include marine products, meat, rice and plantation crops.
- **Shortfalls** - Exports even in these items are frequently interrupted by self-imposed and arbitrary trade curbs.
- State-level curbs on movement of produce add to already high costs from fragmented farms and poor logistics.
- High rejection rates on consignments due to poor quality, antibiotic and pesticide residues and other phyto-sanitary grounds are major concerns.
- **Farmers** - Bumper crops continued to trigger a meltdown in food prices.
- Policy interventions such as e-Nam and the repeal of the APMC Acts by States have made scant progress.
- **Policy** - Domestic price and production volatility of certain agricultural commodities lead to using the existing policy for short-term goals.
- These include taming inflation, providing price support to farmers and protecting the domestic industry.
- These decisions may serve the immediate purpose of maintaining domestic price equilibrium.
- However, they end up distorting India's image in international trade as a long term and reliable supplier.
- It is thus imperative to frame a stable and predictable policy.

key recommendations

- **Infrastructure** - The policy stresses on improving the infrastructure, and storage and exit point logistics.
- It suggested a comprehensive need-gap analysis of existing export oriented infrastructure across the value chain for this.
- **R&D** - The policy emphasised promoting R&D activities for new product development for the upcoming markets.
- Increased focus on R&D, new varieties and state of the art lab for effective accreditation and monitoring is called for.
- This will be part of the efforts towards establishing a strong quality regime.
- Besides, the policy stressed the need to ensure greater interaction between the various research organizations and industry bodies.
- **Exports** - The policy aims to boost high value and value added agricultural exports, focusing on perishables.
- Improving the institutional mechanism for tackling market access barriers is suggested as a measure.
- Dealing with sanitary and phytosanitary issues are also the priorities.

- Processed agricultural products and all kinds of organic products will not be brought under any kind of export restriction.
- **APMC** - Monopoly of the Agricultural Produce Market Committee (APMC) is a long existing concern.
- It prevents private players from setting up markets and investing in market infrastructure.
- APMC across states have not been able to achieve farmers' welfare envisaged in these acts.
- The policy hinted at continuing the efforts with state governments to remove perishables from their APMC Acts.
- It also suggested better coordination between central ministries that are now working at cross-purposes.
- **Mandi** - State governments would also be urged to standardize/ rationalize mandi taxes for largely exported agricultural products.
- Simplification or uniformity of mandi/agricultural fee across states will create a transparent supply chain.
- This will empower the farmers, providing wider access to markets and enabling free trade across the country.
- **Products** - It is proposed that the agricultural export policy must focus on promotion of value added, indigenous and tribal products.
- Development of organic export zones/organic Food park with an integrated approach is suggested to help promote shipments.
- **Agency** - Global bodies like US FDA and European Food Safety Authority are empowered to frame, regulate and implement policies related to both agricultural production and trade.
- The draft policy considered working towards bringing in similar agencies in India.
- **Besides** the policy made a case for promoting contract farming as it would help in attracting investments.
- Some of the other notable recommendations include:
 - promotion of region-specific clusters for lucrative crops
 - coordinated branding efforts
 - a shared database for exporters on market intelligence and export rejects
 - quality assurance at the farm
 - wider adoption of land leases

INTERNATIONAL AFFAIRS

WTO Challenge on India's Export Programmes

In News: The US has challenged in the WTO almost all Indian export subsidy programmes.
complaint

- The US has filed a complaint at the WTO about India's export subsidy programmes.
- **Programmes** - It has challenged practically almost the entire of India's export programmes.
- The programmes include:
 - Merchandise Exports from India Scheme
 - Export Oriented Units Scheme and sector specific schemes, including Electronics Hardware Technology Parks Scheme
 - Special Economic Zones
 - Export Promotion Capital Goods Scheme
 - duty free imports for Indian exporters
- As per the US administration, these apparent export subsidies provide financial benefits to Indian exporters.
- The benefits allow them to sell their goods more cheaply.
- It thus claims that the programmes harm American workers by creating an uneven playing field.
- **Expansion** - It is said that India's exemption under the WTO's special and differential provisions for developing countries expired in 2015.
- It is thus alleged that despite the expiry, New Delhi has increased the size and scope of these programmes.
- E.g. India introduced the Merchandise Exports from India Scheme in 2015.

- It is expanded to include more than 8,000 eligible products, nearly double the number of products covered at its inception.
- Exports from SEZs increased over 6,000% from 2000 to 2017.
- In 2016, exports from these zones accounted for nearly 30% of India's export volume.

dispute settlement procedure

- The US has sought consultations on the matter in the WTO.
- Consultations are the first step in the WTO dispute settlement process, to arrive at a mutually agreed solution.
- In failing this, the US may request the establishment of a WTO dispute settlement panel to review the matter.

implications of US moves

- **India** - The US complaint at the WTO has come as a direct attack on India's trade regime.
- Notably, it comes on the backdrop of a series of US trade decisions that are grossly in violation of basic WTO norms.
- If selective tariffs of US are taken to the WTO, there is a good chance that these will be declared violative of the rules.
- But even before India could protest against such selective tariffs, the US has fired the next shot.
- Nevertheless, how far can a WTO ruling deter a trading superpower like the US is highly uncertain.
- **WTO principle** - The basic concept is that all WTO members are to be treated alike unless they are specifically shown to have violated rules.
- This is being ignored in Trump's selective tariffs.
- Countries are lobbying to be among the favoured countries of US that escape the impact of the tariffs.
- **Trade order** - In US's selective tariffs plans, clearly, only certain sectors and certain countries will be targeted.
- This may appear that this is helpful for some other countries, which will avoid being hurt.
- But in the long term, it will ultimately hurt all, though in varied proportions.
- The world seems to be moving to a regime where countries can discriminate against select countries and commodities.
- The trend is largely undermining the international trading system and could potentially lead to a breakdown of the global trading order.

Informal WTO Negotiations

In News:

- The stalemate between the developed and developing countries in the WTO has effectively stalled policy progress in global trade.
- India will host an informal WTO ministerial meeting in New Delhi in a short while in order to negotiate critically contented aspects.

current meet

- Senior officials of the WTO and trade representatives of Africa, ASEAN, EU, US, China, Japan, and many other countries will gather shortly in New Delhi.
- They are expected to brainstorm over crucial global trade issues in an informal setting to evolve a consensus on contentious issues for moving ahead.
- Notably, no business-relevant decision has emerged out of the multiple formal negotiation rounds in the WTO forum for the past two decades.
- A "Trade Facilitation Agreement" (TFA) was signed in 2013 at Bali, but it turned out to be just an over-hyped face-saver.
- Also, the 11th WTO ministerial conference (MC11) that took place at Buenos Aires in December 2017 concluded without any significant decision.
- Seven core trade issues have resulted in conflicting positions of the country and breaking the impasse would require revisiting the very objectives of WTO.

Major domains of contestation

Agriculture

- **Subsidy** - Developed countries have persistently complained that developing countries are distorting trade by recklessly subsidising farmers.

- Particularly, India's crop MSP program and public procurement for PDS distribution have been flagged as a violation of WTO's subsidy policies.
- But a nuanced observation reveals that even developed countries have been giving out subsidies amounting to as much as \$260 billion annually.
- Notably, the developed countries have been cleverly routing subsidies through avenues that have been exempted by the WTO (argued as a policy flaw).
- **Market** - Due to their cost advantage, countries practicing extensive commercial farming (mostly developed) have been preying on subsistence agriculture economies.
- This has been catastrophic for small subsistence farmers of the developing world, as their produce is being stifled out even in their own domestic markets.
- As their farmers are under intense pressure for survival, most developing countries have erected protectionist tariff walls for agro-products.
- **Contestation** – A realisation that it is a mere trade issue for the developed world, but a survival issue for the developing world is needed.
- Developed countries are demanding the poor countries to lower their agri-import duties.
- But contrarily, the developing world has been vouching for a comprehensive renegotiation of the WTO's "Agreement on Agriculture".
- Notably, India had won a 4 year temporary concession in 2013 called "Peace Clause" to sustain its subsidy programs.
- But as no alternative permanent solution has been reached, the clause remains operational by default.

Digital Business

- **The sector** - Pressured by big names like Amazon, developed countries have been strongly vouching for liberalising e-commerce and online businesses.
- Notably, these big-ticket online firms and their businesses already hold enormous sway in influencing policy, public opinion and business landscape.
- While their menacing size and might already looks scary, the contours and scope of digital platforms aren't fully comprehended as yet.
- **The Concerns** - Many countries feel that the digital business are still evolving and e-commerce hasn't even been defined properly thus far.
- If the WTO makes rules, this would mean that the countries will have to forego their rights to regulate the digital sector, which isn't desirable presently.
- While the developed countries are seeking to freeze the lead they've managed to take in the sector, other countries are seeking more time to comprehend the sector better and catch up with the developed world.
- Notably, the current "Zero Tariff Regime" for e-transactions has been proposed to be retained till 2019 and various clauses are being negotiated further.

Fisheries Subsidy

- Fishermen from the developed countries of the EU, Canada and Japan venture far and wide in high-tech vessels to get a bountiful catch.
- But small fishermen from developing countries are being accused for depleting the marine stock by practicing unsustainable fishing practices.
- Rich countries oppose subsidies granted by the developing countries to its poor fishermen, but they dole out indirect subsidies (WTO exempted) to help their fishers.
- In fact, EU, US and Japan alone provide almost 65% of the total fishing subsidies that total to an annual sum of \$35-billion.
- This issue has also been slated to be taken up in WTO's next ministerial conference in 2019.

Services

- Services sector contributes to 70% of the world GDP, but only 20% of world trade as country-specific domestic regulations (DR) act as trade barriers.
- In this area, developed countries have a clear lead over others as they already have a robustly implemented DR set-up.
- As this can further distort the equation in favour of the developed world, India and other developing countries must rush to create their own DRs.

Investment

- The inclusion of investment as a subject in the WTO was rejected in 1996 because the WTO makes rules for trade.

- But 71 countries led by the EU issued a statement calling for discussions on developing a “multilateral framework for investment facilitation”.
- But most other countries feel this is only a small part of the investment regime and hence should be left as it is.

Crisis Management

- US President Trump has used ‘threat to national security’ provision of the WTO for imposing tariffs, which reveals his disdain for the WTO process.
- Notably, this clause empowers a country to take any action to counter a threat to its national security and is an option of last resort only.
- While the current US action is reckless, the entire WTO membership must confront and oppose Trump before it is too late.

Way Forward

- Improving the standard of living of people and ensuring full employment are two of the important stated objectives of the WTO.
- Many countries need to reconcile their positions with these and approach negotiations with the agility to bargain and settle for compromises.
- It is hoped the WTO Delhi 2018 event will create goodwill, and lead to the development of a common position on important trade issues.

SIPRI Report

In News: The recently released report stated that India was the world’s largest importer of major arms in 2013-17.

- The U.S. recorded a growth in its arms exports to India, recording over 550% growth in 2013-17 compared with the previous five years.
- U.S. became the second largest arms exporter to India next to Russia.
- Russia accounted for 62% of India’s arms imports between 2013 and 2017.
- India’s arms import accounted for 12% of the global total.
- Stockholm International Peace Research Institute is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.

SIPRI

- **Stockholm International Peace Research Institute (SIPRI)** is an independent international institute dedicated to research into conflicts, armaments, arms control and disarmament.
- It is one of the most respected think tanks worldwide. It has a presence in Sweden and Beijing.
- In its recent report titled “Trends in world Military expenditure, 2016”, which ranks countries based on their military spending, places India as the world’s fifth largest spender on defense for 2016.
- Top Countries in military spending:
 1. US (\$611 billion),
 2. China (\$215 billion),
 3. Russia (\$69.2 billion) and
 4. Saudi Arabia (\$ 63.7 billion).
 5. India \$55.9 billion
- Pakistan does not figure in the top 15 spenders.

Philippines pull out from ICC

In News: The Philippines has notified the U.N. secretary-general of its decision to withdraw from the International Criminal Court (ICC), but has assured the United Nations of its commitment to the rule of law.

Background

- The Philippines has given official notice to the United Nations that it will exit the treaty underpinning the International Criminal Court, which is looking into President Rodrigo Duterte's deadly drug war.
- The move comes days after Mr Duterte said his nation would quit the court over its inquiry launched last month into allegations his bloody crackdown on drugs amounted to crimes against humanity.

- Philippine police say they have killed roughly 4,000 suspects who fought back during arrest, but rights groups allege the actual number is three times higher and accuse the authorities of murder.
- "The decision to withdraw is the Philippines' principled stand against those who would politicise and weaponise human rights," the letter said.
- Under the principle, the ICC can step in and exercise jurisdiction if states are unable or unwilling to investigate crimes.
- The International Criminal Court was found by the Rome Statute.
- The International Criminal Court (ICC) investigates and tries individuals charged with genocide, war crimes, crimes against humanity and the crime of aggression.
- India is a non-signatory of the Rome statute and thereby a non-member of ICC.

International Criminal Court:

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

Russia Elections: Putin wins historic fourth term

Russia presidential election



In News: Putin, who has ruled Russia for almost two decades, recorded his best election performance with 76.67 per cent of the vote in the preliminary results.

- The thumping mandate gives Putin another six years of power.
- The leader, however, rejected the possibility of staying in power indefinitely.
- Meanwhile, the opposition cried foul, reporting ballot stuffing and other cases of alleged fraud as the Kremlin pushed for a high turnout to give greater legitimacy to Putin's historic fourth term.

Significance

- This year's victory has marked an increase in Putin's share of votes from 2012 when he won 64 per cent of the votes.
- Since first being elected president in 2000, Putin has stamped his total authority on the world's biggest country.
- The election came amidst escalating tensions with the West, especially with reports suggesting that Moscow was behind the nerve-agent poisoning of a former Russian double agent- Sergei Skripal- in Britain earlier this month.
- The reports were followed up with both Britain and Russia announcing expulsion of each other's diplomats from their territories.
- The United States also recently imposed new sanctions against Russia for trying to influence the 2016 US Presidential elections.
- The win has extended Putin's power until at least 2024. He is already Russia's longest-serving leader since Stalin.

Voter Turnout

- The voter turnout in the elections was more than 67 per cent with the authorities putting in their everything to boost engagement in the polls.
- Some of the engagement techniques rolled out to attract voters to the polling stations included selfie competitions, free giveaways, food festivals and children's entertainers.

Cambridge Analytica controversy

In News: After the news of Cambridge Analytica scandal and facebook's alleged data breach erupted, politicians called on the social media founder to testify before their legislative bodies within five days.

Cambridge Analytica

- Cambridge Analytica (CA) is a privately held data analytics firm, which was established in 2013 as an offshoot of its British parent company Strategic Communications Laboratories (SCL) Group.
- The company mainly combines data mining, data brokerage and data analysis with strategic communication for the electoral process.
- The main objective of the CA is to come up with online political campaigns and reach out to potential voters online by combining data from multiple sources including online platforms.

controversy all about

- The analytics company is alleged to have a hand in assisting with Donald Trump's victory in US Presidential Elections 2016, by using unethically gathered data to manipulate voter behaviour.
- The company was allegedly hired by Trump's campaign team to help with data crunching during the 2016 election season.
- Steve Bannon, then Executive Chairman of Breitbart News, who eventually became an advisor to Trump, was also said to be the vice president of CA's board.
- The analytics firm is reported to have guided Trump's campaign team on how to best target voters using ads or speeches or making the strategic campaign stops and manipulate them into voting for Trump.
- The firm has also allegedly worked with the Leave EU camp during Britain's exit from the European Union (Brexit).

Facebook involvement

- One of its co-founders and former research lead at Cambridge Analytica, Christopher Wylie shared evidence about the company having harvested data from close to 50 million users on Facebook.
- Wylie stated that the company exploited people's profiles without their permission and used the information to create a psychological profile of the users as well as their friends based on their online activities.
- This was then used for targeted political advertising during UK's Brexit referendum as well as during the 2016 US presidential elections.

Data collection

- Facebook lets app developers seek permissions from users to use their personal data to help develop the app.
- The CA reportedly got the private data from a Cambridge researcher - Aleksandr Kogan, who created an app called 'thisisyourdigitallife' to offer personality predictions online.
- The app offered users a personality prediction after they agreed to take a personality test.
- Around 270,000 people downloaded the app and took the personality quiz, as a result of which the data was harvested without their explicit consent through their friend networks.
- Though Kogan got access to the data, it was only meant to be used by him for developing the app and not be shared with others. However, he allegedly sold the data to the CA.
- By taking the personality quiz, the users gave their consent to Kogan to access their public information as well as some of the publicly available data of their friends.
- It also enabled the app to determine the race, gender, sexual orientation and political preference of the user.
- The information helped CA to create a psychological profile of the user, which was then used to tweak the social media strategies in favour of the election campaigns run by them.

Facebook's response

- Facebook suspended Strategic Communication Laboratories (SCL) and its political data analytics firm Cambridge Analytica.
- The CA responded to Facebook's suspension order by stating that it does not hold data from Facebook profiles.
- The company acknowledged that it had contracted a company, Global Science Research (GSR), which was founded by Kogan, for a large-scale research project.
- According to CA, GSR was only to obtain data in accordance with the UK Data Protection Act and after seeking user consent.
- However, the company stated that when it learned that the data had not been obtained by GSR in line with Facebook's terms of service, they deleted all of it.

- It said that none of the data was used by them as part of the services it provided to the Donald Trump's 2016 presidential campaign.

Concern for India

- According to a report in a leading daily, the CA has plans of expanding its services to other nations' electoral processes, especially India, Sri Lanka and Bangladesh as they approach elections.
- The CA along with its India partner Oveleno Business Intelligence (OBI) has reportedly reached out to the two main political parties for the upcoming Lok Sabha elections.
- Recently, Union Minister Ravi Shankar Prasad said that the government was in touch with the US Federal Trade Commission and Department of Justice to assess privacy violations of Indian users.
- Meanwhile, both ruling party and main opposition party of India have reportedly accused each other of having links with Cambridge Analytica and engaging the firm in past elections.

Uncertain Peace in Columbia

Context

- The Columbian leftist militant group FARC had entered into a peace accord with the government of President Juan Manuel Santos in 2016.
- While further negotiations are already on a wobbly path, results of the recent parliamentary elections have complicated matters further.

political developments in Columbia

- FARC (Revolutionary Armed Forces of Colombia) was an armed leftist militia that was involved in a protracted civil war with the Columbian government.
- **Peace** - The rebels reached an understanding (accord) with the Columbian government in 2016 to surrender arms and demilitarize permanently.
- Colombia's presidential election is due in May 2018, which is critical for the fragile peace accord with FARC that ended a 50 year civil war.
- Also, President Santos was awarded the Nobel Peace Prize in 2017 for having piloted the peace initiative despite political pressures.
- Notably, Mr. Santos has been implementing the accord in bits and pieces despite strong right-wing opposition led by former President Álvaro Uribe.
- **The Setback** - Parliamentary elections in Columbia were held this month and the results have presented a clear setback to peace-backers.
- In the parliamentary vote, Mr. Uribe's Democratic Centre Party has emerged as the largest bloc in the Senate with 19 seats.
- Also, two other right-wing parties, Radical Change and Conservative Party, finished second and third with 16 and 15 seats, respectively.
- While the anti-accord parties haven't managed a clear majority, they now account for 50 of the 102 seats, implying that they do enjoy popular support.
- The ruling Social Party of Mr. Santos's won just 14 seats and FARC which contested polls for the 1st time couldn't even muster 1% of the votes.
- But FARC will still get an assured representation in parliament as agreed in the disputed accord.

Peace Accord worked thus far

- Though the implementation of the peace accord thus far has been patchy, major strides were made in demilitarisation and disbanding of the FARC.
- Also, there are clear indications that FARC is transitioning into a genuine political force that has completely shunned violence.
- The accord also granted protect to mainstreamed FARC leaders and vouched to prevent right-wing militias from targeting its members and sympathisers.
- Yet, several left-wing activists and trade union leaders have been assassinated by right-wing militia groups, thereby hindering effective reconciliation.
- Also, such trends are making it harder to get other currently armed insurgents to give up militancy as they fear rightist attacks.

way ahead

- As the verdict of the parliamentary elections show, the pro-accord forces will have to strengthen public support for their efforts in order to sustain it

- It needs to be recognized that the memories of the civil war are still quite raw among many and genuine reconciliatory efforts are needed.
- Dedicated steps to overcome the urban-rural disconnect and economic disparity is needed for a permanently reigning in violence.

Religious Tensions in Sri Lanka

Context:

- Religious tensions have been simmering within the Sri Lankan society ever since the end of the civil war in 2009.
- While it is important to reign in the Buddhist hardliners, other structural frictions in the social fabric of the island also needs to be addressed.

social tensions

- When Mahinda Rajapaksa was in power, anti-Muslim violence was unleashed by Buddhist mobs, in Aluthgama in 2014.
- The new government, which was elected in 2015 had promised an end to such violence but the recent events show that things haven't changed.
- Over 200 homes and 14 mosques were destroyed in Kandy district, which is indicative of the fact that the anti-Muslim project is only gaining steam.
- As the intensity of the situation resulted in even curbing social media and imposing an emergency – a sober post-crisis assessment is necessary.

Precipitating Factors

- **Cultural** - Sinhalese see Muslims as aliens who are a growing, united and an economically persevering group, with a strong mooring to religiosity.
- In contrast, Buddhists are liberal in religious practices and ethno-religious affiliations, which are resented by the Buddhist clergy.
- These fundamental differences and the keenness of Buddhist hardliners for cultural dominance get translated into hatred and even violence at times.
- **Geo Political** - The rise of Islamic State in the West Asia had seen an increase in radicalisation of Islamic youth in the eastern province.
- Some Islamic fundamentalists were also found to be running anti-Buddhist propaganda, which had caused a real security situation in the island.
- **Domestic** - Although unsubstantiated, fears of increasing Muslims populations had created a demographic scare among some sections.
- There are also allegations against Muslim politicians of being engaged in land acquisitions and the illegal resettlement of Muslims.
- A strong community bonding which helped further Muslims businesses has also created economic anxiety among the poorer Buddhist masses.

Way ahead

- **Novice Voices** - Many celebrities have voiced against this violence and stressed that the "Sri Lankan identity" is accommodative and diverse.
- While these assertions are well intentioned, they present an erroneous view that the current crisis is a mere aberration caused by a violent few.
- Addressing the problem first requires recognizing that there are strong linguistic and religious fault lines within the Sri Lankan polity.
- **Way Forward** – As a first step, all persons who've been involved in the violence need to be prosecuted impartially in order to ensure accountability.
- This needs to be followed up by initiating a dialogue between Sinhala Buddhist groups, the Muslim leadership and the government for genuine reconciliation.
- Finally, Sri Lanka needs to evolve into a secular-minded state by according equal status to all religious groups and dominions.
- All citizens needs to be nurture a mindset that is open to diversity, which is critical for lasting peace and progress in the island.

ENVIRONMENTAL AFFAIRS

Draft National Forest Policy - 2018

Context

- Ministry of Environment, Forests and Climate Change has recently released the “Draft National Forest Policy, 2018” for public comments.
- This is a positive as a new forest policy that is in tune with the changed realities was long overdue.

India's forest policy

- Currently, the “National Forest Policy of 1988” is the primary document that drives India's forest outlook.
- This dates back to the times when climate change was a fuzzy concept, and even before economic liberalisation was undertaken.
- While Forest Rights Act was passed in 2006, a comprehensive new forest policy that covers the new evolving concerns was needed.
- Hence, the present draft on climate change concerns has factored in climate change concerns and management plans forest and wildlife.
- It also talks of “safeguarding the livelihood of forest dependent people” and envisions raising the country's forest cover from 25% to 30% of its land area.

Concerns with the draft policy

- It persists with the methodological weakness of the “Indian Forest Survey Reports” of the past 30 years that conflate plantations with forest cover.
- It talks about improving the productivity of forest plantations by the intensive scientific management of commercially important species.
- While it does mention native plants like bamboo, it also stresses the need for plantations of exotics like eucalyptus and casuarina.
- These provisions seems to disregard the compelling evidence that plantations are no substitute for natural ecosystems that with good biodiversity.
- Ecologists vouch that nurturing natural ecosystems comprising of indigenous species are key for ecological sustainability and for climate change mitigation.
- Also, a 2015 study in Nature had cautioned against “promoting intensive forestry for maximum timber yield under the flag of climate change”.

forests and climate change

- While the exotic vs. indigenous species debate is raging, some researchers claim that mere regeneration of forests isn't enough to check global warming.
- The efficiency of the “carbon cycle in forests” (which varies from forest to forest), is said to be a key factor for climate change mitigation.
- India has largely lacked nuanced studies to map forests and their carbon cycle potential and the draft policy doesn't offer a roadmap to address these.
- Such concerns need to be addressed while finalising the new forest policy.

World Water Development Report

in news: The United Nations World Water Development Report (WWDR) was released ahead of World Water Day (March 22).

About report

- The WWDR is an annual and thematic report that focuses on different strategic water issues each year.
- It aims to provide decision-makers with the tools to implement sustainable use of our water resources.
- The development of the WWDR is coordinated by the *World Water Assessment Programme* (WWAP).
- The report is a joint effort of the UN agencies and entities which make up UN-Water.
- The latest report was released at the 8th *World Water Forum* in Brasilia, hosted by Brazil.

highlights

- **Water** - Global demand for water has increased six-fold over the past 100 years and continues to grow at the rate of 1% each year.
- Demand for water is projected to rise faster in developing countries.

- The report highlights that more than 5 billion people could suffer water shortages by 2050.
- This could be due to the effects of climate change, increased demand and polluted water supplies.
- Climate change will put an added stress on supplies because it will make wet regions wetter and dry regions drier.
- **Drought** - It is arguably the greatest single threat from climate change.
- Drought and soil degradation, the biggest risks of natural disaster, are likely to worsen.
- **Water quality** - Pollution has worsened the water bodies and water is expected to deteriorate further in the coming two decades.
- This would be mainly due to agriculture runoffs of fertiliser and other agrochemicals.
- They load freshwater supplies with nutrients that lead to the growth of pathogens and choking algae blooms.
- Industry and cities are also a significant problem.
- About 80% of industrial and municipal wastewater is discharged without treatment.
- **Threat** - Water scarcity can lead to civil unrest, mass migration and even to conflict within and between countries.
- The report thus warns of conflict and civilisational threats unless actions are taken.

concern

- For too long, the world has turned first to human-built, or 'grey', infrastructure to improve water management.
- In doing so, it has often brushed aside traditional and indigenous knowledge that embraces greener approaches.
- But accelerated consumption, multi-faceted impacts of climate change and increasing environmental degradation is the reality now.
- All these call for new ways of managing the competing demands on freshwater resources.

suggestions

- **Water** - Reducing the stress on rivers, lakes, aquifers, wetlands and reservoirs is important.
- Water shortage cannot be offset by groundwater supplies, a third of which are already in distress.
- Nor is the construction of more dams and reservoirs likely to be a solution.
- The report emphasises a shift away from watershed management.
- It calls for a wider geographic approach that takes in land use in distant areas, particularly forests.
- Although farmers have long seen trees as a drain on water supplies, the vegetation helps to recycle and distribute water.
- Evidently, the São Paulo (Brazil) drought of 2014-15 has been linked to Amazon deforestation.
- The key for change, even for the water problem, will be agriculture.
- **Agriculture** - This is the biggest source of both water consumption and pollution.
- The report thus emphasises the importance of **nature-based solutions**.
- Nature-based solutions can be personal – such as dry toilets – or broad landscape-level shifts in agricultural practices.
- In agricultural practices, it is essentially an approach to rely more on soil and trees than steel and concrete.
- It calls for shift to “conservation agriculture”.
- This would make greater use of rainwater rather than irrigation, and regularise crop rotation to maintain soil cover.
- This is crucial to reverse erosion and degradation, which currently affects a third of the planet's land.
- The suggestions imply that the potential savings of such practices exceed the projected increase in global demand for water.
- This would ease the dangers of conflict and provide better livelihoods for family farmers and poverty reduction.

World Water Assessment Programme

- The WWAP focuses on assessing the developing situation of freshwater throughout the world.
- The primary output of the WWAP is the periodic World Water Development Report.

- UNESCO hosts the WWAP Secretariat.

World Water Forum

- The World Water Forum is the world's biggest water-related event and is organized by the World Water Council.
- It is the biggest single gathering of policymakers, businesses and NGOs involved in water management.
- Its mission is to promote awareness, build political commitment and trigger action on critical water issues.
- It takes place every three years.

World Water Council

- The World Water Council is an international multistakeholder platform organization.
- Its members include organizations from the UN and intergovernmental organizations, the private sector, governments, academic institutions, civil society groups, etc.
- Its mission is to mobilize action on critical water issues at all levels, including the highest decision-making level.
- The Council focuses on the political dimensions of water security, adaptation and sustainability.

Australian humpback dolphin

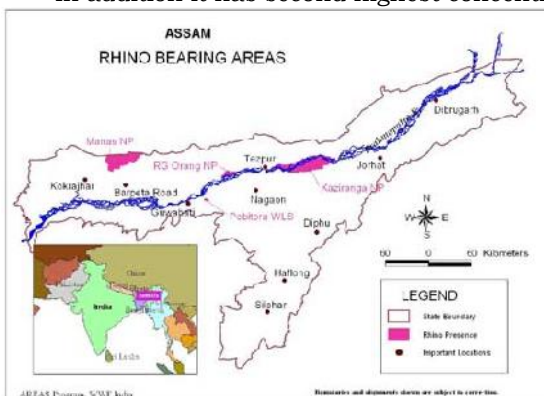
- The *S. sahilensis* is a separate species within the Sousa (Humpback dolphin) family.
- It is endemic to northern Australia and southern New Guinea.
- They are referred to as an 'inshore' species because they mostly occur in shallow near shore waters, often at the mouths of estuaries and in tidal channels.
- They are considered vulnerable by the International Union for Conservation of Nature Red List.
- Australian humpback dolphin populations along the east coast of Queensland are characterized by low levels of genetic diversity, limited gene flow, and small effective population size.

Snowflake crystal

- Scientists are collecting the most fine-grained details about freshly fallen snowflakes and their evolution once they fall in New York's Catskill Mountains.
- Snowflake is a flake of snow, especially a feathery ice crystal, typically displaying delicate sixfold symmetry.
- The data collected could provide clues to the changing climate.
- Snowflakes formed in different places have different characteristics.
- In the Eastern U.S. it tends to be moister than the powdery snow that falls in higher elevation in the West.
- The specimens collected displayed more rounded edges and irregularities than the classic crystalline forms.
- This is characteristic of flakes formed up high in warmer air, suggesting climate change.

Pobitora Wildlife sanctuary

- Pobitora Wildlife Sanctuary is situated in the flood plains of River Brahmaputra in the district of Morigaon, Assam, India.
- It harbors world's highest density of rhinoceros.
- In addition it has second highest concentration of Rhino in Assam after Kaziranga National Park.



- In winter, Pobitora becomes a birder's heaven, with thousands of waterfowl thronging the wetlands.
- Pobitora can be divided into three distinct categories: forest, grassland and water bodies or beels.
- The animals found in the region are one-horned rhino, leopard, wild boar, Barking deer, wild buffalo etc.

Ptilomeranagalanda: A new species

- Scientists from Zoological Survey of India (ZSI) have discovered new species of water strider named PtilomeranagalandaJehamalar and Chandra in Nagaland.
- It was found in river Intanki in Peren district of Nagaland.
- This newly discovered species belongs to Ptilomeraagriodes genus. It measures about 11.79 mm and has long slender legs.
- It has orange with black stripes on dorsal side and pale yellowish brown ventral part of body.
- The presence of black stripes on dorsal side differentiates this species from other known species of subgenus Ptilomera.
- It is only found in rocky, fast flowing streams and rivers that are not exposed to lot of sunlight.
- It has hair on middle legs that help insects resist strong current of streams.

Water striders

- Water striders are group of insects adapted to life on surface of water, using surface tension to their advantage.
- Their presence serves as indicator water of water quality and also play important role in food chain in river ecosystem as they feed on mosquito larvae.
- Water striders have three pairs of legs. The front legs are relatively shorter than mid and hind legs and used to catch and hold prey.
- They possess needle-like mouth parts that are used for sucking the juice of prey.
- There are nearly 100 species of water striders found in India across different water bodies such as open ocean, ponds, pools, lakes, rivers, streams etc.
- With discovery of Ptilomeranagalanda, the number of species of water striders belonging to subgenus Ptilomera has increased to six in India.
- These includes Ptilomeraagriodes found in peninsular India, Ptilomeratalicaudata, northern and northeastern India, Ptilomeraassamensis found in northeastern India, Ptilomeraoccidentalis from Uttarakhand and Ptilomeratigrina found in the Andaman islands.

BIO/ HEALTH ISSUES

Neglected Tropical Diseases in South Asian Region

Context:

- South Asian region has recorded a notable progress in eliminating and containing various diseases.
- However, the status of neglected tropical diseases (NTDs) in the South Asian region calls for a last-mile push.

health achievements in South Asia

- Maternal and neonatal tetanus has been eliminated.
- HIV, TB and malaria epidemics have been halted and reversed after decades of struggle.
- These will hopefully be ended altogether in the coming years.
- **Regional** - India is now yaws-free.
- Maldives, Sri Lanka and Thailand have eliminated *lymphatic filariasis* as a public health problem.
- Nepal is in the process of validating the elimination of *trachoma* as a public health problem.
- Nepal also maintained the elimination target for *kala-azar* for more than 3 consecutive years.
- By the end of 2017, 100% of sub-districts in Bangladesh and 90% of blocks in India had done the same.
- As a whole, the region remains responsible for the world's largest *preventive chemotherapy campaign*.

shortfalls

- NTDs include diseases like leprosy, trachoma, lymphatic filariasis and kala-azar.

- As the name suggests, NTDs take their most severe toll on the poor and marginalised communities.
- The political influence of these sections is limited and their health needs are often overlooked.
- Evidently, South Asian region has eliminated leprosy as a public health problem.
- But the disease continues to circulate among vulnerable communities.
- They accounts for more than 60% of leprosy-caused grade two disabilities worldwide.
- Similarly, several member countries have eliminated *lymphatic filariasis*.
- However, its burden continues to haunt communities in remote and hard-to-reach areas elsewhere.
- Region-wide, 53% of all people require mass drug administration to stay free of this disfiguring disease.

way forward

- No member country of the South Asian region can be complacent as one of the 20 NTDs is endemic to each of them.
- Stable **domestic funding** for national programmes is central to taking forward the progress achieved so far.
- Member countries must ensure programming is both dynamic and flexible i.e. pursuing large-scale campaigns as well as working creatively across sectors.
- Going for **mass drug administration** where appropriate and strengthening NTD-related services at the primary level are essential.
- Simultaneously, **specific efforts** such as roping in agro-engineers in the battle against *schistosomiasis* can be taken up.
- Similarly, **vector control** must be actively pursued and harnessed by programmes at the local level.
- These can have immediate and substantial impact on disease transmission in NTD-affected areas.
- Importantly, member countries should take full advantage of innovations in **research and technology**.
- The effective use of rapid **diagnostics** can facilitate swift and accurate diagnosis of a range of NTDs.
- IT infrastructure should be integrated with existing surveillance systems to allow programme managers to gather, analyse and act on real-time data.
- Ensuring all communities have **access** to health services and the benefits they provide is essential to make them free of NTDs.

Preventive Chemotherapy Campaign

- This is a public health strategy recommended by WHO against a set of Neglected Tropical Diseases.
- Preventive Chemotherapy consists of the regular, large-scale administration of drugs, either alone or in combination.
- It is administered to entire population groups, with the aim of reducing transmission and associated morbidity.

Lymphatic filariasis

- Lymphatic filariasis is commonly known as elephantiasis.
- It is caused by infection with parasites classified as nematodes (roundworms), which are transmitted to humans through mosquitoes.
- Mosquitoes are infected with microfilariae by ingesting blood when biting an infected host.
- Infection is usually acquired in childhood causing hidden damage to the lymphatic system.
- Its visible manifestations may occur later in life, causing temporary or permanent disability.

Schistosomiasis

- Schistosomiasis is an acute and chronic disease caused by parasitic worms.
- People are infected during routine agricultural, domestic, occupational, and recreational activities, which expose them to infested water.
- Water contamination due to excreta containing parasite eggs, which hatch in water, is also a mode of transmission.

Trachoma

- Trachoma is a disease of the eye caused by infection with the bacterium *Chlamydia trachomatis*.

- It causes blindness or visual impairment. It is the cause for about 1.4% of all blindness worldwide.
- Blindness from trachoma is irreversible.
- Environmental risk factors influencing the transmission of the disease include:
 - poor hygiene
 - crowded households
 - water shortage
 - inadequate latrines and sanitation facilities

Kala-azar

- Visceral leishmaniasis (VL), also known as kala-azar, is caused by the protozoan Leishmania parasites.
- It is transmitted to humans through infected sandflies.
- The parasite migrates to the internal organs such as the liver, spleen, and bone marrow; if left untreated, it may result in death.
- It is characterized by irregular bouts of fever, weight loss, enlargement of the spleen and liver, and anaemia.
- It is endemic to the Indian subcontinent in 119 districts in four countries (Bangladesh, Bhutan, India and Nepal).

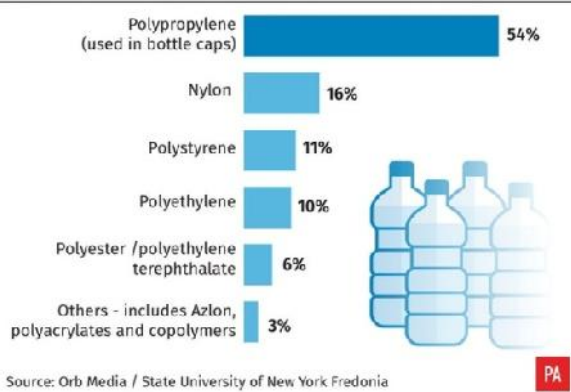
Micro-plastics in Bottled Waters

in news: A new research has shown the presence of micro-plastic particles in bottled drinking waters.

Key findings

- Bottled waters are found to be contaminated with plastic including polypropylene, nylon, and polyethylene terephthalate (PET).
- A single bottle could hold dozens or possibly even thousands of microscopic plastic particles.
- The study finds a global average of 10.4 plastic particles per litre, in the 100 micron or 0.10 millimetre size range.
- The tests also showed a much greater number of even smaller particles which are also likely plastic.
- The global average for these smaller particles is around 300 per litre.
- Water in glass bottles is also found to hold micro-plastics.

Types of plastic found in bottled water



- Bottled water is marketed as the very essence of purity.
- It is in fact the fastest-growing beverage market in the world.
- Bottled water output will soon hit 300 billion litres a year.
- Packaged water is a lifeline for many people worldwide who have no other option for safe drinking water.
- Notably, some 4,000 children die every day from water-borne diseases.

concern with micro-plastics

- **Sources** - Micro-plastics are particles that are smaller than 5 millimetres in size.
- They enter the environment as primary industrial products, such as those used in scrubbers and cosmetics.

- It could also enter via urban waste water and broken-down elements of articles discarded by consumers.
- Washing of clothes too releases synthetic microfibres into water bodies and the sea.
- **Presence** - Micro-plastics escape the filtration and treatment processes for waste water, and end up in sites of nature.
- The durable properties of plastics make them persistent and slow to degrade in the environment.
- Evidently, various studies have found micro-plastics in the oceans, soil, air, lakes, and rivers.
- It thus enters the food chains of even birds, animals and fishes.
- This results in significant global impacts on wildlife, from marine environment pollution.

human health concern

- Micro-plastics hold the potential for both bioaccumulation and biomagnification.
- It may thus finally end up in the human body.
- But based on current limited knowledge on the effects, there is little human health concern.
- This is because the human body is well-adapted to dealing with non-digestible particles.
- As much as 90% of micro-plastic that is consumed might be excreted.
- Of the other 10%, some plastic under 150 microns (0.15 millimetres) could enter the gut's lymphatic system.
- It may pass from the bloodstream to the kidneys or liver.
- Notably, the recent bottled water study finds plastics within this range.
- But how plastic behaves in the gut is still based on assumptions from scientific models and not from proper studies.
- Also, the knowledge on the various chemicals present in plastics is limited.
- So the health impact may not yet be clear, but indisputably these are contaminants.
- Research evidence from complementary fields indicates that accumulation of these chemicals can induce or aggravate immune responses in the body.

Way Ahead

- **Awareness** - Micro-plastic is not directly regulated in bottled water.
- But legislations make it clear that there must be no contaminants.
- It is the government's responsibility to educate people to know what they are drinking and eating.
- **Studies** - The WHO has come forward to commission a review of the health impact of plastics in water.
- More such studies, as a globally coordinated effort, are necessary to assess the impact of plastics on health.
- **India** - India has a major problem dealing with plastics, particularly single-use shopping bags.
- These reach dumping sites, rivers and wetlands along with other waste.
- The most efficient way is to control the production and distribution of plastics.
- Banning single-use bags and making consumers pay a significant amount for the more durable ones is a feasible solution.
- Enforcing Solid Waste Management Rules, 2016, requiring segregation of waste materials, will reduce the burden on the environment.
- Waste separation can be done in partnership with the community, and it presents a major employment opportunity as well.
- The very nature of plastics has to be changed from being cheap and disposable to durable, reusable and fully recyclable.

Bioaccumulation

- Bioaccumulation is the accumulation of substances or chemicals **in an organism**, and toxins building up in a food chain.
- It occurs when an organism absorbs a substance at a rate faster than that at which it is lost by catabolism and excretion.

Biomagnification

- Biomagnification is the increasing concentration of a toxic substance at successively **higher trophic levels** in a food chain.

Mental Health Survey

- The Government had undertaken a National Mental Health Survey through the National Institute of Mental Health and Neurosciences (NIMHANS).
- The report was released in 2016 and some of its major findings are as follows,
 1. The prevalence of mental morbidity is high in urban metropolitan areas.
 2. Nearly 1 in 40 and 1 in 20 persons suffer from past and current depression, respectively.
 3. Data indicate that 0.9 % of the survey population were at high risk of suicide.
 4. Mental disorders are closely linked to both causation and consequences of several non-communicable disorders (NCD).
- To address the mental health problems, the government is implementing the National Mental Health Program (NMHP).

National Centre for Disease Control

- NCDC is an institute which is under the administrative control of the Director General of Health Services, Ministry of Health and Family Welfare.
- NCDC, formerly National Institute of Communicable Diseases (NICD) had its origin as Central Malaria Bureau, established at Kasauli (Himachal Pradesh) in 1909.
- It functions as the nodal agency in the country for disease surveillance facilitating prevention and control of communicable diseases
- Some of the health programs under the National Centre for Disease Control are,
 1. Integrated Disease Surveillance Program (IDSP)
 2. National Program for Containment of Anti-Microbial Resistance
 3. National Viral Hepatitis Surveillance Program
 4. National Rabies control program (NRCP)
 5. Yaws Eradication Program
 6. Guinea Worm Eradication Program
- The mandate of the Institute broadly covers three areas viz. services, trained health manpower development and research.

Sach-Gaurav: India's first cloned Assamese buffalo

In News: The Central Institute for Research on Buffaloes (CIRB) has claimed that India's first cloned Assamese buffalo male calf named Sach-Gaurav was born in Hisar, Haryana.

- It was born to Murrah buffalo, at Hi Tech Sach Dairy Farm, 100 kms from cloning laboratory, making it first buffalo calf to be born in field.
- Animal cloning is an excellent reproductive tool for conservation and multiplication of selected superior animals of buffalo breeds.
- This is second cloned male buffalo produced by ICAR-CIRB after Hisar-Gaurav, born in December 2015.
- The Sach-Gaurav calf was produced unique methods and was delivered through normal delivery.
- The birth weight of calf was 54.2 kgs and it was in good health.
- It had normal physiological parameters and blood profile.
- The genotype of calf was confirmed by microsatellite analysis (parentage verification) and chromosome analysis.
- The small tissue of Assamese buffalo was airlifted from Veterinary College, Khannapara, Guwhati, 2000 km away from cloning laboratory in Hisar to culture establish donor cells.
- Its embryos were transported for about two hours before being transferred into recipient mothers. The ovaries of Murrah buffaloes were used as source of recipient oocytes.

TECHNOLOGICAL AFFAIRS

Artificial Heart

In News: Chinese scientists have developed artificial heart using rocket technology and it is currently undergoing thorough testing experiments on animals.

- The heart was developed jointly by China Academy of Launch Vehicle Technology (CALT) and Teda International Cardiovascular Hospital in North China's Tianjin.
- The artificial heart uses magnetic and fluid levitation from rocket system.
- This technology can reduce friction in device to increase working efficiency and extend life span of power generator.
- This technology used can reduce damage to the blood and enable blood pump to work longer.

- Earlier Experiments Fuwai Cardiovascular Hospital in China also developed artificial heart using magnetic levitation and later planted them in three patients from June to October 2017.
- These artificial hearts were typically used on patients while they were waiting for heart transplant or to permanently replace heart in case heart transplants are not possible.
- In 2013, scientists planted man-made heart in sheep, which survived for 120 days in good health.
- Then hearts were then placed in six other sheep and all survived 100 days or longer, which proved that heart is qualified for batch production.

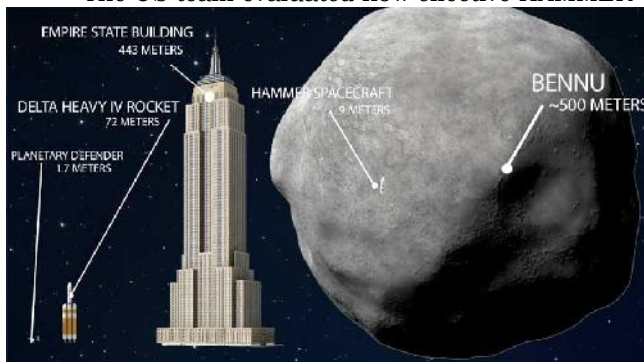
Preventing Asteroid Hit with HAMMER

In News: US scientists have conceptualised the HAMMER to deal with asteroids heading for earth.
need

- Few years back, Stephen Hawking warned of one of the major threats to intelligent life in the universe.
- It is the high probability of an asteroid colliding with inhabited planets.
- If these bodies impact Earth, they can cause regional damage across a whole country or even a continent.
- In response, scientists are looking at possible ways to ward off the threat, if and when it comes.
- The chance of an impact appears slim now, but the consequences would be dire.
- The studies thus aim to help shorten the response timeline when the threat is evident, so as to have more options to deflect it.

HAMMER

- **Mission** - HAMMER is the short for Hypervelocity Asteroid Mitigation Mission for Emergency Response vehicle.
- HAMMER is a spacecraft designed to serve as either a kinetic impactor or as a transport vehicle for a nuclear device.
- It can deflect an asteroid by nudging i.e. a device (a battering ram) is used to apply force to cause deflection.
- The US team evaluated how effective HAMMER would be in nudging away the asteroid Bennu.



- **Bennu** - Bennu is a 500 m wide and 79 billion kg asteroid.
- It has a 1-in-2,700 chance of striking the Earth on September 25, 2135.
- If it does, the energy released would be equivalent to 1,200 megatonnes or 80,000 times the energy of the Hiroshima bomb.
- **Launches** - Delta IV Heavy rocket is the world's second highest-capacity launch vehicle.
- If launched from the Delta IV Heavy rocket 10 years before the impact, HAMMER would take between 34 and 53 launches of the rocket.
- Each of the launches would carry a single HAMMER impactor, to make a Bennu-class asteroid miss Earth.
- If launched 25 years in advance, it would still need 7 to 11 launches.
- The spacecraft, on the other hand, can carry a nuclear device to the object, to cause detonation to deflect the object.

possible ways of dealing with it

- Scientists are looking at two possible ways to ward off the threat.
- One is to "nudge" the asteroid off its Earthbound course.

- The idea is to give a small push that is needed to change the asteroid's course and save the planet.
- The second one is the nuclear option.
- The idea is to blow the asteroid into pieces, most of which will miss the Earth or burn up in the atmosphere.
- Two new studies have sought to assess the practicability of the two approaches and choosing the better between the two.

nuclear option more viable

- Nudging an asteroid is the preferred option, because blasting it entails the risk of fragments crashing into Earth.
- If the object were smaller (say 100 m) or the time to impact were greater (say 100 years), a kinetic impactor may provide a better result.
- But using a single HAMMER spacecraft as a battering ram would prove inadequate for deflecting an object like Bennu.
- The spacecraft capabilities make the nuclear option more viable against a large asteroid within a limited response time.
- The nuclear option is also the only viable option for launches 10-25 years before impact.

Russian research

- Russian scientists, have made toy asteroids, and blasted them with a laser pulse.
- They then estimated the size of the nuclear explosion that would be required to blow up an actual asteroid.
- Notably, to eliminate a rocky asteroid 200 m wide, the bomb needs to deliver the energy equivalent of 3 megatonnes of TNT (trinitrotoluene, an explosive chemical compound).
- This is 200 times the TNT equivalent of Little Boy (15 kilotonnes), the atomic bomb that exploded in Hiroshima in 1945.

New Frontiers program

- The New Frontiers program is a series of space exploration missions being conducted by NASA with the purpose of researching several of the Solar System bodies, including the dwarf planet Pluto.
- There are currently **three New Frontiers missions in progress**.
- **New Horizons**, which was launched in 2006 and reached Pluto in 2015, **Juno**, which was launched in 2011 and entered Jupiter orbit in 2016, and **OSIRIS-REx**, launched in September 2016 towards asteroid Bennu for detailed studies from 2018 to 2021 and a sample return to Earth in 2023.
- NASA is now reviewing 12 proposals that it has received for the fourth mission of the New Frontiers portfolio. All of these proposals will be reviewed from which NASA will choose one mission to be launched around 2024.

IN-SHORT

Antibiotic resistance in vultures

- Escherichia coli, a pathogen in over 90% of Egyptian vultures that migrate to northwest India to spend the winter, tend to show significant difference in resistance to antibiotics within a single season reveals a study report.
- The findings of the study are significant because migrating wild birds can spread drug-resistant pathogens and cause disease.
- The vultures that use human-dominated landscapes as part of their life cycle were likely to act as “reservoirs and melting pots of bacterial resistance”
- Guidelines to restrict antibiotic use in both humans and animals by one country or region alone will be inadequate when wild birds can spread drug-resistant bacteria.
- Global collaboration and coordination is the need of the hour to restrict the usage of antibiotics in both humans and animals to tackle these resistances in vultures.

Annual Survey of India's City-Systems (ASICS) 2017

- The survey was carried out by the NGO Janaagraha Centre for Citizenship and Democracy.

- It broadly looks at urban planning and design, capacity and resources of Urban Local Bodies, the degree of empowerment of the civic body, and processes for transparency and citizen participation.
- The survey uses 150 parameters to judge 23 cities, which has placed Pune at the top and Bangalore at the bottom of the rankings.
- Under the Atal Mission for Rejuvenation and Urban Transformation or Smart City program, Surat, Ahmedabad and Pune shored up revenues and implemented better auditing.
- The reasons behind Bengaluru's low rank are lack of citizen's charter, low per-capita expenditure and absence of sanitation plans.

UN Commission on Status of Women (CSW)

- Rural entrepreneur Sunita Kashyap from India was hailed as a symbol of women's empowerment at inaugural session of 62nd UN's CSW meet, 2018.
- Kashyap founded Mahila Umang Producers Co., an organization in Uttarakhand run by women farmers and producers to market their products and it also runs a micro-credit program.
- The priority theme for this year meet is challenges and opportunities in achieving gender equality and the empowerment of rural women and girls.
- The Commission on the Status of Women (CSW) is the principal global intergovernmental body exclusively dedicated to the promotion of gender equality and the empowerment of women.
- It is a functional commission of the Economic and Social Council (ECOSOC) established in 1946.

A report on Impact of Climate Change

- A recent report in Climate Change journal cautions that up to half the species in 33 biodiverse areas, including Amazon and Madagascar are at risk of localized extinction within decades due to global warming.
- The 33 biodiverse areas host some of the world's richest and most unusual terrestrial species, including iconic, endangered, or endemic plants and animals.
- Spatially, the regions include southern Chile, the eastern Himalayas, South Africa's Fynbos ecoregion, Borneo, Sumatra, the Namibian desert, West Africa, southwest Australia, coastal east Africa, and southern Africa's Miombo Woodlands.
- It also states that limiting warming to 2 C would enable many species to continue inhabiting the areas they currently occupy.
- Extinction is not simply about the disappearance of species but about profound changes to ecosystems that provide vital services to hundreds of millions of people.

World Happiness Report 2018

- The report is released by U.N. Sustainable Development Solutions Network's (SDSN).
- It ranked 156 countries according to their scores for things such as GDP per capita, social support, healthy life expectancy, social freedom, generosity and absence of corruption.
- The report also focused on emerging health problems such as obesity, depression and the opioid crisis.



- The 2018 top-10, as ever dominated by the Nordics, is: Finland, Norway, Denmark, Iceland, Switzerland, Netherlands, Canada, New Zealand, Sweden and Australia.

- India ranked 133rd in the global list of the happiest countries which is lower than other SAARC countries rank.
- India has been consistently falling in the happiness index since 2014.

Defense corridor

- An interactive meeting with local industry was held at Tiruchirappalli as to initiate development of the Tamil Nadu Defense Corridor.
- It is with respect to budget announcement of two Defense Corridors in Tamil Nadu and Uttar Pradesh.
- The Tamil Nadu Defense Corridor is also called the Tamil Nadu Defense Production Quad.
- It is called as Quad as the nodal cities Chennai, Hosur, Salem and Coimbatore, Tiruchirappalli forms the quadrilateral region.
- These nodal cities have existing defense ecosystem in the form of OFBs, vendors working with Defense PSUs, and other allied industries.
- The Corridor aims to bolster interaction between all industry players in order to create long-term synergy and eventual development of the area into a Defense Production powerhouse.

Eastern Quoll

- Eastern quolls, which were wiped out of mainland Australia decades ago, are being introduced to the remote Booderee National Park, Australia.
- Eastern quolls is a species of small Australian marsupial.
- The carnivorous marsupial is native to mainland Australia, New Guinea, and Tasmania.
- This nocturnal marsupial feed on insects, small mammals, birds, and reptiles.
- The quolls were wiped out 50 years ago in the mainland due to the human induced poisoning, habitat destruction and predatory foxes that fed these cat sized marsupials.

World Glaucoma Week

- During World Glaucoma Week observed between March 11 and 17, Ripon Buildings in Chennai was lit up in green to raise awareness about the eye disease.
- Glaucoma is an irreversible condition, resulting from damaged optic nerves due to pressure in the eye.



- Glaucoma is the second prominent cause of blindness in the world accounting up to 8% of total blindness.
- In India, glaucoma is the third leading cause of irreversible blindness with nearly 12 million people affected and nearly 1.2 million people blind from the disease.

Festival of Innovation and Entrepreneurship (FINE)

- The President of India will soon inaugurate a Festival of Innovation and Entrepreneurship (FINE) at Rashtrapati Bhavan.
- He will also present Gandhian Young Technological Innovation awards instituted by Society for Research and Initiatives for Sustainable Technologies and Institutions [SRISTI].
- FINE is an initiative to recognize, respect, showcase, reward innovations and to foster a supportive ecosystem for innovators.
- It is organized by Rashtrapati Bhavan in association with the Department of Science and Technology and the National Innovation Foundation-India.

- It will provide a window to showcase creative and innovative solutions for social development through innovation emerging from grassroots, student ideas and other technologies.

Regional New Years in India

- The Vice President of India has greeted the people on the auspicious occasion of Ugadi, GudiPadava, ChaitraSukladi and Cheti Chand.
- Ugadi, also known as Yugadi, is the Telugu and Kannada New Year festival.
- GudiPudwa is celebrated in Maharashtra that will mark the first day of the Hindu luni-solar calendar which is celebrated by people of Maharashtra, Marathi and Konkanis across the world.
- ChaitraSukladi is the New Year in traditional Hindu calendar based on the beginning of the new moon and marks the first day of the Chaitra Month.
- Cheti Chand is celebrated by the Sindhi Hindus which marks the beginning of the Hindu New Year.

SaaksharBharath

- Saakshar Bharat is a Centrally Sponsored Scheme for Adult Education and Skill Development.
- This program was formulated in 2009 with the objective of achieving 80% literacy level at national level, by focusing on adult women literacy.
- It is being implemented in rural areas 26 States and one UT that had adult female literacy rate of 50 per cent and below as per Census 2001.
- It is seeking to reduce the gap between male and female literacy to not more than 10 percentage points.
- It has four broader objectives,
 1. To impart functional literacy and numeracy to non-literates
 2. To acquire equivalency to formal educational system
 3. To impart relevant skill development program
 4. To promote a learning society by providing opportunities for continuing education.
- The principal target of the program is 70 million non-literate adults in the age group of 15 years and beyond.

World consumer Day

- Union Minister of Consumer Affairs, Food & Public Distribution launched integrated portal for consumer services on the occasion of World Consumer Rights Day.
- Every year March 15 is celebrated as the World Consumer Rights day.
- This year theme is “Making Digital Markets Fairer”.
- The new Consumer Protection Bill is under government’s consideration that would replace the 30 year old Consumer Protection Act (COPRA) of 1986 once enacted.
- The Day on which the COPRA, 1986 act received the Presidents assent is celebrated as National Consumer Day in December which is different from World Consumer Rights day.
- To safeguard the interest of consumers, Bureau of Indian Standards (BIS) is in the process of adopting ISO Standard i.e. ISO 10008:2013 on Guidelines for business-to-consumer electronic commerce transactions.

Acheulianartefacts

- Anthropological Survey of India (AnSI) have discovered a number of Acheulian artifacts (dated to about 1, 500,000–1, 50,000 years ago) at Ghumarwin in Bilaspur district of Himachal Pradesh.
- The site is close to the site where scientists in the 19th century discovered fossil remains of **Sivapithecus**, the last common ancestor of orangutans and humans.
- The oldest dated Acheulian sites in India are at Attirampakkam in Tamil Nadu, dating to 1.5 million years ago.
- It is the first time that the AnSI has found a large number of Acheulian artifacts along with the Soanian tools (about 6,00,000 years ago) at a same site.
- Acheulian is an archaeological industry of stone tool manufacture characterized by distinctive oval and pear-shaped "hand-axes" associated with early humans.
- The Soanian is an archaeological culture of the Lower Paleolithic in the Siwalik region of the Indian subcontinent.

Financial Stability Board (FSB)

- The FSB released its initial assessment of crypto-assets recently which states that they do not pose risk to global financial stability at present time.
- It is an international body that monitors and makes recommendations about the global financial system.
- In the G20 Leaders Summit of April 2009, the expanded Financial Stability Forum was re-established as the Financial Stability Board (FSB) with a broadened mandate to promote financial stability.
- It coordinates financial regulation for the Group of 20 Economies.
- Its headquarters is at Basel, Switzerland.

Initiatives for Digitalization of Education

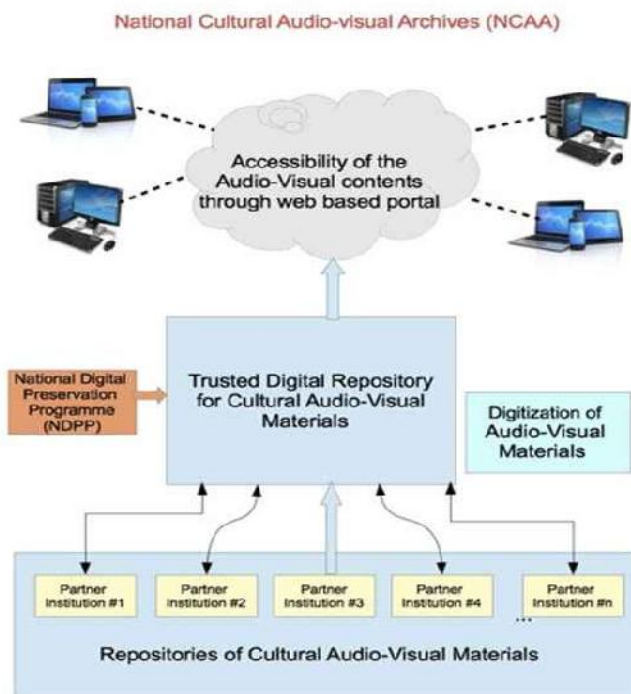
- Some of the Government taken initiatives for digitalization of education are,
 1. E-Pathshala is a web portal designed to disseminate e-resources including e-books developed by NCERT, State Boards.
 2. Shagun portal is designed to showcase the innovative and successful models implemented by all States and UTs in diverse circumstances.
 3. The National Repository of Open Educational Resources (NROER) is an initiative to bring together all digital and digitisable resources across all stages of school education and teacher education.
 4. SWAYAM (Study Webs of Active learning for Young Aspiring Minds) is a Massive Open Online Courses (MOOCs) platform launched to offer various online courses for school education and higher education.
 5. SWAYAM PRABHA DTH-TV program for utilization of satellite communication technologies for transmission of educational e-contents through 32 National Channels has been launched.

Four digital initiatives to push e-education

- **Swayam** - It is an indigenously designed massive open online course (MOOC) which would target those students who could not complete their studies and professional who wished to upgrade their knowledge.
- However, it would not run courses such as engineering, medicine, dental, pharmacy, nursing, architecture, and physiotherapy.
- **SwayamPrabha** — It is 32 Direct-to-Home channels for transmitting high-quality educational content.
- Through SwayamPrabha, the government would air new content of four hours every day, which would be mainly for students from Class IX to XII and those who are preparing for admission into IITs.
- **National Digital Library** – It is an e-library containing 6.5 million books.
- **National Academic Depository** – It is for authenticating all certificates issued by institutions.
- These initiatives are expected to increase the Gross Enrolment Ratio in the higher education from 24.5 (2015-16) to 30 by 2020.

National Cultural Audiovisual Archives (NCAA)

- NCAA has been certified recently, as the world's first Trusted Digital Repository as per ISO standard, granted by Primary Trustworthy Digital Repository Authorization Body Ltd. (PTAB), U.K.
- It is a project of the Ministry of Culture, Government of India, implemented by Indira Gandhi National Centre for the Arts (IGNCA).



Schematic Diagram

Indira Gandhi National Centre for the Arts, Janpath, New Delhi - 110001

- NCAA's primary objective is to identify and preserve the cultural heritage of India available in audiovisual form through a process of digitization and making it accessible to the people.
- NCAA digital repository is established with and powered by DIGITALAYA which is developed by Centre for Development of Advanced Computing (C-DAC), Pune.
- IGNCA is set up by the Government of India, as a premier research institute dedicated to holistic understanding and expression of Indian arts in their inter and multi-disciplinary nature.

Totten Glacier

- A recent research by the Australia's Antarctica Program revealed that more of Totten Glacier is floating.
- As the glacier is in direct contact with warming ocean temperatures it could have a significant impact on the rise of global sea levels (about 3 meters if this glacier melts).
- Totten glacier is one of the fastest-flowing and largest glaciers in Antarctica east



- NASA found that between 2002 and 2016, Antarctica lost 125 giga tons of ice annually, causing global sea levels to rise by 0.35mm a year.

- The amount of ice sitting behind the Totten is comparable to that which is contained within the whole West Antarctic ice sheet (WAIS).

Dog-faced Bat Species

- International team of scientists has succeeded in recognizing two more species of dog-faced bats.
- The dog-faced bats are a fast-flying, insectivorous species.

Species	Location
Cynomopsfreemani	Canal Zone region of Panama.
Cynomopstonkigui	Eastern Andes of Ecuador and Colombia.

- The freemani species was named in honour of scientist Patricia W. Freeman.
- In the case of tonkigui species, the word 'tonkigui' means bat in Waorani, a language spoken in Ecuador, where the species is found.

4TH WEEK OF MARCH

POLITY, GOVERNANCE AND PUBLIC POLICY

Supreme Court's Verdict on SC/ST PoA Act

In News: Supreme Court has pointed out that the SC/ST Prevention of Atrocities Act is being rampantly misused.

SC/ST Prevention of Atrocities Act

- The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) PoA Amendment Act, 1989, was introduced to protect the vulnerable sections of the society.
- The Act was amended in 2015 to cover newer forms of discrimination and crimes against Dalits and tribals.
- The act provides the following provisions
 1. Establishment of Exclusive Special Courts and specification of Exclusive Special Public Prosecutors to enable speedy and expeditious disposal of cases.
 2. Completion of trial of the case filed under POA within two months, from the date of filing of the charge sheet.
 3. Defining clearly the term wilful negligence of public servants at all levels, starting from the registration of complaint, and covering aspects of dereliction of duty under this Act.
 4. Addition of presumption to the offences if the accused was acquainted with the victim, the court will presume that the accused was aware of the caste or tribal identity of the victim unless proved otherwise.

Recent SC verdict

- SC has ruled that Section 18, which bars grant of anticipatory bail to anyone accused of violating its provisions, is not an absolute bar on giving advance bail to those against whom, prima facie, there is no case.
- In addition, the Bench has prohibited the arrest of anyone merely because of a complaint that they had committed an atrocity against a Dalit or a tribal person.
- In respect of public servants, no arrest should be made without the written permission of the official's appointing authority.
- And for private citizens, the Senior Superintendent of Police in the district should approve the arrest.

Key highlights

- Supreme Court in its judgement had made it clear that the SC/ST Atrocities Act should not perpetuate casteism.
- The court said 15-16% of the total number of complaints filed in 2015 under the Act were false and many cases were filed to settle personal scores and harass adversaries.
- SC made this statement in the view that any harassment of an innocent citizen, irrespective of caste or religion, is against the guarantee of the Constitution.
- Supreme Court has sought to strike a balance between protecting individual liberty and preserving the spirit of a law in favour of oppressed sections.

Argument for and Against

- In an ideal system, as long as every charge is judicially scrutinised and every investigation or prosecution is fair and honest, one need not worry about misuse and its adverse effects.
- However, social realities are far from being ideal which ought to concern the civil society including courts.
- The conviction rates under the Act remain low which proves the lackadaisical approach of investigators and prosecutors to bring home charges against perpetrators of such crimes.
- Even if courts are right in taking note of the tendency to misuse this law, society and lawmakers are justifiably worried about the sort of messaging contained in their rulings and observations.
- The strong demands from political parties are that words of caution and rules against misuse may be needed to grant relief to the innocent, but nothing should be done to de-fang the law itself.

Trafficking of Persons Bill, 2018

In News: The Union Cabinet has recently approved the Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill, 2018 for introduction.

Key provisions

- **Coverage** - The Bill covers a wide range of forms of trafficking which includes:
 - trafficking for the purpose of forced labour, begging
 - trafficking by administering chemical substance or hormones on a person for the purpose of early sexual maturity
 - Trafficking of a woman or child for the purpose of marriage or under the pretext of marriage or after marriage, etc.
- In particular, the Bill comprehensively addresses the transnational nature of the crime.
- **Punishment** - It specifies punishment for promoting or facilitating trafficking of person.
- The activities may include
 - producing, printing, issuing or distributing unissued, tampered or fake certificates
 - registration or stickers as proof of compliance with Government requirements
 - procuring or facilitating the acquisition of clearances and necessary documents from Government agencies fraudulently
- Punishment ranges from rigorous imprisonment for minimum of 10 years to life, and fine of not less than Rs. 1 lakh.
- Besides, the Bill provides for the attachment and forfeiture of property and also the proceeds of crime.
- This is to break the organized nexus, both at the national and international level.
- **Relief** - The Bill provides for immediate protection of rescued victims and their rehabilitation.
- The Victims are entitled to interim relief immediately within 30 days to address their physical, mental trauma etc.
- Further appropriate relief within 60 days from the date of filing of charge sheet is also provided for.
- **Rehabilitation** - Rehabilitation is irrespective of criminal proceedings initiated against the accused or the outcome thereof.
- A specific Rehabilitation Fund for this purpose is created for the first time.
- This will be used for the physical, psychological and social well-being of the victim.
- It also for education, skill development, health care/psychological support, legal aid, safe accommodation, etc.
- **Confidentiality** - The confidentiality of victims/witnesses and complainants must be ensured by not disclosing their identity.
- Further the confidentiality of the victims is maintained by recording their statement through video conferencing.
- This also helps in trans-border and inter-State crimes.
- Time bound trial and repatriation of the victims, within a period of one year from taking into cognizance, is mandated.
- **Mechanism** - The Bill provides for designated courts in each district for the speedy trial of the cases.
- It creates dedicated institutional mechanisms at District, State and Central level.

- These will be responsible for prevention, protection, investigation and rehabilitation work related to trafficking.
- National Investigation Agency (NIA) will perform the tasks of Anti-Trafficking Bureau at the national level present under the MHA.
- The National Anti-Trafficking Bureau will -
 - perform the functions of international coordination with authorities in foreign countries and international organizations
 - take up international assistance in investigation
 - facilitate inter-State and trans-border transfer of evidence and materials, witnesses and others for expediting prosecution
 - facilitate inter-state and international video conferencing in judicial proceedings, etc

Significance

- Trafficking in human beings is the third largest organized crime violating basic human rights.
- It is a global concern, also affecting a number of South Asian nations.
- But notably there is no specific law so far to deal with this crime.
- The Bill thus addresses a pervasive yet invisible crime affecting the vulnerable persons especially women and children.
- The new law will make India a pioneer in formulating a comprehensive legislation to combat trafficking.

No-confidence Motion - Speaker's Role

- **Context:** The Lok Sabha Speaker adjourned the House without taking up the motion of no-confidence for the fourth day in succession.
- This and other decisions in the recent days have led to questioning the non-partisan role of the Speaker.

no-confidence motion

- **Motion** - As per the Rules of Procedure and Conduct of Business in Lok Sabha, any member of the house can move a no-confidence motion.
- The member need not give a reason for moving a no-confidence motion.
- Once the Speaker is of the opinion that the motion is proper, then s/he reads out the motion to the house.
- A minimum of 50 members have to accept the motion.
- If not, then the motion fails and the member who moved the motion is informed about it.
- **Discuss** - If the motion is accepted, then the Speaker will announce a day when the motion is to be discussed.
- The day cannot be more than 10 days from the day the motion is accepted.
- **Vote** - The motion is then put to vote; it can be conducted through "Voice Vote", "Division of Votes" or other means.
- The government of the day has to resign if the government loses a 'confidence' motion or if the 'no-confidence' motion is accepted by the majority.
- There is no time-limit that must be adhered to between two no-confidence motions.

present concern

- **No-confidence motion** was recently moved by the Telugu Desam Party and the YSR Congress that was supported by major Opposition parties.
- The motion was moved by the required number of Members of Parliament (MPs).
- The Speaker is delaying the no-confidence motion on grounds of disruption in the House.
- Not taking it up for passage has led to concerns in the Opposition benches.
- As, delaying the no-confidence motion will benefit the government.
- **Procedure** - A no-confidence motion must be taken up immediately, and all other House business must make way for it.
- This is fundamental to parliamentary functioning and to executive accountability.
- In any case, the Speaker's argument is debatable as the onus of maintaining order in the House is squarely on the Speaker.

other recent concerns

- **Finance Bill** - Recently, guillotine provision was used for passing the Finance Bill without debate.

- This was also the first time in years that the Lok Sabha did not discuss and vote on even one demand for grants.
- Many important decisions were thus taken without any legislative scrutiny.
- **Money Bills** - The present Speaker's approval of Bills that are clearly not Money Bills is another concern.
- These are hence being dealt with by the Lok Sabha as such, depriving the Rajya Sabha of its right to legislate.

Way Forward

- The Speaker represents the entire House and not just the Treasury benches.
- It is extremely essential for democracy that the Speaker remain non-partisan.
- Decisions of the Speakers in matters as discussed above are a prime means by which impartiality is demonstrated.
- The Speaker should carry out the assigned duty to ensure detailed deliberation and legislative scrutiny of important legislation.

High Court's Verdict on MLAs' Disqualification

In News: The Delhi High Court quashes presidential notification disqualifying 20 AAP MLAs on EC's recommendation.

Court's verdict

- Earlier the High Court refused to stay the disqualification notification.
- But it restrained the ECI from taking any "precipitate measures" such as announcing dates for bypolls to fill the vacancies.
- The Court has now said the Election Commission recommendation in the office-of-profit case was "bad in law".
- It said the principles of natural justice had been violated by the EC.
- This is because of EC's failure to give the MLAs an oral hearing or opportunity to address their argument on merits.

the directives

- The High Court thus directed the EC to hear the arguments afresh by giving the MLAs a proper hearing.
- It also directed the EC to decide the "all important and seminal issue" of what is meant by "office-of-profit in government".
- This is the first time in over 20 years that the Commission's opinion in an office-of-profit case has been set aside by a court.

CEC's recusal issue

- Earlier, one of the then Commissioners, O.P. Rawat had recused himself from the reference proceedings.
- He decided to stay away from the proceedings after the Delhi CM questioned his independence in dealing with the case.
- Rawat later agreed to rejoin the reference proceedings without informing the AAP.
- The Delhi High Court questioned the EC of not informing on the rejoining or withdrawal of recusal by Rawat to the AAP.
- As informing it would have affected the response of the petitioners.

Court's observation

- The Bench observed that no one could act in a judicial capacity if the previous conduct gives grounds for believing that She/he cannot act with an open mind and impartially.
- The broad principle is that the person trying a case must act fairly as well as the acts should be above suspicion of unfairness or bias.
- These observations are relevant on the question of rejoining of Mr. Rawat after recusal.
- In this context, the Court rightly accepts the petitioners' view that they were kept in dark.
- In all, there have been errors and lapses which make the EC's decision questionable.

Parliamentary Secretary

- A Parliament Secretary often holds the rank of Minister of State and has the same entitlements.
- He/she is appointed to assist the ministers and is assigned to a government department.
- Many states in the Indian Union have instituted the post of Parliamentary Secretary and have also appointed MLAs to the post.

'Office of Profit'

- 'Office of profit' (OoP) is not clearly defined in the Constitution.
- But deriving from the past judicial pronouncements, five tests have been laid down to check if an office is an OoP or not.
- They are:
 - whether the government makes the appointment
 - whether the government has the right to remove or dismiss the holder
 - whether the government pays remuneration
 - what the functions of the holder are
 - does the government exercise any control over the performance of these functions
- In all, the word 'profit' has always been treated equivalent to or a substitute for the term 'pecuniary gain' (financial gain).

legal concerns

- **Office of Profit** - MPs and MLAs are supposed to hold the government accountable for its work.
- Logically, holding an "Office of Profit" under the government may make them susceptible to government influence.
- They may fall short of discharging their constitutional mandate.
- **Number of members** - Article 164(1A) specifies that the number of ministers including the Chief Minister has to be within 15% of the total strength of the Assembly.
- In the case of Delhi, which is not a 'full' state, the number of Cabinet Ministers cannot exceed 10% of the total 70 seats.
- This is as per Article 239AA of Constitution which deals with Special provisions with respect to Delhi.
- As a Parliament Secretary often holds the rank of Minister of State, their numbers should also be considered in meeting this limitation.
- On violation of this, various High Courts have earlier struck down the appointment of Parliamentary Secretaries as unconstitutional.

Understanding Special Courts

Context: It is assumed that special courts are a panacea for judicial efficiency.

- But the system needs a reassessment to understand its actual working efficacy, for it to be more rational in number and functioning.

special courts

- Special courts have existed in the subordinate judiciary since before Independence.
- A special court is one which is to deal with special types of cases under a shortened and simplified procedure.
- They are established under a statute meant to address specific disputes falling within that statute.
- Over 25 special courts were set up between 1950 and 2015 through various Central and State legislations.

fast track courts

- Fast track courts on the other hand were the result of recommendations made by the 11th Finance Commission.
- 11th FC advised the creation of 1,734 such courts to deal with the judicial backlog.
- They were actualised through an executive scheme as opposed to a statute of the legislature in case of special courts.
- Moreover these are meant to be set up by the State governments in consultation with the respective high courts.

Concerns with special courts

- **Understanding** - Special courts are a significant means of addressing the specificities of certain statutes and judicial backlog.
- However, there is little if any evaluation of how this system works and a vacuum exists in research and analysis of special courts.
- This has led to inconsistencies in legislation and operation, which is more pronounced by the Parliament.
- Central legislations from Special Criminal Courts (Jurisdiction) Act, 1950 to the Prevention of Money Laundering (Amendment) Act, 2012 prove this point.

- **Ambiguities** - The Special Courts case clearly uses the phrase “established under statute”, meaning the establishment of a new court.
- However statutes use terms like “constitute”, “create”, “designate”, “notify”, “appoint”, etc leading to ambiguities of its stature.
- The anomaly is that these terms have not been defined or procedurally explained.
- Moreover, certain legislations state that the government “may” set up special courts, while other say the government “shall”.
- However, going by the definition, the answer as to whether a law requires a special court or not should only be either yes or no.
- Leaving options such as “may”, add to the ambiguities.
- **Clarity** - For States and high courts, this leads to uncertainties in operation and setting up such courts.
 - There is lack of clarity in specifics like:
 - Do they require new buildings?
 - Should more judicial officers be hired?
 - If a judge is designated under a special statute, should those matters be added to or replace her roster?
- This also creates confusion with respect to appointments, budgetary allocation, infrastructure, and listing practices.
- **Purpose** - There are more special courts under the Prevention of Corruption Act, 1988 than SC/ST (Prevention of Atrocities) Act, 1989.
- However the former is said to have a tenth of the number of registered cases as the latter (2015).
- This point to the unclear legislative intent for creating special courts.

way forward

- The SC should address the constitutional status, and analyse policy questions pertaining to the need and efficiency of special courts.
- There are over 2.8 crore cases in the subordinate judiciary, which is the highest out of the three tiers of the judiciary.
- The working of special courts has to be studied critically.
- Parameters such as the frequency and number of effective hearings and calculating the number of pending cases need to be developed.
- These are essential to check the growing number of special courts being established without definite purposes.
- In all, it is important to determine whether or not this special courts system is in fact helpful in addressing the judicial backlog.

Influencing Voter's Choice – Facebook Issue

Context: The Cambridge Analytica involved in data breach controversy used users’ details obtained from Facebook.

- It was allegedly used to influence voter's preferences in the American Presidential election.

Observation of user preferences

- Individual interacting with Facebook over a period of time are observed.
- The platform gathers enough information about the likes and dislikes of the person.
- It becomes aware of the kinds of people the individual follows and the types of news sources that s/he prefers.
- The range of actions and reactions from the user, for the posts from these sources, is also observed.
- All these data, when combined, help in putting together a picture of the user’s political affiliation and inclinations.

Targeting users

- Facebook has an advertisement preferences page.
- It helps the platform to serve up advertisements according to user preferences.
- Based on an individual’s likes and dislikes, it lists topics, people and interests, which it thinks are good enough to push ads to the user.
- With the availability of advertisements of all kinds, Facebook allows a good degree of targeting.
- Usually, the targeting is based on age, location and interests.

Role of Cambridge Analytica

- Cambridge Analytica did not gather data from Facebook through advertisement preferences.
- The firm allegedly took the help of a psychology professor at Cambridge University.
- The professor designed an application, 'thisisyourdigitallife', to gather information about users.
- This third party app used Facebook's login API (application programming interface).
- This allows people to use their Facebook profile instead of creating a new account.
- This is allowed under Facebook's rules and guidelines.
- However, the professor then shared the data with Cambridge Analytica, which is against the norms.
- The app was projected to be for a personality quiz.
- The questions were framed in a manner so as to draw out details about the quiz-taker's political leanings and related aspects.
- The acquired data would then provide raw material for a detailed profile of the potential voter.

Influencing voters

- With the kind of data Cambridge Analytica had, it allegedly influenced voters in many American states.
- It specifically targeted those who had not made up their minds, and had a high probability of moving.
- E.g. people dissatisfied with economic slowdown and resultant unemployment were targeted with the pro-Trump campaign.
- A certain line of narrative to these voters over a period of time may have helped them in making their choices.

Securing Data Streams

- Cambridge Analytica fiasco has highlighted the risks and challenges in safeguarding privacy and preventing data abuse.
- Mandating big foreign tech firms to set up data centres within Indian jurisdiction and nurturing indigenous firms are some possible solutions.

Present status

- **Vulnerabilities** - Recent developments with respect to "Cambridge Analytica" raise some questions on how the Government can protect data.
- Although the Government claims data is safe, the sheer massiveness of foreign companies like Facebook, Google, Amazon or Apple is menacing.
- Notably, the above 4 are the main firms driving big-data technologies in the country and globally and are almost omnipotent in all gadgets.
- **Government Response** - So far, India has shown no signs of doing anything to control them and the data protection law is still in its nascence.
- Past experiences haven't been positive either, and even protocols issues to government departments regarding cyber security are not complied with.
- Notably, government departments were asked to not use Gmail for official purposes, and '.nic.in' was promoted instead, but compliance has been tardy.

way ahead

- **Data Centres** - If Indian data doesn't remain within India's borders, it can't be subject to Indian laws, which makes regulating them really tough.
- Data breaches will only expand in future and India is expected to be the centre of expansion for tech giants due its youthful population.
- Due to these transgressions, government should ask these tech giants to set up their data centres in India, which won't be a big investment for them.
- Despite the minimal taxes that these firms would face, they've refused to set up data centres sighting trivial problems like electricity and land acquisition.
- **Indigenisation** - The Government has also been talking about creating big home grown tech firms, but it's been years now.
- Notably, China has been successful in this domain with firms like "WeChat and Baidu", to counter international tech giants.
- We must back big India-owned e-commerce and mobility players to fight the Amazons and Ubers of the world.

SC Verdict on Honour Killing

In News: Supreme Court in its recent verdict has upheld the choice of consenting adults to love and marry as a part of their fundamental rights.

The verdict

- The judgment came on a petition filed by NGO Shakti Vahini to curb honour crimes.
- The court held that the consent of the family, community or clan is not necessary for marriage.
- This is to safeguard young couples under threat for marrying outside their caste or religion.
- The Court also issued a set of guidelines for the authorities, to stop interference by khapPanchayat.
- The guidelines issued by the Court will be in place till the government comes up with a law.

khap Panchayat a concern

- Khappanchayats are the self-appointed village courts.
- Khappanchayats wield enormous influence in villages of several states of India.
- **Honour Killings** - They are often seen responsible for the growing number of honour killings in the country.
- They group against young couples to force their presence and dictate punishments.
- **Sense of honour** - These "feudalistic" entities have no reluctance in committing crimes.
- The "sense of honour" perpetuates the idea of not to marry outside one's caste, clan or religion.
- Masculine dominance becomes the sole governing factor of perceptive honour.
- The police turn a blind eye and the administration hardly questions them.
- **Women** - Women are treated by the khaps as servile persons who have no desire for autonomy.
- Their families are either silent spectators or active participants in their torture.
- To highlight the terror inflicted on women, the Supreme Court gave a list of actions which trigger honour-based crimes.
- They include
 - loss of virginity outside marriage
 - unapproved relationships
 - refusing an arranged marriage
 - asking for divorce
 - demanding custody of children after divorce
 - causing scandal or gossip in the community
 - even "falling victim to rape"

Court's observations

- The apex court ridiculed the "elevated sense of honour" of elders, the collective and khappanchayats.
- It observed honour killing that guillotines individual liberty, freedom of choice and one's own perception of choice.
- The human rights of a person are not mortgaged to the so-called honour of the family or clan or the collective.
- Khappanchayats were condemned for their belief that their duty is sanctified and their action of punishing the hapless victims is inviolable.
- It termed the elders, presiding over murder in broad daylight, as "patriarchal monarchs".
- The verdict thus comes down heavily on crimes committed in the name of honour.

Guidelines for various stake holders

- **States** - The state governments should identify districts, sub-divisions and/or villages concerned.
- These are areas where instances of honour killing or assembly of KhapPanchayats have been reported in the last 5 years.
- **Police** - Officer In-charge of the police stations of the identified areas needs to be cautious.
- Any instance of inter-caste or inter-religious marriage within their jurisdiction coming to their notice should be taken care of.
- They should inform to the immediate superior officer.
- Also the jurisdictional Deputy Superintendent of Police (DSP) and Superintendent of Police should be intimated.
- **Prevention** - Once done, the DSP or a senior police officer should immediately interact with the members of the Khap Panchayat.

- It should be made clear that convening of such meeting/gathering is not permissible in law, and should ultimately be prevented.
- **Meeting** - Despite these, if the meeting is conducted, the DSP should personally remain present during the meeting.
- S/he should ensure that no decision is taken to cause any harm to the couple or the family members of the couple.
- If this fails, each one participating in the meeting besides the organisers would be personally liable for criminal prosecution.
- **Video** - Discussion and participation of the members of the assembly meet should be video recorded.
- The DSP should ensure this, as this is the basis on which the law -enforcing machinery can resort to suitable action, later, if needed.
- **Proposal** - The DSP shall submit a proposal to the District Magistrate/Sub-Divisional Magistrate of the District/ Competent Authority of the concerned area.
- This is when the gathering cannot be prevented and/or is likely to cause harm to the couple or members of their family.
- **Orders** - The authority can issue orders to take preventive steps under the CrPC.
- Prohibitory orders under Section 144 CrPC can also be invoked.
- Arrest of the participants in the assembly under Section 151 CrPC can also be approved.
- **Crime** - The jurisdictional police official can file an FIR under the appropriate provisions of the Indian Penal Code.
- This is when, despite all preventive measures, if Khap Panchayat has taken place and passed any diktat against a couple/family.
- Upon registration of FIR, the Superintendent/Deputy Superintendent of Police should be intimated.
- S/he, in turn, should ensure that effective investigation of the crime is done.
- **Security** - Immediate steps should be taken to provide security to the couple/family.
- If necessary, steps to move them to a safe house within the same district or elsewhere should be taken.
- The District Magistrate/Superintendent of Police must deal with utmost sensitivity, the complaint regarding threat administered.
- **Safe house** - After the marriage, if the couple so desire, they can be provided accommodation on payment of nominal charges in the safe house.
- This would be for a period of 1 month to be extended on monthly basis but not exceeding one year in aggregate.
- The decision would be taken depending on their threat assessment on case-to-case basis.
- **Inquiry** - The initial inquiry regarding the complaint should be entrusted by the District Magistrate/Superintendent of Police to an officer of the rank of Additional Superintendent of Police.
- S/he shall conduct a preliminary inquiry and ascertain the authenticity, nature and gravity of threat perception.
- On being satisfied as to the authenticity of such threats, a report should be submitted to the Superintendent of Police in one week.
- The District Superintendent of Police, on such report, should direct the Deputy Superintendent of Police in-charge of the concerned sub-division.
- This is to cause to register an FIR against the persons threatening the couples and, if necessary, invoke Section 151 of CrPC.
- Additionally, the DSP should personally supervise the progress of investigation and ensure that the same is completed.
- **Case** - The designated Court/Fast Track Court earmarked for the purpose will try criminal cases pertaining to honour killing or violence to the couple(s).
- The trial must proceed on day-to-day basis.
- It must preferably be concluded within 6 months from the date of taking cognizance of the offence.
- **Negligence** - Police or district officer/officials failing to comply with the directions will be considered as an act of deliberate negligence and/or misconduct.

- This is if such official(s) do not prevent the incident or take appropriate actions thereafter, despite prior knowledge of it.
- Departmental action would be taken under the service rules.
- The action shall be initiated and taken to its logical end, preferably not exceeding 6 months.
- The states are directed to take disciplinary action against the concerned officials.
- **Special Cells** - The State Governments should create special cells in every District.
- This is to receive petitions/complaints of harassment of and threat to couples of inter-caste marriage.
- The special cell will comprise of the
 - Superintendent of Police
 - District Social Welfare Officer
 - District Adi-Dravidar Welfare Officer
- These special cells should create a 24-hour helpline to receive and register such complaints.
- They are also to provide necessary assistance/advice and protection to the couple.
- **Sensitisation** - The different state governments and the centre should work on sensitisation of the law enforcement agencies.
- There should be institutional machinery with the necessary coordination of all the stakeholders.
- The Home department must take this initiative and work in coordination with the state governments.
- This is to mandate social initiatives and awareness, to curb such violence, and meet the goal of social justice and rule of law.

RashtriyaUchchatarShikshaAbhiyan

In News: The budget for RashtriyaUchchatarShikshaAbhiyan is increased 4 times, and the second phase of the scheme is also approved.

RUSA

- RashtriyaUchchatarShikshaAbhiyan is a Centrally Sponsored Scheme launched in 2013.
- Its aim was to increase enrolment in higher education by 30%.
- It primarily provides strategic funding to eligible State higher educational institutions.

Need for the scheme

- India is estimated to have over 800 universities, with over 40,000 colleges affiliated to them.
- The Centre's slant toward premier institutions has continued ever since the Eleventh Five Year Plan (2007-12).
- **Central Fund** - Presently, less than 6% of students study in about 150 Centrally-funded institutions.
- But they corner almost the entire funding by the Ministry of Human Resource Development (MHRD).
- The funding is mainly directed towards starting more IITs, IIMs and Central universities.
- **State Institutions** - About 94% of students of higher education study in 369 State universities.
- In spite of a nine-fold increase in Budget allocation, State institutions have been left to fend for themselves.
- To make things worse, investment by State governments has been dwindling each year as higher education is a low-priority area.
- The University Grant Commission's system of direct releases to State institutions, bypassing State governments, also leads to their sense of alienation.
- Thus, despite being the face of higher education in India, State institutions do not get their due share.
- It was to address these critical concerns that the MHRD launched RUSA.

Functional aspect

- The RUSA, unlike other schemes, is not imposed on State governments in a one-size-fits all manner.
- Under RUSA, **states and institutions** have to give an undertaking expressing their **willingness** to the idea of reform.
- They should also agree to meet the States' **share of the cost**.
- Accordingly, preparatory grants will be released to States to have the required systems, processes, and the technical support in place.

- The scheme is largely based on the **conditional release of funds**.
- It is **linked to reforms** in the key areas of governance, learning-teaching outcomes, reaching out to the unreached and infrastructure support.

Structural reforms for the scheme

- **Plans** - State Higher Education Councils (SHECs) which have eminent academics, industrialists and other experts have been created.
- They play a major role, from an academic and professional point of view.
- They formulate the medium- and long-term State perspective plans.
- **Appointment** - State has to give its commitment to creating a search-cum-select committee.
- This is to avoid arbitrariness in the selection of vice-chancellors.
- **Affiliation** - Mitigating the bane of the affiliation system is also a major objective.
- This is achieved through a reduction in the number of colleges affiliated per university.
- This is done by creating cluster universities and promoting autonomous colleges.
- **Faculty** - An important precondition is the filling up of faculty positions and lifting the ban on recruitment (as in some States).
- **Other** efforts to improve learning-teaching outcomes include:
 - improving pedagogy by capacity-building of faculty
 - selecting teachers in a transparent manner
 - adopting accreditation as a mandatory quality-assurance framework
 - implementing semester system
 - involving academics of repute and distinction in decision-making processes

Progress been

- Despite being voluntary, all States except a Union Territory (Lakshadweep) are a part of RUSA.
- Over the years, the RUSA's resource allocation has increased.
- The funding linked to reforms has had a visible impact on higher education.
- There is improvement in gross enrolment ratio (GER), addressing faculty vacancies, teacher-student ratio, etc.
- There has also been an improvement in the number of institutions accredited and their scores.

Recent decision

- The Union Cabinet has recently decided to continue with the Rashtriya Uchchatar Shiksha Abhiyan (RUSA).
- For the current year, Rs. 1,300 crore has been provided and funding is conditional to performance.
- It is hence critical to have a robust monitoring and evaluation system in place.
- In this regard, certain effective tools are in function since 2015, including:
 - geo-tagging
 - introduction of a public financial management system
 - a fund tracker and reform tracker system
 - regular video conferences
- Given the significance of RUSA in higher education, its further success lie in the impartial administration of the scheme by MHRD.
- The degree to which State governments allow the SHEC to function is also important.

ECONOMIC AFFAIRS

Concerns with Electoral Bonds

Context: The Government issued a notification in January, 2018 on electoral bonds, which was provided in the Finance Act 2017.

- Despite being argued as an effective tool for cleaning political funding, there are some serious concerns with electoral bonds.

Earlier Provisions

- The incongruity of political parties depending on corporate funds to fight elections and sustain democracy is at times troubling.
- To address this, the **Representation of People Act 1951** was amended in 2003, and sections 29B and 29C were inserted.

- **Section 29B** says political parties may accept contributions of any amount from any person or company.
- This is however except any contributions from a government company or foreign source.
- **Section 29C** says that every political party which receives such funding should prepare a report on contributions above Rs.20,000.
- They should also submit the same to the Election Commission before the income tax returns are filed.
- If any party fails to do this, it will not get tax exemption for that year under the Income Tax Act.
- Similarly, **Section 13A of the Income Tax Act 1961** provides for exemption of all voluntary contributions received by a political party from payment of income tax.
- But such exemption is conditional on -
 - the recipient party maintaining such books of accounts and other documents
 - maintaining a record of such contributions and the names and addresses of donors as well as amounts above Rs.20,000
- This provision also says that if the party fails to submit the report as stipulated in Section 29C, it will not get the tax exemption.
- **Section 139 (4B) of the IT Act** deals with furnishing of income returns by parties.
- It requires a political party to furnish **total income including the exempted contributions** with all the particulars.

Electoral Bond

- Electoral bonds will be issued by a notified bank for specified denominations.
- Those who want to donate to a political party, can buy these bonds by making payments digitally or through cheque.
- Then they are free to gift the bond to any registered political party.
- The bonds will likely be bearer bonds and the identity of the donor will not be known to the receiver.
- The party can convert these bonds back into money via their bank accounts.
- The bank account used must be the one notified to the Election Commission and the bonds may have to be redeemed within a prescribed time period.
- Electoral bonds are essentially like bearer cheques.
- The issuing bank will remain the custodian of the donor's funds until the political party redeems the bond.

Recent Amendments

- The Finance Act, 2017 amended both the above mentioned Acts.
- It also exempted electoral bonds from the purview of section 29 C of the RP Act 1951 as well as section 13 A of the IT Act 1961.
- Henceforth, income received by way of electoral bonds is not required to be disclosed in the report to the Election Commission.
- Further, political parties are not required to maintain any record of the same or the names and addresses of donors of these bonds.

concerns

- **Secrecy** - The electoral bonds scheme has been to keep the identity of the donor absolutely confidential.
- The authorised bank will not disclose any information about the purchaser of the bonds to any authority for any purpose.
- Also, the bank will not know who the recipient of the bonds is.
- This secrecy and confidentiality in the case of political funding is a serious concern.
- **Black Money** - A legal provision introduced by the Centre last year mandated contribution above Rs.2,000 to be made only through cheques, drafts, etc.
- This provision should adequately take care of the problem of black money flowing into the coffers of political parties.
- But by introducing electoral bonds, the Government has defeated this purpose.
- **Opaque** - The scheme conceals from public scrutiny the identity of the corporates and donors who contribute to political parties.
- The Election Commission will neither be allowed to have a record of the electoral bonds received by a political party.

- It is also not clear whether the I-T authorities will have an opportunity to get all the details of the contribution.
- **Legal incongruity** - Section 13A, as amended, rules out the need to maintaining record of the electoral bonds or details of the donor.
- This provision seems to be in contradiction with Section 139 (4B) of the IT Act which deals with furnishing information.
- **Taxation system** - Taxing is a sovereign function. It is the social policy to tax all incomes for the benefit of society.
- So, all tax statutes lay down specific conditions for exempting any particular category of income.
- But the amendments, excluding all the existing conditions, in favour of the bonds goes against the scheme of taxation laws.
- Any legislative exclusion of public scrutiny of financial transactions having a bearing on public revenue is against constitutional policy.
- **Legal** - The notification prohibits disclosure of any information about a donor to any authority which is a substantive provision.
- Notably, a notification issued under an Act cannot make a substantive provision. Only an Act can make such a provision.
- Also, this notification has been issued under section 31 of the RBI Act 1934 which does not contain any such provision.
- Legally, a notification which is a subordinate legislation cannot travel far outside the parent Act.
- In all, the electoral bonds have some legal incongruities and basic differences with constitutional and democratic principles.

Materialising Municipal Bonds

Context: Beyond focussing on national and State budgets, forward planning is important at the municipal level as well.

recent developments

- Pune Municipal Corporation raised Rs.200crore in June 2017 for a water supply project.
- Greater Hyderabad Municipal Corporation raised Rs.200crore recently to fund their road project.
- Municipal bond market has seen an issuance of around Rs.2,000crore since the first bond issue two decades ago.
- While regulators and the Government are keen on more such bonds, the markets are yet to share the enthusiasm.

Unattractive Municipal Bond Market

- **Information** - Among the many factors withholding the development of municipal bonds market is the lack of information infrastructure.
- The RBI publishes annually a report on the State budgets analysing the fiscal position of State governments based on primary data.
- But notably, there is no such compendium on the budgets of local bodies giving real data on the overall receipts or expenditure.
- **Reports** - The available data if any comes from the Comptroller and Auditor General (CAG) audit reports.
- These give a consolidated picture of the municipal finances.
- However, even the latest available CAG reports on local bodies date as far back as 2014-15.
- **Primary Source** - The primary source of data is the website of the municipal corporation.
- But the governance of the local bodies in some states leads to doubting the credibility of such reports.
- The details of service delivery or the properties assessed for tax are not published in the budget.

concerns

- **Accounting** - Very few municipalities adhere to the national/State municipal accounting manual (NMAM/SMAM).
- Even among the mega cities, Bengaluru and Kolkata present budgets that are not compliant with the NMAM.
- NMAM mandates presenting budget information both function-wise (type of service rendered) and account code-wise (nature of revenue or expenditure item).
- However, most municipal corporations present the data only account code-wise.

- Also, the chart of accounts is fluid in many municipalities as they are still transitioning to the accounting manual.
- **Accounting quality** - The accounting quality largely varies and is not linked to the size of the corporation.
- The most common errors are the confusion between revenue and capital items, and wrong account coding in the budget document.
- **Disparities** - The reporting units are not the same in the budget data of various corporations.
- Most municipal bodies present it in rupees lakh, and some in rupees thousands and rupees.
- The differences in data from the municipal budget documents make it hard to compare data across municipals.

way forward

- Building a national municipal data base ought to be a priority.
- **Integrated database** with operational, economic data and financial data is essential.
- Making it user-friendly is the first step to building an **information infrastructure** for the municipal bonds market.
- It facilitates **analytics** on the operational efficiency of the corporation, the potential for revenue growth, the debt bearing capacity, etc.
- Presently, the lender weighs in the tacit or explicit support of the state government while **lending** to a municipal corporation.
- A national database can promote a culture of **credit analysis** among lenders to municipalities, to make informed decisions.
- The increased levels of **transparency** will attract **public private partnerships** in infrastructure delivery and improve **ease of doing business**.

Government's Borrowing Plan

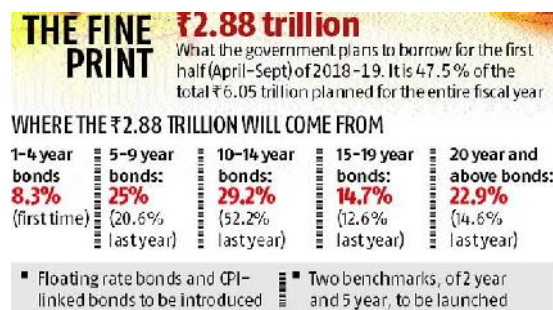
In News: Union government plans to borrow Rs 2.88 trillion in FY 2018-19.

union government's plan

- Union government has planned to borrow Rs 2.88, against market expectation of Rs 3.3-3.6 trillion.
- To meet its fiscal demands government usually borrows from the bond market and by using other instruments.
- The normal practice of borrowing from the bond market will be around 60-65 per cent.
- For now first half of borrowing government has planned 47.5% of budgeted amount for 2018-19.
- The weekly borrowing size would also be Rs 120 billion, against the usual Rs 150-180 billion.
- The Union will also reduce its planned buyback of government securities (G-Secs) by Rs 250 billion.

Planning for borrowing

- The government plans to draw an additional Rs 250 billion from the National Small Savings Fund (NSSF) to finance the fiscal deficit for 2018-19.
- For this RBI, on behalf of the government, will be issuing bonds in 1-4 year maturity, raising Rs 240 billion through the papers.
- Inflation-indexed bonds linked to the consumer price index (CPI), and floating rate bonds will be used to raise 10 per cent of the first-half borrowing.



- The borrowing will also be done through instruments that have been in demand in the market, instead of a maturity profile in the shape of 10-14 years.

- The government also said it would introduce new benchmarks in the 2-year and 5-year categories.

benefits

- Government's move had been welcomed by bond market player as it will ease pressure on the market considerably by reducing the first-half borrowing.
- The borrowing plan will allow the government to meet all its expenditure requirements without getting into an overdraft situation.
- CPI-linked bonds will have much better chance of success compared to WPI linkers.
- The borrowing profile will help banks and other investors invest in bonds again.
- This will also ease the redemption pressure on the government at the cost of duration risk on the bank credits.
- Introduction of benchmarks allows government to raise money through bonds and liquidity and allows creating many other derivatives.

NFRA for Regulating Accountants

Context: 'National Financial Reporting Authority' (NFRA) was proposed recently as an independent regulator for accounting and auditing professionals.

- But the authority is said to also constitute three part-time members from ICAI, which has raised troubling questions about its neutrality.

NFRA evolve

- **The Beginnings** - The NFRA was first proposed as an independent regulator of accounting and auditing in the wake of the Satyam scandal.
- As the scam went undetected for many years by the company's auditors, there are clear indications of auditor collusion in the fiasco.
- This created a public outcry for better regulations in the sector and a 2010 standing committee report had subsequently vouched for the creating NFRA.
- **Stalemate** - NFRA was a part of the Companies Act 2013, which was notified in 2017, but interestingly the clause related to NFRA wasn't notified.
- Notably, Institute of Chartered Accountants of India (ICAI), which is currently the certifying and self-regulatory institution, had opposed NFRA.
- ICAI had vouched that it is doing a good job and a new regulator isn't needed as it would merely add regulatory levels.
- Significantly, despite the strong support of the ministry of corporate affairs, NFRA couldn't be notified, which indicates ICAI's lobbying power.
- **Revival** - The recent Rs. 13,000-crore Punjab National Bank (PNB) fraud that seems to have broken the camel's back on NFRA issue.
- This case slipped through a variety of audits by CAs that public banks are mandated to undergo (statutory, branch, concurrent, and stock audit).
- Also, the rising non-performing assets (NPAs) of banks have also raised questions about the failure of auditors to properly review asset quality.

composition of NFRA

- NFRA was touted to be a fully independent body that will consist of a chairperson, three full-time members and nine part-time members.
- Among the part-time members, one each from Ministry of Corporate Affairs (MCA), CAG, RBI, and SEBI, will be part of NFRA
- Additionally, two external experts (accountancy, auditing, finance, or law) and three ex-officio members from the ICAI (the president, and chairpersons of Accounting, and auditing boards) will also be members in NFRA.
- While none of the previous proposal had a provision for ICAI members to be included in the board, the inclusion of the 3 ICAI members is intriguing.
- Notably, ICAI members are practicing CAs, which clearly gives rise to a conflict of interest and also will bring the neutrality of NFRA into question.

way forward

- The separation of the regulator from those it regulates is a fundamental principle of good governance and followed universally.
- This is true of the Securities Board of India (SEBI), the Telecom Regulatory Authority of India (TRAI), and the Competition Commission of India (CCI).

- International Forum of Independent Audit Regulators (IFIAR) also stipulates to keep practicing auditors out of the regulatory mechanisms.
- Formal independence of the regulator is necessary to maintain trust and public confidence and this mandates keeping the ICAI away from NFRA.
- **Importantly** - CAs elect members of the ICAI's council to represent their interests, and not the interests of investors, creditors and other stakeholders.
- Allowing ICAI representatives to have a say in the working of the NFRA is like letting the fox guard the hen-house.

Impact of Judicialisation of the Economy

Context: In recent times Judiciary has an adverse impact on the country's GDP and employment.

- To address this issue union finance ministry has called on the legal scholars.

SC decision's effect on economy

- The Constitution has always been a source of guidance while interpreting economic policy matters, but on several occasions the Supreme Court has not been able to keep pace with the changing policy regime.
- The most recent examples of this are
 1. Affirming a stricter standard of patenting might impact innovation in the pharmaceutical industry.
 2. An unconstitutional imposition of a tax can hit the automobile industry.
 3. A ban on selling liquor near highways may affect the tourism industry.
 4. The shock waves of the quashing of coal block allocations are still being felt throughout our banking system as well as power, metal, steel and mining industries.
- Many of these decisions by the SC were hailed as the apex court then was battling corruption that had gripped the country at the highest levels.

concerns with SC's decision

- The government is bound by Constitutional dictats and if its actions violate Constitutional provisions, the Court can review such executive action and strike it down if necessary.
- However, when such executive action is being reviewed, the court cannot direct the government to follow a particular kind of economic policy.
- With regard to the coal it an integral part of industrial growth, then ignoring the economic impact of the cancellation of 214 out of 218 coal block licenses was undesirable and unacceptable.
- It is clear that Corruption or mala fides during the licensing process, proved beyond doubt, cannot be tolerated.
- But if SC cancels licenses only based on an apprehension of some wrongdoing the economy and people suffer
- Article 14 (equality before law and equal protection of law) of the Constitution is a safeguard against arbitrary government decision-making, but there are grave dangers if judiciary continues to traverse in alarmist path.

measures needs to be taken

- India is on the road of economic growth in such an environment it becomes the bounden duty of the Court to have the economic analysis and economic impacts of its decisions.
- The Supreme Court can't be insensitive to the potential economic impact that its decisions might have, especially when there is no statutory violation or the violation is, at most, of a technical character.
- Thus the court needs to avoid that particular outcome which has a potential to create an adverse effect on employment, growth of infrastructure or economy, or the revenue of the state.
- At the same time legal and economic professionals need to build the necessary theoretical framework for assisting the Supreme Court.

Findings on Urban Development by ASICS

In News: 5th edition of Annual Survey of Indian City Systems (ASICS) has been released.

About survey

- ASICS is a health diagnostic of Indian cities, the better a city scores, the better it stands to provide its citizens high quality of life in the medium to long term.

- It evaluates India's city-systems - The complex, mostly-invisible factors (such as laws, policies, institutions, institutional processes) that underpin urban governance and strongly influence the quality of life in India's cities.
- ASICS aims to provide a common frame of reference for political and administrative leaders, business and academia, media and civil society, in different cities to converge on their agenda for transformative reforms.
- Janaagraha Centre for Citizenship and Democracy a non-profit organisation conducts ASICS and releases its results.

Key findings

- The ASICS score (on a scale of 0 to 10) gives a measure of the health of a city's governance and ability to deliver on quality of life.
- The scores for Indian cities come in the 3.0 to 5.1 range, whereas both London and New York score 8.8, and Johannesburg 7.6.
- Pune, Kolkata and Thiruvananthapuram, which appear in that order, occupied the top three positions in 2016.
- Pune has undertaken some AMRUT reforms and has improved the share of its own revenue in total expenditure and raised the average per capita capital expenditure for the last three years.
- Mumbai has gone down the pecking order, to 9th position in 2017 from its 2nd position in 2015.
- Chandigarh occupies the second lowest rank of 22 and Bengaluru is at the bottom of the list it has declined from rank 12 in 2015 to 23 in 2017, where Chennai has gone from rank eight to 19.

challenges faced by urban cities

- **Pune** - Even though Pune has secured 1st position it lacks a sanitation and mobility plan and the other administrative reforms.
- **Mumbai** - The city's average per capita capital expenditure for the last three years has gone down despite its robust revenue stream, being the only city whose own revenue exceeds its total expenditure.
- Despite carrying a gargantuan commuter load, it has no comprehensive mobility plan and it has not carried out many of the urban reforms envisaged in AMRUT.
- **Chennai** - It lacks resilience and sanitation plans and a land titling law.
- Proper titles for property owners create an incentive to pay property taxes, raising revenue.
- Expectedly, the share of its own revenue in its total expenditure has gone down.
- **Chandigarh** - The city has hardly any urban local government worth the name and the share of its own revenue in its total expenditure is next to zero.
- **Bengaluru** - The city is rapidly running out of water and has some of the worst traffic jams imaginable.

concerns with the survey results

- The survey notes that a large part of the missing policy initiative to set things right must come from State governments.
- Due to the result of in-migration by the day urban landscapes get bigger, in the last three years (2015-17) 20-odd leading Indian cities have progressed at a snail's pace in improving their level of governance.
- Thus urban local government has to be empowered, professionally run and have a mechanism whereby an involved citizenry can claim ownership and demand answers.

INTERNATIONAL AFFAIRS

US Fed Interest Rates Hike

Context: U.S. Federal Reserve again raised its benchmark short-term interest rate by 25 basis points to 1.75%, the highest in a decade.

- This monetary tightening is driven by the confidence in the markets, but there are inherent risks which call for caution.

trend in US monetary policy

- The 2008 economic crisis pushed central banks worldwide to cut interest rates to historic lows in order to overcome recession.
- These loans were facilitated by public borrowings and monetary policy easing and hence had to be serviced at some point in the future.

- So, US Federal Reserve (which control's monetary policy), has been tapering liquidity lately, as the US economy seems to have recovered fully.
- While the current increase is only the 6th since the financial crisis of 2008, the trend ahead seems unambiguous for further increases.
- Notably, US economy is projected to register strong growth ahead.
- The resultant inflationary pressures might push Fed rates further for the next 2 years.

its impact been

- To reverse the post-2008 liquidity easing, the Fed and other central banks have initiated normalisation of monetary policy.
- The impact of these on the wider credit markets is slowly beginning to show in the markets.
- The “interbank lending market” has been directly influenced.
- Significantly, the benchmark “London Interbank Offered Rate” (LIBOR), at which international banks lend to each other has also been increasing.
- LIBOR has risen for more than 30 consecutive sessions and is currently at its highest since the financial crisis.
- Also, the corporate debt market has clearly been impacted.
- The rising rates could adversely affect the capacity of private firms to service their debt.

challenges

- **Debt Default** - The risk of default by private borrowers has been flagged by various organisations recently, including the IMF.
- Notably, private corporations attracted by ultra-low interest rates had heavily loaded up on debt over the last decade.
- Also, some companies borrowed heavily from across the borders, thus making them prone to exchange rate risks as well.
- Ironically, the 2004-2006 period saw the Fed raising rates to tackle inflation.
- But it ultimately led to a mass default of mortgage debt and precipitated the 2008 crisis.
- **Trade Protectionism** - US President Trump's steep tariff raise against imports from China had recently forced down stock values across markets.
- These trade wars will clearly have a negative impact on global growth.
- Corporate earnings and these policy uncertainties seem to be a long haul.
- **Capital Flux** - Rising interest rates would also see capital outflow from emerging markets due to liquidity crunches.
- This is particularly a concern for India.

India's Stance on Tibetan Refugees

Context: Indian government has planned to shun Tibetan community in India, to ease tensions with China.

- Indian foreign policy establishment should reassess seeing the Tibetan population in India as a strategic tool.

recent irritants in India-China ties

- India-China ties have deteriorated over the past few years.
- These have notably been for a number of reasons unconnected to the Dalai Lama and the Tibetan population in India.
- It includes border incursions, including the standoff at the part of Doklam claimed by Bhutan.
- India's strategic shift in line with the U.S.'s Indo-Pacific pivot that targets China is another irritant.
- China constructs 'deep-pocket' inroads into South Asia.
- Besides, the differences on the international stage, including over the India's Nuclear Suppliers Group membership and terror designations to Masood Azhar are some of the other concerns.

India's plan in this regard

- India has planned to stay away from events that commemorate the 60th anniversary of the Dalai Lama's 1959 flight to India.
- This has led to the cancellation of several public events related to Tibet.
- This is seen as a bigger error as the government has planned to use Tibetan refugees in India as a card in its relations with China.

concerns of Tibetan population

- China is investing huge sums of money for infrastructure investments in Tibet Autonomous Region (TAR) albeit at the cost of its **environment**.
- Tibet's downtown Lhasa has all the trappings of a modern city.
- But this is by destroying the unique Tibetan **culture** and mainstreaming Chinese culture into the region.
- These are notably leading to significant **demographic shift**.
- The outflow of refugees from Tibet has been curtailed by the Chinese authorities by convincing Nepal to close a popular route.
- Many third generation Tibetans settled in India have no idea about their **motherland** and India's attitude towards giving them citizenship has been stern.
- In recent times there is also a rise in the younger and more radical "Rangtsen" (**freedom**) **groups** demanding an independent Tibet.
- The primary concern that looms over the community is that of its **future leadership**.
- This is because the present Dalai Lama is getting older and there is no firm announcement about their next leader.

India's Role

- India must refresh its overseas China policy and its domestic engagement with the Tibetan community
- India needs to take a proactive policy that takes into account these new realities.
- There is an urgent need for community outreach, surveys and a referendum.
- If necessary, mapping what the Tibetan community in India wants in its future could be considered.
- In this context, India must reconsider its citizenship laws, specially for those who want to make India a permanent home.

Freedom of Terrorists in Pakistan

In News: Global pressures and sanctions were levied upon Pakistan to act against terror groups.

- Despite of international sanctions Lashkar terrorist Hafiz Saeed has remained largely free in Pakistan.

international pressures on Pakistan

- Financial Action Task Force (FATF) is an inter-governmental body which has set standards for regulatory measures to combat money laundering and terror financing.
- The Financial Action Task Force (FATF) Plenary decided to put Pakistan back on the "grey list".
- By this Pakistan will subject to direct monitoring and intense scrutiny by the International Co-operation Review Group (ICRG) on terror financing, pending further review in June 2018.
- China and Saudi Arabia voted against Pakistan at the FATF, and India succeeded in shaping global opinion against Pakistan.
- The US has compelled Pakistan to initiate stringent action against terror groups.
- For which US piloted a resolution against Pakistan to put it in the global terror finance watch list.

Hafiz Saeed in Pakistan

- Hafiz Saeed is the founder and foremost leader of the Lashkar terrorist group.
- In 2008 Lashkar-e-Taiba (LeT) terrorists killed more than 150 people at multiple locations across Mumbai.
- Despite international sanctions on the Lashkar and sustained global pressure on Pakistan to act against terrorist groups, Hafiz Saeed has remained largely free.
- He intends to join mainstream politics and is scheduled to release the manifesto of his party, Milli Muslim League.
- He has also challenged government's decision in court for freezing his bank accounts and taking over assets linked to his organisation under the Anti-Terrorism (Amendment) Ordinance, 2018.

Pak's Action on terror groups

- Lashkar-e-Taiba (LeT), Jamaat-ud-Dawa (JuD) and Falaah-i-Insaniyat Foundation (FIF) are placed under Anti-Terrorism Act, 1997.
- They have also attracted sanctions under the United Nations Security Council Resolution and have been dealt accordingly.

- To avoid grey-listing, Pakistan promulgated an Ordinance amending the Anti-Terrorism Act, 1997, to include terrorist organisations listed by the UNSC.
- Consequently, JuD and FIF were declared as proscribed groups, and all their properties in Pakistan-occupied Kashmir and Gilgit-Baltistan were confiscated.
- Election Commission of Pakistan acted on a recommendation by the Pakistan Interior Ministry, citing Milli Muslim League's (MML) links with banned militant outfits.

Concern for global peace

- Recently Islamabad High Court set aside the Election Commission's resolution refusing registration for JuD's political front, (MML).
- Following the HC order MML can contest the parliamentary elections scheduled for July 2018.
- Pak's action against the JuD and FIF was aimed at evading grey listing by the FATF which had created a turmoil in the country.
- Lashkar has long been considered a "good" terrorist group by the Pakistan army, which has used it as a proxy against India and Afghanistan.
- An influential section in the Army reportedly believes that Hafiz Saeed is too big taking him on directly will have unmanageable consequences.
- Thus Limited action against Saeed's groups is unlikely to satisfy the FATF.

Concerns with India's Export Subsidies

Context: The US has recently challenged in the WTO almost all Indian export subsidy programmes. This calls for India to assess the real effects of export subsidies and consider other effective options for export promotion.

exception provided for India

- India was among the 20 developing countries included in Annex VII of the *Agreement on Subsidies and Countervailing Measures* (SCM Agreement).
- This allowed it to use export subsidies as long as per capita Gross National Product (GNP) had not crossed \$1,000, at *constant 1990 dollars*, for 3 consecutive years.
- This was provided to the developing countries for phasing out export subsidies.
- It is an exception under the "special and differential treatment".
- India thus had the flexibility to use export subsidies until 2015.

Contentious Issues

- India had crossed the \$1,000 GNP per capita threshold in 2015.
- India must have eliminated export subsidies immediately upon crossing the threshold.
- The complaint now is that India is violating its commitments under the SCM Agreement.
- But in Doha negotiations, India and several other "special provision" countries sought an amendment of the agreement.
- The demand was to enable them to get a transition period.

India's export subsidies

- Contrary to the pronouncements made in the Foreign Trade Policy, the government has continued to increase its outlays on export promotion schemes.
- In 2016-17, the total outlay on export promotion schemes was around Rs. 58,000 crore.
- This is an increase of more than 28% in 3 years.
- The Merchandise Exports from India Scheme (MEIS) was introduced to promote exports.
- This was done notably by offsetting the infrastructural inefficiencies faced by exports of specified goods and to provide a level playing field.
- The scheme initially covered 4,914 tariff lines and was subsequently increased to cover 7,914 tariff lines.
- In recent months, there have been expansions of the scheme.
- This has increased the total outlay on the scheme to nearly 60% over the level in 2016-17.

needs to be done

- India's export promotion schemes face an uncertain future after the US decision to challenge their legality in the WTO.
- This is not the first time that the U.S. has put India's export promotion schemes under the scanner.
- Moreover, the utility of export subsidies to promote exports has long been questioned.
- The real impact of these subsidies has never been clearly measured.

- But it has been quite evident that they have benefited the rent-seekers.
- There is, therefore, a strong case for the government to invest in trade-related infrastructure and trade facilitation measures.
- Only these can deliver tangible results on the export front.

India's argument

- When SCM Agreement was implemented in 1994-95, countries with GNI higher than \$1,000 got 8 years to get rid of their export subsidies.
- India argues that it is also entitled to an 8-year phase-out period and would put this forth in the discussions it has with the US.
- But obviously the two situations are not comparable.
- Essentially, the phase-out period was extended to give comfort to members when the pact kicked in.
- But more than two decades have passed since then.
- India's earlier efforts, to establish that it would be fair to extend the same dispensation to all, have not borne fruit yet at the WTO.

way forward

- The least that India should have done to prepare for the eventuality was to have a contingency plan ready.
- Nevertheless, it generally takes at least a couple of years for a dispute at the multilateral forum to run its course.
- India has to use this time effectively to draw up alternative schemes.
- Wide-ranging discussions with industry and related ministries for looking at possible alternatives to the export subsidy schemes are essential.
- The options may include technology upgrading funds, capital expenditure subsidies, and funds for research and development.
- Various ministries should cooperate with the commerce ministry in deciding ways to extending support to exporters without violating WTO rules.

Constant 1990 dollars

- The purchasing power of the dollar changes over time due to inflation.
- Constant dollars are used to adjust for these effects of inflation.
- This is done by converting economic information into a standard era dollar term, such as 1990 dollars.
- Constant dollars are used to compare economic activity in different time periods.

Agreement on Subsidies and Countervailing Measures

- The SCM Agreement addresses two closely related topics:
 1. multilateral disciplines regulating the provision of subsidies
 2. use of countervailing measures to offset injury caused by subsidized imports
- It strengthens discipline on trade distorting subsidies given by governments to give their firms an unfair competitive advantage.
- All countries that become members of the WTO will automatically be subject to the Subsidies Agreement.

Federation of Indian Export Organizations (FEIO)

- FEIO is the **apex body** of export promotion councils, commodity boards and export development authorities.
- It was setup in 1965, **under the aegis of Ministry of Commerce.**
- It facilitates the redressal of exporter's problem by taking up them with concerned authority.
- FIEO confers **NiryatBandhu** and **Niryat Shree** awards to its exporters and export facilitators for their outstanding performance in exports.

Repairing ties with the Maldives

In News: The Maldivian government has decided to lift the state of emergency.

Background

- Recently the Supreme Court of Maldives ordered to release many jailed opposition leaders, Maldives government has openly refused to comply the judgement.

- Contrarily Maldives administration has declared a state of emergency for and government forces have also taken over the Supreme Court complex.
- Maldivian administration has ordered the arrest of two judges, as well as hundreds of activists and politicians including former President Abdul Gayoom, and imposed a state of emergency.
- During emergency certain rights had been restricted and general movements, services and businesses have not been much affected.

Recent decision on emergency

- The ruling Maldives administration under President Abdulla Yameen has lifted the emergency declared 45 days earlier.
- The opposition parties believe that the emergency was lifted only because present administration has established total control over the judiciary and parliament.
- Therefore, it is supposed that lifting the emergency does not automatically amount to status quo ante.

Indo-Maldivian ties

- After the announcement of emergency India made a public statements of disapproval on the emergency for which Male has reacted India's statements of disapproval were "not helpful at all".
- Recently India made a statement that the withdrawal of the emergency is "one step", and much more must be done to restore democracy in the Maldives.
- Even this statement of India has been unwelcomed by Maldives claiming that the events of the past couple of months were "internal political matters".
- With military exchanges, a free trade agreement with China and a slew of Chinese infrastructure investments in place, the ruling government clearly considers itself sufficiently insulated from any counter-moves by India.
- In this regard India has been wise to keep its counsel and not over-react to the recent events.

US-Russia Diplomatic Tussle

In News: United States had expelled Russians officials and ordered to shut Russian consulate in Seattle.

Background

- The diplomatic ties between the nuclear powers U.S and Russia continue to deteriorate.
- U.S. expelled 60 Russian officials and ordered the closure of the consulate in Seattle.
- The consulate in Seattle alone was ordered for a closure is due to its proximity to one of US's submarine bases and Boeing Aircraft Company.
- U.S. administration has given seven days for the officials and their families to leave the country.

Recent developments

- **Spy Fiasco** - Russia was suspected to be involved in a nerve agent attack on an ex-Russia spy, who was freed by a treaty and is living in exile in U.K.
- Consequently the UK expelled many Russia diplomats in a sign of protest, and US, 14 EU countries and Australia followed suit in solidarity with the UK.
- While this is the most dramatic and concerted purge since the Cold War years, it wasn't totally unexpected as tensions were already brewing underneath.
- **Election Tampering** - Even before the current expulsions, U.S. had slapped sanctions against multiple Russian individuals and entities close to Mr. Putin.
- The sanctions were in context of alleged interference in the 2016 US presidential election through covert online propaganda, including fake news.
- **Other issues** - Russia's alleged nexus with Afghani Taliban that is threatening American operations have added to the crisis matrix.
- Also, Mr. Trump accused Russia of aiding North Korean to circumvent UN sanctions and is undermining the international pressure exerted.
- EU had also voted to extend sanctions prohibiting businesses from investing in "Crimea" (which was illegally annexed by Russia from Ukraine in 2014).

US's stand on its decision

- The U.S. takes this action in conjunction with its NATO allies and partners around the world in response to Russia's use of a military-grade chemical weapon on the soil of the United Kingdom.
- US claim its actions will make the United States safer by reducing Russia's ability to spy on Americans and to conduct covert operations that threaten America's national security.
- It is believed that with these steps, the U.S. and its allies pose clear to Russia that its actions have consequences.

- United States also stated that its ready to build a better relationship with Russia, but this can only happen with a change in the Russian government's behaviour.

Russia's Response

- The Russian side has strongly rejected the accusations and offered assistance in the investigation.
- Russian Defence Ministry made it clear that all chemical weapons stockpiles in Russia had been completely destroyed in late 2017.
- This had been even confirmed by the Organisation for the Prohibition of Chemical Weapons (OPCW).
- However, Moscow's request for samples of the chemical substance used to poison the ex-spy was denied by UK.
- Moscow also expelled UK diplomats and ordered the British Council to stop its activities in Russia in response to the UK move and plans to take the same move with US.

Future Perspective

- **US Perspective** - US has been inconsistent in its stands towards Russia, as Mr Trump had continuously wavered his position vis-a-vis Russia.
- Notably, despite harsh diplomatic actions, he congratulated Mr. Putin for his electoral victory despite sharp criticism from across party lines.
- Some also feel that the expulsion of Russian diplomats was to distract investigations into Trump Campaign's collusion with the Russians during the elections.
- **Russian Perspective** - Moscow seems determined to tighten its strategic grip on global geopolitics, through all possible means to reclaim its stature.
- It may continue to influence foreign elections, undermine western forces in Syria, and Afghanistan, or even collude covertly with North Korea and Iran.
- Given the high stakes in these international engagements, it is imperative that U.S. and EU bring Russia to the negotiation tables to avert a crisis.

DEFENCE/SECURITY AFFAIRS

BrahMos Tested with an Indigenous Seeker

In News: BrahMos missile was recently flight-tested successfully for the first time with an indigenous seeker.

BrahMos missile

- BrahMos is a supersonic cruise missile.
- It is a joint collaboration between India and Russia.
- The missile is capable of being launched from land, sea, sub-sea and air against surface and sea-based targets.
- Its range was initially capped at 290 km as per obligations of the Missile Technology Control Regime (MTCR).
- But since India's entry into the club, the range has been extended to 450 km, and the plan is to increase it to 600km.
- The Army and Navy have already inducted the missile.
- The air-launched version was test-fired for the first time last year from a modified Su-30MKI aircraft.
- The submarine-launch variants are still in their testing phase.
- BrahMos was flight tested with an **Indian-made seeker** for the first time, at Pokhran test range, Rajasthan.

seeker technology

- The seeker technology is a critical technology that determines the accuracy of a missile.
- So far, the seeker technology had come from Russia.
- The technology is a closely guarded secret.
- Mastering it is a significant milestone in missile technology and would reduce import dependence.
- The seeker was developed by Research Centre Imarat (RCI), Hyderabad, in collaboration with other DRDO labs.

significance

- The missile demonstrated its supreme operational capability with the new indigenous seeker.
- The development would be a further boost to the country's security.
- **Indigenous** - It was developed jointly by BrahMos Aerospace and DRDO; both companies have teamed up with the private sector.
- This is particularly with an aim to bolster in-house manufacturing capability of the missile and to propel indigenisation.
- **Export** - The test is a significant step in bolstering the export potential of the missile.
- With the successful test, several South-East Asian countries have evinced interest in purchasing the missile.
- **Geo-political** - Exports are significant especially since China has reportedly sold a high-tech missile tracking system to Pakistan.
- Both Pakistan and China are also developing Air Launched Cruise Missiles.
- The geopolitical situation is tense and recently peaked between Vietnam and Beijing.
- China threatened to attack Vietnamese posts in the South China Sea if its efforts to explore oil fields was not called off.
- Notably, Vietnam is one among many countries to have shown an interest in the BrahMos.

ENVIRONMENTAL AFFAIRS

Understanding the Basics of Forest Fire Mitigation

Context: A massive forest fire at Kisangani forest in Theni district of Tamil Nadu has caused huge causality.

- This tragedy raises several issues of approaches in fighting fires and ways of mitigating damage.

Causes of forest fire

- Forest fires may be caused by different factors like natural causes, including lightning, but 99% of the fires in the forests are man-made.
- **Encroachers** - Attempts to encroach upon forest lands, renewal of pastures or regain agricultural land at the expense of forests.
- Fire caused by poachers and timber smugglers to destroy evidence of illegal activities or merely fire by miscreants or burning of waste in illegal dumps.
- **Act of Locals** - It is also suspected that the locals might set fire in order that there may be growth of fresh grass for their cattle, or to shift cultivation patterns on the hills.
- **Careless deed** - A smouldering fire, not stamped out properly, leftover by travellers, campers and picnickers.
- It can even might be of a spark that has escaped from a deliberate one on agricultural lands or from controlled burning elsewhere.

Approaches to addressing forest fire

- **Controlled burning** - The British introduced a system of controlled burning of undergrowth in safe seasons (say, during winter), so that by summer there would be nothing left to burn.
- This is an extremely destructive practice, since it wipes out insects, small reptiles, seeds, herbs and bushes.
- **Fire Line** - This method contain the fire in compartments bordered by natural barriers such as streams, roads, ridges, and fire lines along hillsides or across plains.
- A fire line is a line through a forest which has been cleared of all vegetation, the width depends on the type of forest being protected.
- Once the blaze has burnt out all combustibles in the affected compartment, it fizzles out and the neighbouring compartments are saved.
- **Counter fire approach** - This follows setting up of a counter fire, so that when a fire is unapproachable for humans, a line is cleared of combustibles and manned.
- One waits until the wildfire is near enough to be sucking oxygen towards it, and then all the people manning the line set fire to the line simultaneously.
- The counter fire rushes towards the wildfire, leaving a stretch of burnt ground, as soon as the two fires meet, the blaze is extinguished.
- **Combination method** - This is practised in combination with fire lines and counter fire.
- This is the most practical and most widely used, is to have enough people with leafy green boughs to beat the fire out.

- **Technological approaches - In this Helicopters or ground-based personnel spray** fire retardant chemicals, or pump water to fight the blaze.
- These are expensive methods and make sense when one is protecting a human community, but are usually not practised in India.

Monitoring mechanism

- A fire anywhere in the world is detected by NASA's MODIS (Moderate Resolution Imaging Spectroradiometer) and VIIRS (Visible Infrared Imaging Radiometer Suite) satellites.
- Then Forest Survey of India (FSI) analyses such data by overlaying the digitised boundaries of forest areas to pinpoint the location to the exact forest compartment.
- The FSI relays news of the fire to the concerned State, so that the Divisional Forest Officer (DFO) in charge of the forest where the fire is raging is informed.
- Earlier the time lapse between spotting the fire and the news reaching the DFO was five to six hours, but this has been reduced to about two hours recently.
- Meanwhile, news of the fire would have reached the DFO from his guards in watchtowers and on patrol and the DFO decides whom to deploy.
- There will be a master fire control room which is informed and which sends firefighters from local fire crew stations to fight the blaze.

Shortfalls in mitigating forest fires

- In India Forest departments face a huge constraint of funds, major amounts of funds are used for frivolous purposes like 'planting forests', instead of investing in mitigating infrastructures.
- While communication and response time have been cut down, the actual numbers of Forest Department personnel that are sent to put out fires are woefully inadequate.
- Contract fire fighters with inadequate training are recruited due to corrupt officials and political parties.

Enhancing mitigation efforts

- Respective Governments need to vastly increase the number of firefighters as well as equip them properly with adequate gears and other essentials.
- Seasonal labour with adequate training can be contracted during the fire season to fill gaps of fire fighters, Local villagers would be the best resource.
- More Forest Department field staff could be hired to put out fires during the fire season and to patrol the forests during other times.
- Recruitment of field staffs and investments in equipments must be done by discontinuing the claimed 'forest plantations', this would help rejuvenation of fire-stressed forest ecosystems.
- Giving access to the public to reserve forests would have a salutary effect on the quality of life and the quality of field researchers available within the country.

Diclofenac Threat to Vultures

In News: The 104 birds bred at Rani, Assam face a serious threat by Diclofenac drug used in cattle.
vulture population in India


- India hosts 9 vulture species, 5 of them the highly endangered Gyps species.
- Assam is naturally a suitable habitat for vultures.
- It is home to 6 species, including winter visitors from the Himalayas — the Himalayan and Eurasian griffons.
- The Vulture Conservation Breeding Centre (VCBC) in Assam at Rani, Guwahati has 104 vultures, brought in as chicks.
- It has 30 adults and sub-adults: all oriental white-backed and slender-billed.
- These are 2 of the 6 species found in Assam that are old enough to be set free.
- The vulture population in Assam is presently battling toxic chemicals in livestock carcasses, due to Diclofenac use.

diclofenac affect vultures

- Diclofenac is a painkiller, usually injected to cattle.
- The digestive system of vultures is so evolved.
- This makes it possible to tolerate bacteria and natural toxins in putrefying meat.
- But they are vulnerable to chemicals such as diclofenac.
- Diclofenac present in the carcasses of cattle, injected as a painkiller, finds way into the vulture.

DICLOFENAC DEBACLE

- > In 1991 diclofenac was introduced in the country
- > Animals were given injected doses of the drug
- > Vultures, which scavenged on carcasses of animals treated with diclofenac, suffered renal failure and died
- > From 4 crore, the number of vultures in the wild dwindled to 1 lakh in 2007
- > The Centre banned veterinary use in 2006, but cattle owners procured the drug illegally



Challenges

- **Diclofenac** - Diclofenac for veterinary use was banned in 2005 but it was continued to be made for humans.
- BNHS pressured the government into banning the vials (containers) of 30 ml or more in 2015.
- Humans need 3-5 ml while only 30 ml or more works for cows.
- But untrained veterinarians use the 30 ml vials for veterinary use, with fatal consequences for vultures.
- The last of the 2015 stocks of the big vials expire by December 2018.
- This is thus delaying the freedom (release) for adult vultures being reared in captivity in the State.
- **Pesticides** - Even after the expiry of diclofenac stocks, there is no guarantee that the birds will be safe.
- The rampant use of pesticides by farmers and more than 70,000 tea gardens is another concern.
- Villagers generally poison carcass of dead animals with pesticides to kill dogs, jackals and leopards that are a danger to livestock.
- Unfortunately, vultures that feed on these carcasses become the unintended victims.
- Recently, around 30 vultures, most of them Himalayan griffons, died in Assam, after feeding on the poisoned carcass of a goat.
- **Life cycle** - Vultures take time to mature, pair for life, breed once a year, and live up to 70 years.
- This extended cycle make captive breeding efforts challenging.

Efforts to address this

- The VCBC takes various efforts to save the birds by reducing their exposure to the fatal drug.
- Mutton is the only food given at the VCBC and goats are kept for 10-12 days before the feeding.
- This is to ensure that traces of any toxic painkiller or other chemicals are flushed out.

Vulture Conservation Breeding Centre (VCBC)

- VCBC is an ex-situ conservation initiative.
- The centers were setup by Bombay Natural History Society (BNHS).
- Four such centers exist now at Haryana, Assam, West Bengal and Madhya Pradesh.
- Except these centers, Central Zoo Authority (CZA) manages five breeding centers.
- A typical VCBC has aviaries of different types for breeding, nursing, looking after sick and injured vultures and colonies for vultures to live in.
- Similar to the ex-situ conservation BNHS also provides in-situ conservation in the name of Vulture safe zones (VSZ).
- A VSZ is a geographical area, the natural habitat of wild vultures, of at least 100 Km radius made free of the presence of the drug diclofenac in animal carcasses, the major food of vultures.

Pink Bollworm Infestation in Bt Cotton

Context: India is the only Bt cotton-growing country facing the problem of pink bollworm infestation.

- A look into the various factors that make it a problem unique for India and the consequences therein is essential.

Infestation concern

- The pink bollworm infestation is plaguing cotton farmers.

- Monsanto is an American agro-tech company that released the Bt cotton in India.
- Bollgard 2 or BG-2 is Monsanto's second generation insecticidal technology for cotton.
- BG has a single bacterial gene called CryA1C, and BG-2 has CryA1C and Cry2AB2.
- Both are designed to protect the crop against pink bollworm.
- But the pest has grown resistant to the toxins produced by this trait.
- BG began failing against the pest in 2009, and BG-2 began failing in 2014.

Significance

- **Cost** - As a result of this, farmers now spend more on pesticides to control infestations.
- This, along with the high cost of Bt seeds, is driving farmers to deprivation.
- **India** - Interestingly, none of the other 14 Bt cotton-growing countries have seen this resistance.
- China still successfully controls pink bollworm with first-generation Bt cotton.
- The U.S. and Australia are moving on to third-generation BG-3 without having faced this problem.

Unique problem for India

- Hybrids are crosses between two crops that often see higher yields than their parents, in a genetic phenomenon called heterosis.
- All other Bt cotton-growing countries mainly grow open-pollinated cotton varieties rather than hybrids.
- But India restricted itself to cultivating long-duration hybrids since the introduction of Bt cotton in 2002.
- This is said to be the reason for the pink bollworm growing resistant to toxins in India.

Factors behind

- **Agreement** - Monsanto licensed its BG and BG-2 traits to Indian seed companies.
- The agreement restricted the introduction of these traits to hybrids only.
- **Cropping pattern** - When Monsanto introduced Bt cotton in India, the technology was so popular.
- Many cotton farmers shifted to it in large numbers.
- However, absence of open-pollinated Bt option forced many farmers to shift en masse to hybrids.
- From 2002 to 2011, the area under cotton hybrids rose from 2% in north India and 40% elsewhere to 96% across the country.
- **Seed protection** - India is the only country whose intellectual property laws have never prevented its farmers from either saving or selling seeds.
- Other countries restrict saving and selling of seeds in various degrees.
- Some countries allow farmers to reuse seeds from a protected plant variety, but not to sell them.
- In the U.S., where plant varieties are patented, the patented seeds cannot even be reused.
- **Seed Companies** - Without seed protection mechanism, several seed companies in India prefer hybrids.
- This is because unlike open-pollinated varieties, hybrids lose their genetic stability when their seeds are replanted.
- This compels farmers to repurchase seeds each year and in a way protects corporate revenues.

Consequences

- One adverse consequence is resulted from the cost of the hybrids.
- **Density** - Besides, hybrids are also bigger and bushier.
- This forces farmers to cultivate them at low densities of 11,000 to 16,000 crops per acre.
- This is suboptimal, as countries like the U.S. and Brazil plant cotton at 80,000 to 100,000 per acre.
- The low densities also drive Indian farmers to grow them longer so that they produce enough cotton.
- **Toxicity** - The introduction of the Bt gene into only one parent of Indian hybrids, as is the practice, is itself a problem.
- The resulting hybrids are homozygous, which means that they express only one copy of the Bt gene.
- They thus produce cotton bolls that have some seeds toxic to the pink bollworm and some that are not.

- Unlike this, the homozygous seeds of open-pollinated varieties in the U.S., China or Australia have 100% toxic seeds.
- The problem is homozygous hybrids allow pink bollworms to survive on toxin-free seeds when they are vulnerable new-borns.
- But this is only a hypothesis, and experiments are needed to confirm this.

Pink bollworm's effect on crops

- When all the above factors combine with the pink bollworm's biology, it creates favourable conditions for resistance.
- The pest does its most damage in the latter half of the cotton-growing season.
- It does not consume any other crop that grows then.
- So, the long duration of Indian cotton crops, between 160 and 300 days, allows this pest to thrive and evolve resistance.
- Contradictorily, other cotton-growing countries strictly terminate the crop within 160 days, arresting resistance growth if any.

Way out

- The National Seed Association of India suggested the government to encourage a move back to Bollgard.
- Notably, Monsanto has not patented BG in India.
- Farmers should move swiftly to the short-duration crop varieties.
- This is where Monsanto's first-generation Bollgard comes in.
- Seed companies cannot develop open-pollinated varieties with BG-2, but they can with BG as Monsanto did not patent BG in India.

Challenges

- **Moving back** - Some say that when the many countries are moving to BG-3, moving back to BG in India would be a bad idea.
- This is because the problem was not with the BG trait but with long-duration cotton.
- **Pests** - Even if BG-2 does not fend off the pink bollworm, it still protects against other pests like tobacco cutworm and American bollworm.
- The presence of two Bt genes in BG-2 means it will be more effective than BG in delaying resistance against these pests.
- **Resistance** - Another challenge is that even if government incentivises a return to BG, the seed companies are unlikely to stop making BG-2 seeds.
- If India cultivates both BG and BG-2, simultaneously, that may accelerate resistance among pests.
- This could trigger the emergence of new cotton pests.
- India erred by not clamping down on long-duration crops when Bt cotton was first introduced.
- At least now it must base its policy on sound science and implement it stringently.

State of Climate Report 2017

- The report is released by World Meteorological Organization (WMO).
- The report said that weather and climate disasters cost countries about \$320 billion last year.
- It also observed major monsoon floods in the Indian subcontinent and severe droughts in parts of East Africa contributing to making **2017 the most expensive year on record.**



- The North Atlantic hurricane season was the costliest ever for the U.S.
- While the hurricanes such as Irma, Harvey eradicated decades of development gains in small islands in the Caribbean, such as Dominica.
- The report also noted that two significant cyclones in North Indian Ocean- Mora and Ockhi- caused potential damage.

BIO/ HEALTH ISSUES

Solving the TB Puzzle

Context: At the recent “End TB India Summit”, PM Modi declared intent for eliminating the disease by 2025, five years ahead of the global target.

- But despite the well intentioned push from the highest levels, there are considerable challenges that make reaching the target uncertain.

concerns

- TB is a highly stigmatised and omnipresent disease in India.
- It kills over a 1,000 Indians every day despite being a curable disease.
- But approach towards the disease remains disempowering and paternalistic, and is largely oblivious of the multiple parameters involved.
- **Infrastructure** - Accurately diagnosing, recording all diagnosed cases and treating the most vulnerable communities has been challenging.
- While private sector is the dominant player for TB treatment in India, many hospitals do not have a proper TB protocol, which is worsening the situation.
- Partnerships to tackle TB with communities, the private health sector, government and other stakeholders remain weak.
- There is thus a need for an expanded and inclusive strategy for TB, backed by sufficient funding and rigorous implementation.
- **Patient** - The most troubling aspect of TB in India is the lack of patient cooperation to ensure proper and continued treatment for the full course.
- Patient continuance for treatment is a challenge because TB treatment is long drawn and affects one's earning potential drastically.
- Hence, while millions get affected, diagnosis and sustained treatment is pathetic as even accessing free treatment is financially burdening.

way forward

- **Expanding Care** - It is important to talk to TB survivors and affected communities and identify the exact hurdles for getting themselves treated.
- Expanding the treatment apparatus to vulnerable population clusters and enhancing accesses to remote terrains could help in bridging the gap.
- Simultaneously, it needs to be recognized that poor nutrition, unplanned urbanisation, and limited public awareness feed the epidemic.
- Empowering communities and making cities more liveable and healthcare more accessible and affordable for all are also essential.
- **Technical Aspects** - Drug resistance is a serious issue and calls for moving away from standardized regimes for drug selective and targeted treatment.
- High incidences of ‘multi drug resistance’ (MDR) warrants an upfront drug susceptibility test (DST) for all TB patients to identify the exact strand of TB.
- Further, new drugs that have the potential for curing the most resistant TB strains should be made available under controlled conditions.

N- TB App

- N-TB is a mobile phone-based nutrition assessment and counseling application, was unveiled in the recently concluded TB summit.
- N-TB is endorsed by the RNTCP and the World Health Organization (India).
- The app, that is to be launched on World TB day (March 24), allows healthcare workers to calculate the right Body Mass Index and nutrition levels.
- It is based on the Revised National Tuberculosis Control Program (RNTCP) released Guidance Document on nutritional care and support for patients with tuberculosis in India.
- The Center for Nutrition Studies, Yenepoya University, Mangalore provided the content for the

app and it was developed with technical support from McGill International TB Centre, Montreal.

- The theme for this year World TB day is '**Wanted: Leaders for TB-free world**'.

National Vector Borne Disease Control Program (NVBDCP)

- As per Global Burden of Disease Study, 2013 Visceral Leishmaniasis (Kala Azar) was the second largest Neglected Tropical Diseases causing mortality.
- NVBDCP, which is a part of the National Health Mission, plays a crucial role in the Kala azar elimination.
- Kala-azar elimination project is being implemented in four endemic States namely Bihar, Jharkhand, Uttar Pradesh and West Bengal.
- Directorate of National Vector Borne Disease Control Program (NVBDCP) is the central nodal agency for the prevention and control of following vector borne diseases
 1. Malaria
 2. Dengue
 3. Filariasis
 4. Kala Azar
 5. Chikungunya
 6. Japanese encephalitis
- It is one of the Technical Departments of Directorate General of Health Services, Ministry of Health and Family welfare.

TECHNOLOGICAL AFFAIRS

Banana Extract for Bettering Ice-Creams

Context: Researchers at the Columbia University have discovered that adding Cellulose Nano-Fibres extracted from banana waste could help improve ice cream.

Expected positives

- Cellulose Nano-fibrils (CNFs), which are thousands of times smaller than the width of a human hair, are extracted by grinding banana fruit stems, or rachis.
- **Slower Melting** – Adding the fibres could lead to the development of a thicker and more palatable dessert, which would take longer to melt.
- As a result, this would allow for a more relaxing and enjoyable experience with the food, especially in warm weathers.
- **Long Lasting** - CNFs were also found to increase shelf-life of ice cream, which helps in extending the expiry timelines (which is usually 6 months now).
- This is because CNF decrease temperature sensitivity changes that occur when moved to and from the freezer and thereby retards decay.
- **Low Fat** - In addition, CNFs increased the viscosity of low-fat ice cream, which improved the creaminess and texture of the product.
- Hence, CNFs could help stabilise the fat structure in ice creams and as a result could potentially replace some of the fats and perhaps reduce some calories.

MISCELLANEOUS

Harappan Necropolis – Haryana

In News: A Harappan excavation carried out by Archaeologists in Haryana has unveiled a large burial ground.

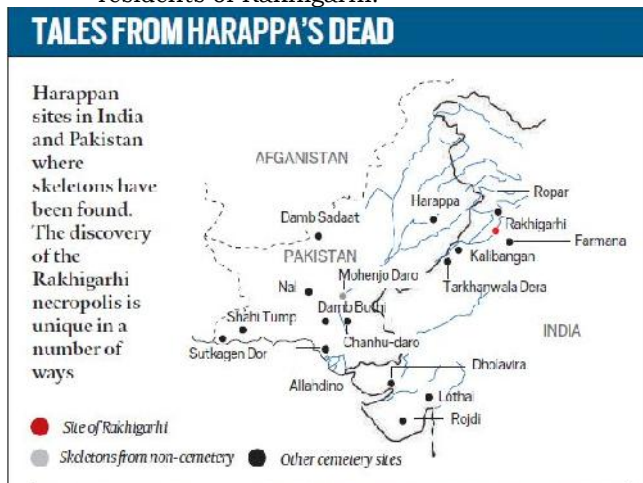
brief account of Harappan studies

- Indus Valley Civilization had been spread across a vast area of land in present day India and Pakistan (around 12 lakh sq.km).
- It is called Harappan civilization after the place (Harappa in Pakistan) where first archaeological evidences for the civilization has been found.
- Harappan studies are focused primarily on urban design, crafts and trade, funeral customs say a lot about a community, what its people value, its social hierarchy, gender relations, and how it treats its children.
- There are five big known centres of the Harappan civilisation of which three are in Pakistan namely Harappa and Ganweriwala in Punjab, and Mohenjodaro in Sindh).

- The other two important in sites are found in India namely Dholavira and Rakhigarhi.
- Some important burial grounds have been discovered in Lothal (Gujarat), Kalibangan (Rajasthan), Farmana (Haryana), Sanauli (UP).

Recent excavation

- The excavations have been carried out in place called Rakhigarhi in Haryana by Indian archaeologists, and a South Korean team.
- The necropolis, dated to between 2,500 BC and 2,000 BC, or the Mature Harappan Period, sprawls under a 1 hectare patch of land that has long been under cultivation by present-day residents of Rakhigarhi.



- The excavation yielded graves contained full skeletal remains classified as **Primary burials**.
- The researchers subcategorised the primary burials into “typical” and “atypical” cases.
 1. **Typical cases** - Single bodies buried in supine position inside a plain pit
 2. **Atypical cases** - These have brick-lined graves, multiple bodies, or prone-positioned burials.
- In others, only a few human bones were found along with votive pots classified as **Secondary burials**.
- In yet others, only pots were found, **Symbolic burials** that suggest that the person died elsewhere.

Significant findings

- The Harappan Civilization’s normative form or forms of body disposal remains unclear, since there are possibilities of diverse groups following distinctive mortuary customs.
- The recent excavations noted pit burials with multiple bodies, and prone (face down) burials as significant departures from other Harappan necropolises.
- Brick-lined burials (as opposed to plain pits) were among the most elaborately constructed graves, and possibly implied a high social or ritual status.
- The important feature was that every individual found in a brick-lined pit was determined to be female, leading theory that these women played a special role in the community.
- However, women in typical burials got fewer votive pots than men, leading the study that if there were any “discriminatory” attitudes toward women in general.
- In Rakhigarhi, buried individuals seem to have got elaborate burials with numerous grave goods.
- Two burials had been done on a bed of pottery, which may be indicative of high social status.

Copernicus Program

- Recently, India has joined Europe’s mega global arrangement of sharing data from Earth observation satellites, called Copernicus.
- Under this arrangement, both European Commission and India will mutually share the data from Copernicus Sentinel family and ISRO’s land, ocean and atmospheric series of civilian satellites (Oceansat-2, INSAT-3D) respectively.
- Copernicus is the European Union's Earth Observation Program.
- The Program is coordinated and managed by the European Commission.
- It is implemented in partnership with the Member States, the European Space Agency (ESA), and European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), the

European Centre for Medium-Range Weather Forecasts (ECMWF), EU Agencies and Mercator Océan.

- The space-based information will be used for forecasting disasters, providing emergency response, to glean land, ocean data and for issues of security, agriculture, climate change and atmosphere.



- The Copernicus emergency response mapping system was activated on at least two Indian occasions — during the 2014 floods in Andhra Pradesh and after the 2013 storm in Odisha.

INSHORT

Periyar Tiger Reserve

- Periyar Tiger Reserve is in Thekkady, Kerala, comprising the Periyar National Park and Wildlife Sanctuary.
- Besides being a tiger reserve, it is also one of the most significant Elephant Reserve in the country housing Asiatic Elephants.
- It comprises a range of tropical evergreen and semi-evergreen forests, moist deciduous forests, grasslands and eucalyptus plantations.
- Periyar and Pamba rivers flow through the reserve.
- In 2015, the Periyar Tiger Reserve won the National Tiger Conservation Authority biennial award for encouraging local public participation in managing the Reserve.

Angkor

- Angkor is situated in Cambodia and consists of several temples, hydraulic structures like basins, dams and reservoirs, and communication routes.
- It is also known as Yashodarapura and was the capital city of the Khmer empire.
- It is one of the most important archaeological sites in Southeast Asia.
- The world-famous Angkor Wat and the Bayon temple at Angkor Thom form a major part of Angkor ruins.
- Angkor was declared as a World heritage Site by UNESCO.
- The Archaeological Survey of India had undertaken major conservation work at the Angkor Wat in Cambodia.

Congo conflict

- An ongoing conflict between the Pygmies and the Bantus has displaced 67,000 people in Congo.
- Cohabitation has never been easy between the two communities, with the land-owning Bantus accused of exploiting the hunter-gatherers pygmies.
- Bantu peoples is used as a general label for the 300–600 ethnic groups in Africa who speak Bantu languages
- The 'Pygmy' peoples of central Africa are traditionally hunter-gatherers living in the rainforests throughout central Africa.
- The Pygmies' nomadic lifestyle is increasingly under threat from deforestation, mining and extensive farming by the Bantus

Pacific Garbage Patch

- The vast dump of plastic waste swirling in the Pacific ocean is now bigger than France, Germany and Spain combined —is growing rapidly.
- The immense accumulation of bottles, containers, fishing nets and microparticles in the ocean is known as the **"Great Pacific Garbage Patch" (GPGP)**.
- The dump now contains around 1.8 trillion pieces of plastic, posing a dual threat to marine life.
- 1. Microplastics, tiny fragments of plastic smaller than 50mm in size that make up the vast majority of items in the GPGP, is a major contributor to bioaccumulation in the food web.

2. The other environmental impact comes from the larger debris, especially the fishing nets. The net fragments kill marine life by trapping fish and animals such as turtles in a process known as **'ghost fishing'**.
 - At present, about 80,000 tons of buoyant plastic is in the GPGP.

Kawal Tiger Reserve

- Kawal tiger reserve is situated in Northern Telangana state.
- The wildlife sanctuary in Kawal is the catchment area of river Godavari and Kadam.
- The indicator species of the sanctuary are Tiger and Nilgai.
- The reserve forms the southern end of the central Indian Tiger Reserve Landscape.
- It is also linked to the Tadoba Andhari Tiger Reserve in Maharashtra to its north and Indravathi Tiger Reserve to its east
- The forest area found here is the southern tropical mixed dry deciduous forest and dry teak forest.

Integrated Scheme for Development of Silk Industry

- The Cabinet Committee on Economic Affairs had given its approval for Central Sector Scheme "Integrated Scheme for Development of Silk Industry".
- The core objective of the scheme is to improve the productivity and quality of silk through R&D intervention.
- It is expected to increase the silk production from the level of 30348 MTs during 2016-17 to 38500 MTs by end of 2019-20
- It will promote Women Empowerment and livelihood opportunities to SC/ST and other weaker sections of the society.
- It will be implemented by the Ministry through Central Silk Board (CSB).
- The Scheme has four components,
 1. Research & Development (R&D), Training, Transfer of Technology and IT Initiatives
 2. Seed Organizations and farmers extension centers
 3. Coordination and Market Development for seed, yarn and silk products and
 4. Quality Certification System (QCS) by creating amongst others a chain of Silk Testing facilities, Farm based & post-cocoon Technology Up-gradation, and Export Brand Promotion
- Brand Promotion of Indian silk will be encouraged through quality certification by Silk Mark.
- Efforts will be strengthened for collaborating with National Institute of Fashion Technology and National Institute of Design for support on design and product development.

Research Centre Imarat (RCI)

- The indigenous seeker technology in the recently tested BrahMos Missile was developed by the RCI.
- RCI is situated in Hyderabad in the state of Telangana.
- RCI has been considered as **'Avionics Hub'** of DRDO.
- It is one of the three DRDO Labs of **'Missile Complex'**
- RCI is a leading laboratory of Defense Research Development Organization (DRDO) which is responsible for development of missile system
- It is also responsible for design, development and participation in production of missile avionics like Inertial Navigation Systems, Control Systems, Imaging Infrared Seeker, Radio Frequency Seeker and Power Supply System.
- Telemetry and Telecommand systems are also developed in RCI to evaluate missile performance during its development phase.
- RCI focus is to design and develop world class, State-of-the-art missile technologies which will produce precise and reliable indigenous weapon systems to strengthen country's Armed Forces.

Sarora Paintings

- Sarora paintings are painted by **Lanjia Saoratribals** in the mud walls of their homes.
- The tribe inhabits the great Bansadhara River in southern Odisha.
- The tribe finds mention in the Hindu epic Ramayana with Savari, Lord Ram's devotee.



- A Saora painting is called **Idital** and the person who creates it is known as the **iditalma**.
- Saura paintings are done to appease their presiding deity, Edital, who is invoked during all rituals and celebrations.
- Each painting has a rectangular frame, and features icons of deities, or those drawn from nature.

Colors used	According to convention, only geru (red earth) and white(from rice paste)
Iconography	Stick figures
Motifs	People, trees, sun, moon, animals, village activities etc

- The frequently featured motifs include Labasum (the earth god), Jodisum (the village deity), Manduasum (the sun god) and Jananglosum (the wind deity).

NikshayAsudhi Portal

- On World TB day, the health secretary released the TB INDIA 2018 Report, National Drug Resistance Survey Report, NikshayAushadi Portal and shorter regimen for Drug Resistant TB.
- NikshayAushadhi is a logistics and supply chain management solution portal.
- It will enable real time visibility into stock status at all levels and enable forecasting, quantification & further distribution of TB drugs and diagnostics.
- It is not to be confused with NIKSHAY portal which a web based solution for monitoring of TB patients.
- Also Nikshay portal is to monitor Revised National Tuberculosis Programme (RNTCP) effectively that was developed by National Informatics Centre (NIC).

e-Asuhadhi

- Health Informatics technologies help to improve quality of healthcare, reduce medical errors, reduce healthcare costs, increase administrative efficiency, and expand access to affordable healthcare.
- e-Aushadhi is one among such health informatics technology developed by Centre for Development of Advanced Computing.
- Each state government has its separate e-asuhadhi portal.
- e-Aushadhi' deals with the management of stock of various drugs, sutures and surgical items required by **different district drug warehouses**.
- The main aim is that all the required materials/drugs are constantly available to be supplied to the user district drug warehouses without delay.

Resource Efficiency

- NITIaayog initiated implementation of strategy on Resource efficiency.
 - Resource efficiency means using the Earth's limited resources in a sustainable manner while minimizing impacts on the environment.
 - In 2017, the NITI Aayog along with EU Delegation to India released the Strategy paper on Resource Efficiency (RE).
 - The objective of the RE Strategy is
1. To make recommendations for enhancing the resource-use efficiency in the Indian economy and industry

2. To develop indicators for monitoring progress
3. To create an ecosystem for improving the resource security and minimizing environmental impacts.

Mount Etna

- Mount Etna was sliding towards the Mediterranean Sea at a rate of 14mm/year.
- Mount Etna on the Italian island of Sicily is Europe's most active volcano.
- It is believed that for the first time "basement sliding" of an entire active volcano has been directly observed.
- It is moving down a very gentle slope due to its position on a base of relatively weak, loose sediments.

Illegal Animal trade

- Some of the animal products are driving the multi-billion dollar illegal trade in animal parts which are touted to cure anything.
- Examples of such animal products are dried seahorse, sloth claws, manta ray gills, and macaque embryos.
- Some of them are key constituents in centuries-old traditional cures prescribed by healers in Asia and Africa, others are fictional cure-alls sold by quacks.
- The scales of the pangolin, or scaly anteater, are sold raw or fried in Asia for as much as \$500 per kilogram for treating asthma and migraines.
- There is no scientific evidence to support any supposed properties of pangolin scales.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora is an international intergovernmental agreement to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- TRAFFIC is the wildlife trade monitoring network, which is a non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

Paliyar tribes

- After a relentless struggle, Paliyartribals on Kodaikanal and Sirumalai hills have got the legal rights to access reserve forests for their survival and livelihood.
- The aboriginal tribes live in the clad of Western Ghats.
- They live as a scattered and unorganized smaller group in the foothills.
- In olden days, these people lived in small cave like structures called Kalazhais and later on constructed a small hut in the forest.
- Paliyar is a contemporary hunting and gathering society once lived in the interior forest.

Principle scientific advisor to government of India

- K Vijay Raghavan, one of the most distinguished biologists of the country, was appointed Principal Scientific Advisor to the Government of India.
- The Principal Scientific Advisor (PSA), a post created in 1999, is the topmost advisor to the government on all matters related to scientific policy.
- The office of the PSA is one of the three scientific bodies the government relies on for advice on matters relating to science.
- It acts as the interface between scientific institutions and the government.
- The other two are Science Advisory Council to the Prime Minister (SAC-PM) and Science Advisory Council to the Cabinet (SAC-C).
- Both SAC-PM and SAC-C were not reconstituted under the present government.

Down syndrome

- A 'National Conference on Down Syndrome' was organized by the National Trust under Ministry of Social Justice and Empowerment recently.
- Down syndrome is a chromosomal condition associated with intellectual and learning disabilities.
- Delayed development and behavioral problems are often reported in children with the syndrome.

Causes & Risk Factors

- **Causes:** Down Syndrome is not related to race, gender, economic status, or religion. It is a genetic mutation that causes an extra copy of the 21st chromosome to be present in the developing embryo/fetus.
- **Risk Factors:** Age of the mother at the time of pregnancy is a risk factor. At 25, only 1 in 1250 mothers will have a baby with DS. By 35, the defect is 1 in 400 and at 45, 1 in 30 will be Down Syndrome.
- The United Nations General Assembly in 2011 declared 21st March of every year as World Down Syndrome Day (WDSD) to create awareness about this disease.
- The National Trust is a statutory body set up by an Act of Parliament for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities under the Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice & Empowerment.

E-tribes India

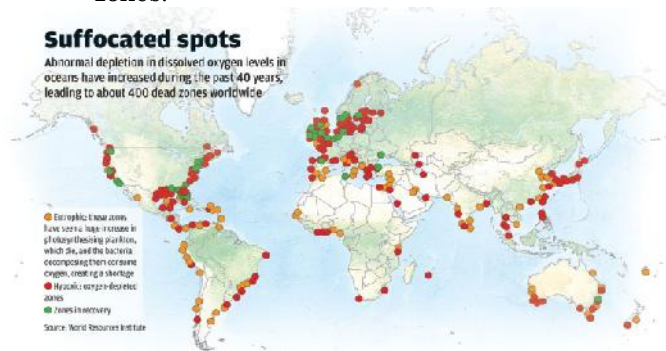
- Ministry of tribal affairs will soon launch e-Tribes India.
- The Launch of e-Tribes includes Tribal Cooperative Marketing Development Federation of India's (TRIFED) websites www.tribesindia.com, www.trifed.in and Retail Inventory Software and M-commerce app.
- The TRIFED under the Ministry of Tribal Affairs is going Digital as per the vision document of the Ministry of Tribal Affairs.
- It will also include the launch of 'Tribes India' Banners at Amazon, Snapdeal, Paytm&GeM.
- This initiative will lead to expansion of tribal commerce and the availability of tribal products over large area, reaping greater benefits for tribal artisans.
- TRIFED also organizes exhibitions like National Tribal Craft Expo called "AadiMahotsav".
- TRIFED is a PSU under Ministry of Tribal Affairs with a objective is to promote tribal art and craft for the benefit of tribal artisans of the country.

Idumishmis

- In a unique initiative, the famous MadhavpurMela in Gujarat saw its first-ever cultural integration with the North-East.
- The event witnessed performance of Arunachal Pradesh mishmi tribes and Haroba folk dance of Manipur.
- The Idu-Mishmi is a major sub-tribe of Mishmi group.
- Their brother tribes are namely the Digaru-Mishmi (TARAONS) and the Miju-Mishmi (KAMANS).
- They inhabit the Lohit district, Dibang Valley district and Lower Dibang Valley district in Arunachal Pradesh.
- They are of mongoloid stock and speak the Tibeto-Burman language.
- Idus are expert in handicraft and weaving.

Dead Zones

- The Gulf of Mexico's annual "dead zone" will likely persist for decades.
- Hypoxic zones or Oxygen minimum zones (OMZ) are areas in the ocean of such low oxygen concentration that animal life suffocates and dies, and as a result are sometimes called "dead zones."



- In dead zone area most marine life either dies, or, if they are mobile such as fish, leave the area.
- Habitats that would normally be teeming with life become, essentially, **biological deserts**.
- One of the largest dead zones forms in the Gulf of Mexico every spring.
- Nutrients such as nitrogen flow from North America's Corn Belt through streams and rivers before ending up in the Gulf.
- The dead zones or Oxygen Minimum Zones (OMZ) in the Arabian Sea have been growing in size.
- It is the thickest and the most intense OMZ among the world's oceans and covers an area of around two million sq km.

Mega fauna

- The word 'mega fauna' means big (mega) animals (fauna).
- At present, there are only 101 species of big, land-dwelling wild animals in the world.
- Biologists warned that this modest number of species is sure to shrink to double digits, and could continue to diminish at an alarming rate.
- Two-thirds of these iconic creatures are listed as threatened with extinction by the International Union for the Conservation of Nature (IUCN).
- The Saharan Addax antelope, Eastern Gorilla, orangutans of Borneo and Sumatra are some of the species which are in the path of extinction.
- Over the course of the last century,
 1. Lions, rhino and cheetah populations have collapsed by more than 90 %
 2. Giraffes are down by 40 % in just three decades
 3. Polar bears are forecast to lose a third of their numbers by mid-century.
- Scientists agree that Earth has entered a so-called “mass extinction event” in which species of all sizes and shapes are disappearing at 100 times the normal rate.



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