



Security / Law / Strategic affairs The DNA Technology (Use and Application) Regulation Bill, 2018

- **The DNA Technology (Use and Application) Regulation Bill, 2018** was introduced in Lok Sabha by the Minister for Science and Technology, Mr. Harsh Vardhan, on August 9, 2018. The Bill provides for regulation of use of DNA technology for establishing the identity of certain persons.
- **Use of DNA Data:** Under the Bill, DNA testing is allowed only in respect of matters listed in the schedule to the Bill (such as, for offences under the Indian Penal Code, 1860, for paternity suits, or to identify abandoned children).
- **Permission for use of DNA Data:** While preparing a DNA profile, bodily substances of persons may be collected by the investigating authorities. Authorities are required to obtain consent for collection in certain situations. For arrested persons, authorities are required to obtain consent if the offence carries a punishment of up to seven years. If the offence carries more than seven years of imprisonment or death, consent is not required. Further, if the person is a victim, or relative of a missing person, or a minor or disabled person, the authority is required to obtain the consent of such victim, or relative, or parent or guardian of the minor or disabled person. If consent is not given in either case, the authorities can approach the Magistrate.
- **DNA Data Bank:** The Bill provides for the establishment of a National DNA Data Bank and regional DNA Data Banks, for every state, or two or more states. The National Data Bank will store DNA profiles received from DNA laboratories and receive DNA data from the regional Banks. Every Data Bank will be required to maintain indices for the following categories of data: (i) a crime scene index, (ii) a suspects' or undertrials' index, (iii) an offenders' index, (iv) a missing persons' index, and (v) an unknown deceased persons' index.
- **Protection of information:** Under the Bill, the Board is required to ensure that all information relating to DNA profiles with the Data Banks, laboratories and other persons are kept confidential. DNA data may only be used for identification of the person. However, the Bill allows for access to information in the Data Bank for the purpose of a one-time keyboard search. This search allows for information from a DNA sample to be compared with information in the index without information from the sample being included in the index.
- **Retention of DNA Data:** The Bill states that the criteria for entry, retention or removal of the DNA profile will be specified by regulations. However, the Bill provides for removal of the DNA Data of the following persons: (i) of a suspect if a police report is filed or court order given, (ii) of an undertrial if a court order is given, (iii) on request, of persons who are not a suspect, offender or undertrial from the crime scene or missing persons' index. Further, the Bill provides that information contained in the crime scene index will be retained.
- **DNA Regulatory Board:** The Bill provides for the establishment of a DNA Regulatory Board, which will supervise the DNA Data Banks and DNA Laboratories. The Secretary, Department of Biotechnology, will be the ex officio Chairperson of the Board. The Board will comprise an additional 12 members including: (i) an eminent person with at least 25 years' experience in biological sciences, as the Vice Chairperson, and (ii) Director General of the National Investigation Agency and the Director of the Central Bureau of Investigation or their nominees (of at least the rank of Joint Director).
- **Functions of the Board:** The functions of the Board include: (i) advising governments on all issues related to establishing DNA laboratories or Data Banks, (ii) granting accreditation to DNA Laboratories, and (iii) developing training modules and framing guidelines for training manpower to deal with DNA related matters.
- **DNA Laboratories:** Any laboratory undertaking DNA testing is required to obtain accreditation from the Board. The Board may revoke the accreditation for reasons including, failure to: (i) undertake DNA testing, or (ii) comply with the conditions attached to the accreditation. If the accreditation is revoked, an appeal will lie before the central government or any other authority notified by the central government.
- **Obligations of DNA Laboratories:** Under the Bill, every DNA laboratory is required to perform various functions, including: (i) following standards for quality assurance in collection, storing, testing, and analysis of DNA samples, and (ii) depositing DNA samples with the Data Bank. After depositing the sample for ongoing cases, the Laboratory is required to return the biological sample to the investigating officer. In all other cases, the sample must be destroyed and intimated to the concerned person.
- **Offences:** The Bill specifies penalties for various offences, including: (i) for disclosure of DNA information, or (ii) using DNA sample without authorization. For instance, disclosure of DNA information will be punishable with imprisonment of up to three years and fine of up to one lakh rupees.

Security / Law / Strategic affairs Draft Personal Data Protection Bill, 2018

- **The Committee of Experts** on a Data Protection Framework for India (Chair: Justice B. N. Srikrishna) submitted its report and draft Bill to the Ministry of Electronics and Information Technology on July 27, 2018. The Committee was constituted in August, 2017 to examine issues related to data protection, recommend methods to address them, and draft a data protection Bill.
- **Fiduciary relationship:** The Committee observed that the regulatory framework has to balance the interests of the individual with regard to his personal data and the interests of the entity such as a service provider who has access to this data. It noted that the relationship between the individual and the service provider must be viewed as a fiduciary relationship. This is due to the dependence of the individual on the service provider to obtain a service. Therefore, the service provider processing the data is under an obligation to deal fairly with the individual's personal data, and use it for the authorised purposes only.
- **Obligations of fiduciaries:** To prevent abuse of power by service providers, the law should establish their basic obligations, including: (i) the obligation to process data fairly and reasonably, and (ii) the obligation to give notice to the individual at the time of collecting data to various points in the interim.
- **Definition of personal data:** The Committee noted that it is important to define what constitutes personal information. It defined personal data to include data from which an individual may be identified or identifiable, either directly or indirectly. The Committee sought to distinguish personal data protection from the protection of sensitive personal data, since its processing could result in greater harm to the individual. Sensitive data is related to intimate matters where there is a higher expectation of privacy (e.g., caste, religion, and sexual orientation of the individual).
- **Consent-based processing:** The Committee noted that consent must be treated as a pre-condition for processing personal data. Such consent should be informed or meaningful. Further, for certain vulnerable groups, such as children, and for sensitive personal data, a data protection law must sufficiently protect their interests, while considering their vulnerability, and exposure to risks online. Further, sensitive personal information should require explicit consent of the individual.
- **Non-consensual processing:** The Committee noted that it is not possible to obtain consent of the individual in all circumstances. Therefore, separate grounds may be established for processing data without consent. The Committee identified four bases for non-consensual processing: (i) where processing is relevant for the state to discharge its welfare functions, (ii) to comply with the law or with court orders in India, (iii) when necessitated by the requirement to act promptly (to save a life, for instance), and (iv) in employment contracts, in limited situations (such, as where giving the consent requires an unreasonable effort for the employer).
- **Participation rights:** The rights of the individual are based on the principles of autonomy, self-determination, transparency and accountability to give individuals control over their data. The Committee categorised these rights in three categories: (i) the right to access, confirmation and correction of data, (ii) the right to object to data processing, automated decision-making, direct marketing and the right to data portability, and (iii) the right to be forgotten.
- **Enforcement models:** The Committee also recommended setting up a regulator to enforce the regulatory framework. The Authority will have the power to inquire into any violations of the data protection regime, and can take action against any data fiduciary responsible for the same. The Authority may also categorise certain fiduciaries as significant data fiduciaries based on their ability to cause greater harm to individuals. Such fiduciaries will be required to undertake additional obligations.
- **Amendments to Other Laws:** The Committee noted that various allied laws are relevant in the context of data protection because they either require or authorise the processing of personal data. These laws include the Information Technology Act, 2000, and the Census Act, 1948. It stated that the Bill provides minimum data protection standards for all data processing in the country. In the event of inconsistency, the standards set in the data privacy law will apply to the processing of data. The Committee also recommended amendments to the Aadhaar Act, 2016 to bolster its data protection framework.

Bill Summary on The Draft Personal Data Protection Bill, 2018

- **Rights of the individual:** The Bill sets out certain rights of the individual. These include: (i) right to obtain confirmation from the fiduciary on whether its personal data has been processed, (ii) right to seek correction of inaccurate, incomplete, or out-of-date personal data, and (iii) right to have personal data transferred to any other data fiduciary in certain circumstances.
- **Obligations of the data fiduciary:** The Bill sets out obligations of the entity who has access to the personal data (data fiduciary). These include: (i) implementation of policies with regard to processing of data, (ii) maintaining transparency with regard to its practices on processing data, (iii) implementing security safeguards (such, as encryption of data), and (iv) instituting grievance redressal mechanisms to address complaints of individuals.
- **Data Protection Authority:** The Bill provides for the establishment of a Data Protection Authority. The Authority is empowered to: (i) take steps to protect interests of individuals, (ii) prevent misuse of personal data, and (iii) ensure compliance with the Bill. It will consist of a chairperson and six members, with knowledge of at least 10 years in the field of data protection and information technology. Orders of the Authority can be appealed to an Appellate Tribunal established by the central government and appeals from the Tribunal will go to the Supreme Court.

- **Grounds for processing personal data:** The Bill allows processing of data by fiduciaries if consent is provided. However, in certain circumstances, processing of data may be permitted without consent of the individual. These grounds include: (i) if necessary for any function of Parliament or state legislature, or if required by the state for providing benefits to the individual, (ii) if required under law or for the compliance of any court judgement, (iii) to respond to a medical emergency, threat to public health or breakdown of public order, or, (iv) for reasonable purposes specified by the Authority, related to activities such as fraud detection, debt recovery, and whistle blowing.
- **Grounds for processing sensitive personal data:** Processing of sensitive personal data is allowed on certain grounds, including: (i) based on explicit consent of the individual, (ii) if necessary for any function of Parliament or state legislature, or, if required by the state for providing benefits to the individual, or (iii) if required under law or for the compliance of any court judgement.
- **Sensitive personal data** includes passwords, financial data, biometric data, genetic data, caste, religious or political beliefs, or any other category of data specified by the Authority. Additionally, fiduciaries are required to institute appropriate mechanisms for age verification and parental consent when processing sensitive personal data of children.
- **Transfer of data** outside India: Personal data (except sensitive personal data) may be transferred outside India under certain conditions. These include: (i) where the central government has prescribed that transfers to a particular country are permissible, or (ii) where the Authority approves the transfer in a situation of necessity.
- **Exemptions:** The Bill provides exemptions from compliance with its provisions, for certain reasons including: (i) state security, (ii) prevention, investigation, or prosecution of any offence, or (iii) personal, domestic, or journalistic purposes.
- **Offences and Penalties:** Under the Bill, the Authority may levy penalties for various offences by the fiduciary including (i) failure to perform its duties, (ii) data processing in violation of the Bill, and (iii) failure to comply with directions issued by the Authority. For example, under the Bill, the fiduciary is required to notify the Authority of any personal data breach which is likely to cause harm to the individual. Failure to promptly notify the Authority can attract a penalty of the higher of Rs 5 crore or 2% of the worldwide turnover of the fiduciary.
- **Amendments to other laws:** The Bill makes consequential amendments to the Information Technology Act, 2000. It also amends the Right to Information Act, 2005, and to permit non-disclosure of personal information where harm to the individual outweighs public good.

The Right of Children to Free and Compulsory Education (Second Amendment) Bill, 2017

- **Highlights of the Bill The Right to Education Act, 2009** prohibits detention of children till they complete elementary education i.e., class 8. The Bill amends this provision to state that a regular examination will be held in class 5 and class 8 at the end of every academic year. If a child fails the exam, he will be given additional instruction, and take a re-examination.
- **If he fails in the re-examination,** the relevant central or state government may decide to allow schools to detain the child.
- **Key Issues and Analysis** There are differing views on whether children should be detained for failing examinations in elementary school. Some argue that automatic promotion reduces incentive for children to learn and for teachers to teach. Others argue that detaining a child leads to drop outs and does not focus on the systemic factors that affect learning such as quality of teachers, schools, and assessment.
- **Provisions of the Bill** regarding assessment and detention are at variance with what most states have demanded. In this context, the question is whether these decisions should be taken by Parliament or left to state legislatures.
- **It is unclear** as to who will conduct the examination (which may lead to detention): centre, state, or the school

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Second Amendment) Bill, 2015

- **Highlights of the Bill This Bill amends the principal Act passed in 2013.** The Bill enables the government to exempt five categories of projects from the requirements of: (i) social impact assessment, (ii) restrictions on acquisition of multi-cropped land, and (iii) consent for private projects and public private partnerships (PPPs) projects.
- **The five categories of projects are:** (i) defence, (ii) rural infrastructure, (iii) affordable housing, (iv) industrial corridors, and (v) infrastructure including PPPs where government owns the land.

- **The Act would apply retrospectively**, if an award had been made five years earlier and compensation had not been paid or possession not taken. The Bill exempts any period when a court has given a stay on the acquisition while computing the five year period.
- **The Act deemed the head of a government** department guilty for an offence by the department. The Bill removes this, and adds the requirement of prior sanction to prosecute a government employee.
- **Key Issues and Analysis** The five types of projects being exempt from the provisions of social impact assessment, restrictions in case of multi-cropped land and consent are broad and may cover many public purpose projects.
- **The Act** requires consent of 70% of landholders for PPP projects, and 80% for private projects. Acquisition, being different from purchase, implies that land owners were unwilling to part with the land. Requiring consent from them may be impractical. Also, it is not clear why the consent requirement depends on who owns the project.
- **The amendments** in the Bill propose to expedite the process of acquisition. However, the changes in the Bill will reduce the time for acquisition from 50 months to 42 months.
- **The removal** of the provision that deemed the head of department guilty, and addition of a new requirement of prior sanction to prosecute government employees may raise the bar to hold them accountable.
- **The change** in the retrospective provision may be ineffective in cases instituted until 2014 in light of a recent Supreme Court judgment.

The Lokpal and Lokayuktas and other related Law (Amendment) Bill, 2014

- **The Lokpal and Lokayuktas** and other related Law (Amendment) Bill, 2014 was introduced in Lok Sabha on December 18, 2014 by the Minister for Personnel, Public Grievances and Pensions, Dr. Jitendra Singh.
- **The Bill amends the Lokpal and Lokayuktas Act**, 2013 and the Delhi Special Police Establishment Act, 1946.
- **The Lokpal Act** provides for a Selection Committee for making appointments to the Lokpal. The Committee includes the Leader of Opposition (LoP) in the Lok Sabha. The Bill amends this provision to state that the Leader of the single largest Opposition party in the House would be part of the Selection Committee, in the absence of a recognised LoP in the Lok Sabha.
- **The Lokpal Act** states that one eminent jurist, to be recommended by the other members of the Selection Committee, will also be part of that Committee. The Bill adds that such eminent jurist is to be nominated for a single term of three years.
- **The Act states that no appointment** of a Chairperson or member of the Lokpal shall be invalidated for reasons of vacancy in the Selection Committee. The Bill adds that the proceedings of the Committee would not be invalidated also on account of absence of a member.
- **The Lokpal Act** requires the Selection Committee to constitute a Search Committee to make nominations for appointments to the Lokpal. The Bill clarifies that no proceedings related to the Search Committee shall be invalidated for reasons of: (i) vacancy or absence of member in the Selection Committee, or (ii) absence of a person in the Search Committee.
- **Under the Lokpal Act**, the Secretary to the Lokpal is of the rank of Secretary. The Bill amends this provision to now mandate that the Secretary to the Lokpal would be in the rank of Additional Secretary.
- **The Lokpal Act** requires that the Director of Inquiry and Director of Prosecution of the Lokpal would be at least of the rank of Additional Secretary. The Bill now requires that these posts be filled by officers of at least the rank of Joint Secretary.
- **Under the Lokpal Act**, the benches of the Lokpal would sit in New Delhi, and other places to be specified in the regulations. The Bill states that the headquarters of the Lokpal would be in the NCR, and the seat of benches would be specified in the regulations.
- **Under the Lokpal Act**, the power of the Lokpal to grant sanction for prosecution overrides provisions of the Criminal Procedure Code, Section 6A of the Delhi Special Police Establishment (DSPE) Act, 1946 or the Prevention of Corruption Act, 1988. The Bill omits Section 6 A of the DSPE Act. This follows from a Supreme Court judgment which struck down Section 6A of the DSPE Act.
- **The Lokpal Act** requires a public servant to declare his assets within thirty days of assuming office. The details of such declaration would include: (i) liabilities and (ii) assets jointly owned by him, his spouse and dependent children, or assets for which they are beneficiaries.

- **The Bill** replaces this provision to require that the declaration contain information of all his assets, including: (i) movable and immovable property owned, inherited, acquired, or held on lease by him or his family; and (ii) debts and liabilities incurred directly or indirectly by him. Provisions related to public servants under the Representation of the People Act, 1951, All India Services Act, 1951, and rules and regulations prescribed in this regard would also apply.
- **The DSPE Act** provides for a Directorate of Prosecution which is headed by a Director, of a rank not below that of Joint Secretary, for conducting prosecution of cases. The Bill introduces eligibility criteria in this regard. It states that an officer from the Indian Legal Services, of the rank of Joint Secretary and eligible to become a Special Public Prosecutor may be appointed as Director of Prosecution. In the absence of such a candidate, an advocate with at least 15 years experience in handling cases of corruption, money laundering, etc. may be appointed.
- **The Bill** adds that if there is a difference of opinion between the Director and the Director of Prosecution, the matter is to be referred to the Attorney General, whose advice shall be binding.
- **The Bill** introduces provisions that empower the centre to make rules in relation to the DSPE Act.



India Surges 23 Ranks in ease of doing Business with port-led Development under Sagarmala Improving 'Trading Across Border'

- **As per the World Bank report 2019** on Ease of Doing Business, India has taken a huge leap of 23 ranks from 100 in 2017-18 to 77 in 2018-19 indicating it is continuing its steady shift towards global standards. One of the key indices which has contributed immensely toward this growth is 'Trading across borders' which shows an impressive improvement from 146 rank last year to 80th rank this year.
- **The Ministry of Shipping** has been taking initiatives to improve the parameter of 'Trading across border' as 92% of India's Export- Import trade by volume is handled at ports.
- **The report mentions** that this is mainly due to India's continued reform agenda, which has made it the top-ranked economy in the region. Upgradation of port infrastructure, Improvement of processes, and digitization of document submission has substantially reduced Export/Import cargo handling time at ports which has significantly contributed towards improving the trading across border parameter and India's impressive growth in the World Bank's report. The World Bank has recognized India as one of the top improvers for the year.
- **According to the report**, under the Border Compliance Criterion relevant to the Port Sector the Cost to Export has come down from \$ 382.4 to \$251.6. Similarly, the Cost to Import has come down from \$ 543.2 to \$ 331.
- **"Focused efforts at improving the export/import cargo handling at major ports** has contributed to improving the Ease of Doing Business in India and thus will help in economic growth & more jobs opportunities for the youth.", said Shri Nitin Gadkari, Union Minister for Shipping, Road Transport & Highways and Water Resources, River Development and Ganga Rejuvenation.
- **The Government has initiated a series of steps** to make India's EXIM logistics more competitive in terms of time and cost. A series of studies to bench mark the performance of Indian Major Ports with their international counterparts has been undertaken and steps to increase the capacity and productivity to global standards have been initiated. Specifically 114 initiatives which were identified have been undertaken.
- **"The focus has been on development of port infrastructure and capacity enhancement**, improvement in last mile connectivity and development of multi-modal hubs to promote EXIM while reducing logistics cost and time. Under Sagarmala, port-led-development initiative of the Govt, 266 port modernization projects with an investment of more than Rs 1.45 lakh Crore has been identified for implementation over next 10 years." said the Minister.
- **80 projects worth Rs. 13,701Cr** have been completed and projects worth 2.39 lakh Crore are under implementation.
- **"In order to enhance last mile connectivity**, 211 road-rail projects worth Rs 250,907 Crore have been identified under Sagarmala. 15 multimodal logistic parks with an investment of Rs3,989 will help in improving efficiency in freight movement under the programme", the minister added.
- **With more than 5 % average** growth at major ports over last 4 years, the Ministry of Shipping, has taken several steps to improve their operational efficiencies through policy and procedural changes and mechanization.
- **As a result**, key efficiency parameters have improved considerably. The Average Turnaround Time has reduced from 82 hrs to 64 hrs in 2017-18. The Average Output Per Ship Berth day has increased from 14,583Tonnes in 2016-17 and to 14,912 Tonnes in 2017-18. The traffic at major ports increased to 6794.7 lakh tonnes during 2017-18 over 6483.98 lakh tonnes during 2016-17.
- **Transfer of conventional activities** to digital platforms, use of technology for moving cargo and simplification of processes have been done to promote business and facilitate ease of doing business.

Steps taken in port-led Development

- **Radio Frequency Identification (RFID) system** installed in 11 Major Ports to enhance security, remove bottlenecks for seamless movement of traffic across Port gates. The RFID system automatically identifies the trucks and drivers without the need to stop at the port gates for manual checking.
- **DMICDC's Logistics Databank system (LDB)** for tracking & tracing movement of EXIM container in the Major Ports thereby enabling the consigners and consignees to track the movement of the Containers from portal.
- **Direct Port Delivery (DPD) and Direct Port Entry (DPE)** enable direct movement of containers from factories / port without intermediate handling requirement, thus saving cost & time
- **Direct Port Delivery of Import** containers increased from 3% in November 2016 to 40.62% in July, 2018. The DPD importers are benefited by savings in cost upto Rs.15,000/ and average saving in delivery time of 5 days. The percentage of Direct Port Entry of Export containers increased from 60% in April 2017 to 82.66 in July, 2018.
- **Installation of drive-through Container Scanners** to save time at Major Ports Reducing paper work- Issuance of e- Delivery orders, e-invoice and e-payment across all the Major Ports. Digitalization of processes has considerably reduced the processing time.
- **Upgradation of the Centralized Web Based-Port Community System (PCS)** to provide global visibility and access to the central database to all its stakeholders through internet based interfaces

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- **India and Japan** signs a Loan Agreement worth Rs. 1817 crore for the 'Project for the Construction of Turga Pumped Storage (I)' contributing to the Industrial Development and Living Standard Improvement in the State of West Bengal
 - **A Loan Agreement** was signed here today between Shri C.S. Mohapatra, Additional Secretary, Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Mr. Katsuo Matsumoto, Chief Representative, JICA, New Delhi on Japanese Official Development Assistance loan for the construction of Turga Pumped Storage (I) of Yen 29.442 Billion (Rs. 1817 crore approximately) [Exchange RATE: 1 Rupee= JPY 1.62]
 - **The objective of the Project** is to strengthen the capability to respond to fluctuation in supply and demand of power and to improve stability of the power supply by constructing the pumped storage facilities, thereby contributing to the Industrial Development and Living Standard Improvement in the State of West Bengal.
 - **India and Japan** have had a long and fruitful history of bilateral development cooperation since 1958. In the last few years, the economic cooperation between India and Japan has steadily progressed. This further consolidates and strengthens the Strategic and Global Partnership between India and Japan.

The Compensatory Afforestation Fund Bill, 2015

- **Highlights of the Bill** The Bill establishes the National Compensatory Afforestation Fund under the Public Account of India, and a State Compensatory Afforestation Fund under the Public Account of each state.
- **These Funds** will receive payments for: (i) compensatory afforestation, (ii) net present value of forest (NPV), and (iii) other project specific payments. The National Fund will receive 10% of these funds, and the State Funds will receive the remaining 90%.
- **These Funds** will be primarily spent on afforestation to compensate for loss of forest cover, regeneration of forest ecosystem, wildlife protection and infrastructure development.
- **The Bill also establishes the National and State Compensatory Afforestation Fund** Management and Planning Authorities to manage the National and State Funds.
- **Key Issues and Analysis** The Bill establishes the Funds for compensatory afforestation and forest conservation. However, there are several factors (other than administration of funds) which affect compensatory afforestation and forest conservation. These factors are mentioned below.
- **A 2013 CAG report noted that state forest departments** lack the planning and implementation capacity to carry out compensatory afforestation and forest conservation. With the share of funds transferred to states increasing from 10% to 90%, effective utilisation of these funds will depend on the capacity of state forest departments.

- **Procuring land for compensatory afforestation** is difficult as land is a limited resource, and is required for multiple purposes, such as agriculture, industry, etc. This is compounded by unclear land titles, and difficulties in complying with procedures for land use.
- **A High Level Committee** on Environment Laws observed that quality of forest cover has declined between 1951 and 2014, with poor quality of compensatory afforestation plantations being one of the reasons behind the decline.
- **The Bill delegates** the determination of NPV (value of loss of forest ecosystem) to an expert committee constituted by the central government. As NPV constitutes about half of the total funds collected, its computation methodology would be important.

The National Waterways Bill, 2015

- **The National Waterways Bill, 2015** was introduced in Lok Sabha on May 5, 2015 by the Minister of Road Transport and Highways and Shipping, Mr. Nitin Gadkari.
- **Under Entry 24 of the Union List of the Seventh Schedule of the Constitution**, the central government can make laws on shipping and navigation on inland waterways which are classified as national waterways by Parliament by law. The Bill identifies additional 101 waterways as national waterways. The Schedule of the Bill also specifies the extent of development to be undertaken on each waterway.
- **The Bill repeals the five Acts** that declare the existing national waterways. These five national waterways are now covered under the Bill.
- **The Statement of Objects and Reasons of the Bill** states that while inland waterways are recognised as a fuel efficient, cost effective and environment friendly mode of transport, it has received lesser investment as compared to roads and railways.
- **Since inland waterways** are lagging behind other modes of transport, the central government has evolved a policy for integrated development of inland waterways.

Industry / Commerce / Finance The Goods and Services Tax (Compensation to States) Amendment Bill, 2018

- **The Goods and Services Tax (Compensation to States) Amendment Bill, 2018** was introduced in Lok Sabha by the Minister of Finance, Mr. Piyush Goyal on August 7, 2018. It amends the Goods and Services Tax (Compensation to States) Act, 2017. The Act provides for compensation to states for any loss in revenue due to the implementation of GST.
- **Compensation Fund:** The Act allows the central government to levy a GST Compensation Cess on the supply of certain goods and services. The receipts from the cess are deposited to a GST Compensation Fund. The amount deposited in the Fund is used to compensate states for any loss in revenue following the implementation of GST.
- **Under the Act**, any unutilised amount in the Compensation Fund at the end of the transition period (five years from the date on which the state brings its State GST Act into force) is distributed in the following manner: (i) 50% of the amount is shared between the states in proportion to their total revenue, and (ii) remaining 50% is a part of the centre's divisible pool of taxes.
- **The Bill** inserts a provision specifying that any unutilised amount (as recommended by the GST Council) in the Compensation Fund at any time during the transition period will be distributed in the following manner: (i) 50% of the amount will be shared between the states in proportion to their base year revenue (2015-16), and (ii) remaining 50% will be part of the centre's divisible pool of taxes.
- **The Act specifies** that compensation payable to states has to be released at the end of every two months. The Bill states that in case of shortfall in this amount of compensation, it may be recovered in the following manner: (i) 50% of the amount from the centre, and (ii) the remaining 50% from the states in proportion to their base year revenue. However, this amount should not exceed the total amount transferred to the centre and states.



Loans for MSMEs in 59 minutes

- **PM Modi announced 12 measures to boost the Micro, Small and Medium Enterprises (MSME) sector**, including a portal that would enable the units to get a loan in just 59 minutes and interest subvention of 2%. Small businesses can use the '59-minute' portal to avail loans of up to Rs 1 crore.
- **Small enterprises** registered under the goods and services tax will also get a 2 percent tax rebate on incremental loans of up to Rs 1 crore. More than 72,000 loans worth over Rs 23,852 crore have been sanctioned. The portal is set up by the Small Industries Development Bank of India. MSMEs can register and apply for a loan. The prime minister unveiled 12 initiatives for MSMEs, which he called "Diwali gifts".
- **They are:** Loans for MSMEs up to Rs 1 crore can be granted in 59 minutes, which can also be availed through goods and services tax portal. A 2 percent interest subvention will be given on incremental and new loans to GST-registered MSMEs. For exporters who receive loans in pre- and post-shipment period, an increase in interest rebate has been given from 3-5 percent.
- **All public-sector companies** and corporates with turnover exceeding Rs 500 crore will have to mandatorily register on Trade Receivables Electronic Discounting System portal. This will improve the cash cycle for MSMEs as it will enable entrepreneurs to access credit from banks, based on their upcoming receivables.
- **Public-sector undertakings** will have to buy their 25 percent of their inputs from MSMEs from 20 percent earlier. Of the 25 percent, 3 percent of procurement will have to be done by women entrepreneurs or women-led MSMEs.
- **All central public sector enterprises** will have to come on board of Government e-Marketplace so that they can procure goods from MSMEs listed on the portal. Technology upgradation support will be given to MSMEs. About 20 technological centres will be made as hubs and 100 centres as tool rooms will be created at the cost of Rs 6,000 crore.
- **Clusters** will be created for pharma MSME companies so that they can reach customers directly. About 70 percent of the cost for creating these clusters will be borne by the central government.
- **MSMEs** will have to file only one return under eight labour laws and 10 central rules against two returns earlier.
- **Inspection** would be done based on computerised random allotment and report of inspection will have to be submitted within 48 hours on the reporting portal. This will free MSMEs from Inspector Raj (regime), Modi said.
- **Process of environmental clearance** has been simplified, and MSME will require only one approval for "environmental clearance" and "consent to establish" under Air and Water Act.
- **Ordinance has been approved for simplifying levy of penalty** for minor offences under Companies Act. This will avoid unnecessary harassment to small business owners, and they won't have to approach courts, but can correct minor violations through simple procedures.

China Pakistan: Growing Ties

- **Pakistan** is expected to receive a \$6 bn aid package from China during PM Imran's visit.
- **Pakistan's Prime Minister** has reinforced Islamabad's bonds with Saudi Arabia, and has kept the door open for the re-entry of West-backed International Monetary Fund (IMF) into his country.

- **Analysts** point out that China needs Pakistan's full support to make the CPEC a success.
- **China has billed the \$62 billion project** as the flagship undertaking of its Belt and Road Initiative (BRI).

NASA's historic Dawn mission comes to an end

- **Earlier we read** about retirement of NASA's Kepler space telescope mission. Now NASA's pioneering Dawn spacecraft — which orbited the two largest objects in the asteroid belt — has run out of fuel, ending a 11-year mission that unravelled many mysteries of our solar system.
- **The \$467 million Dawn mission**, launched in 2007 to study the protoplanet Vesta and the dwarf planet Ceres, missed scheduled communications sessions with NASA's Deep Space Network on October 31 and November 1.
- **The astounding images** and data collected from Vesta and Ceres are critical to understanding the history and evolution of our solar system.

Madras HC on this issue

- **In the recent times** there has been growing incidents loss of artefacts, historical idols and antiquities in the state of Tamil Nadu. Tamil Nadu is rich feeding ground for idol thieves and smugglers because of the sheer number of temples within its borders.
- **Madras HC on this issue** The Madras High Court constituted a special bench to hear cases relating to idol theft. The court raised the concerns related to the lack of coordination between departments responsible for custodianship of cultural heritage and law enforcement agencies. HC also noted that the department has not computerised the stock, provided adequate ICON Centres with surveillance to keep safe custody of the valuable idols in the Centre and in the temples.
- **Madras HC** also raised concerns related to the management of the historical artefacts in India, importantly about lack of coordination and lack of surveillance measures. Because of these concerns the Madras HC ordered the state government to go for computerisation of the stock of the idols.
- **Steps taken by the government** The parliament of India passed an Act, the Antiquities and Art Treasures Act, 1972, focussing mainly the objectives of prevention of smuggling, prevent illegal sale, regulate export trade in antiquities and compulsory acquisition of antiquities and art treasures. National mission on monuments and antiquities (NMMA) has been launched. One of the main components of this NMMA is to create a national register of these antiquities. Nodal agency for implementation of NMMA is Archaeological survey of India.
- **Concerns still remain** The problem of non-coordination and lack of information among government departments as highlighted by the Madras High Court still remain a concern across India. While the Ministry of Culture's annual report for 2017-18 states that a mammoth 15.2 lakh registered antiquities have been documented through the NMMA, the Register only provides information for about 4.7 lakh of these.
- **Way forward** Thus, different states needs to co-ordinate their effort in terms of identification and then preservation of such artefacts National register for antiquities must be updated for these valuables artefacts. Also, there is a need for timely action to be taken by the concerned government departments for identification and preservation of our cultural heritage.
- **Connecting the dots:** State and public initiatives to compile registers of antiquities must be closely coordinated to control the smuggling and theft. Elucidate

India's ranking in the latest edition of the World Bank's Ease of Doing Business Index has jumped 23 spots to 77 among 190 economies. It is a substantial improvement over the last couple of years.

- **Analysis of Index and India's performance** The Index seeks to measure 11 areas of business, among them the procedures, timelines and cost related to construction, protection of minority investors, payments of tax, time and cost to export a product or import it and to resolve commercial dispute, the quality of the judicial process and time taken and the cost for resolution or insolvency.

- **India's score** was boosted this time because of the strides in cross-border trading with the streamlining of paper work and documentation — the country's score has moved up from 146 last year on this count to 80 this time.
- **The scores** should improve further next time with recognition of the laws on GST and more companies taking the resolution route under the insolvency. The other area of improvement is in construction permits. All these underline the importance of supply-side reforms.
- **The other important** take away from the Index is that what is common among the top-ranked economies is the pattern of continuous reform.
- **India has considerable ground** to cover on this front: When it comes to enforcing contracts, the country's score has barely moved in the latest ranking.
- **What more needs to be done?** The lesson here is the absence of judicial reforms, bureaucratic and legal hurdles are hurting the economy.
- **In a federal structure** like India, cutting the red tape or easing procedures across states is not easy.
- **However**, the signs are that many states have recognised the need to remove hurdles to attract industry.
- **Businessmen** complain about the steep cost of doing business and the constraints they face in translating ideas into viable commercial ventures. As the World Bank points out, economies with better business regulations are the ones that create more job opportunities and the countries with more transparent and accessible information have lower levels of corruption.
- **Conclusion** It is good to benchmark the country's progress on various counts of starting a business, but it is also important not to lose sight of the fact that this does not measure macro stability policies and development of the financial sector.
- **The boost** to ranking has come at a time when investment activity is far from vibrant.
- **The key is a revival in demand**, but removing systemic constraints would help business and industry become more competitive.

The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts (Amendment) Bill, 2018 Highlights of the Bill

- **The Commercial Courts Act, 2015** provides for commercial courts and commercial divisions of high courts to adjudicate commercial disputes with a value of at least one crore rupees. The Bill reduces this limit to three lakh rupees.
- **The Bill allows state governments** to establish commercial courts at the district level, even in territories where high courts have ordinary original civil jurisdiction.
- **In areas where high courts** do not have original jurisdiction, state governments may set up commercial appellate courts at the district level to consider appeals from commercial courts below the level of a district judge.
- **Key Issues and Analysis** The Bill reduces the pecuniary jurisdiction of commercial courts from one crore rupees to three lakh rupees. It may be argued that the transfer of all commercial disputes above three lakh rupees may overburden the commercial courts and defeat the objective with which they were established.

The Insolvency and Bankruptcy Code (Second Amendment) Bill, 2018 Highlights of the Bill

- **The Bill amends the Insolvency and Bankruptcy Code, 2016** to clarify that allottees under a real estate project should be treated as financial creditors.
- **The voting** threshold for routine decisions taken by the committee of creditors has been reduced from 75% to 51%. For certain key decisions, this threshold has been reduced to 66%.
- **The Bill** allows the withdrawal of a resolution application submitted to the NCLT under the Code. This decision can be taken with the approval of 90% of the committee of creditors.

- **Key Issues and Analysis** The rationale for classifying allottees under a real estate project as financial creditors may be questioned. Further, the Bill does not clarify whether allottees are secured or unsecured financial creditors. In the absence of allottees having a clear status, there may be uncertainty about their priority when receiving dues from the insolvency proceedings.

The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities (Amendment) Bill, 2018

- **The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities (Amendment) Bill, 2018** was introduced in Rajya Sabha by Mr. Thawar Chand Gehlot, Minister of Social Justice and Empowerment on July 18, 2018. It amends the National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999.
- **The 1999 Act** sets up a National Trust to enable persons with disability to live independently by: (i) promoting measures for their protection in case of death of their parents, (ii) evolving procedures for appointment of their guardians and trustees, and (iii) facilitating equal opportunities in society.
- **Tenure of the Board:** Under the Act, the Chairperson and members of the Board of the National Trust can hold office for a term of three years from the date of their appointment or until their successors are appointed, whichever is longer. The Bill amends this provision to fix the tenure of the Chairperson and members of the Board to three years. Further, the Bill states that the central government will initiate the process for appointment of the Chairperson or any member of the Board, at least six months prior to the expiry of his tenure.
- **Resignation of Chairperson:** The Act states that if the Chairperson or members of the Board resign, they will continue in office until the appointment of their successor is made by the central government. The Bill amends this to allow the Chairperson or members of the Board to hold office till their resignation is accepted by the central government.



The Ministry of AYUSH

- **The Ministry of AYUSH** was formed on 9th November 2014. Earlier it was known as the Department of Indian System of Medicine and Homeopathy (ISM&H) which was created in March 1995 and renamed as Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November 2003, with a view to provide focused attention for the development of Education and Research in Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy.
- **Objectives:** To upgrade the educational standards of Indian Systems of Medicines and Homoeopathy colleges in the country.
- **To strengthen existing research institutions** and to ensure a time-bound research programme on identified diseases for which these systems have an effective treatment.
- **To draw up schemes** for promotion, cultivation and regeneration of medicinal plants used in these systems.
- **To evolve Pharmacopoeial standards** for Indian Systems of Medicine and Homoeopathy drugs.

National Medicinal Plants Board

- **India is one of the richest countries** in the world in terms of biodiversity, has 15 agro-climatic zones. Out of the 17000-18000 species of flowering plants, more than 7000 are estimated to have medicinal usage in folk and documented systems of medicine like Ayurveda, Unani, Siddha & Homoeopathy (AYUSH System of Medicine).
- **Medicinal plants** are not only a major resource base for the traditional medicine & herbal industry but also provide livelihood and health security to a large segment of Indian population. About 1178 species of medicinal plants are estimated to be in trade of which 242 species have annual consumption levels in excess of 100 metric tons/year. The domestic demand of medicinal plants has been estimated 1,95,000 MT for the year of 2014-2015 and export demand of medicinal plants has been estimated 1,34,500 MT during 2014-2015. Total consumption of herbal raw drug in the country for the year 2014-15 has been estimated at 5,12,000 MT with corresponding trade value of ₹ 5,500 Crore. The major increase has been recorded in export value which has increased from ₹ 345.80 Crore in 2005-06 to ₹ 3211 Crore in 2014-15, registering a nine fold increase in during last decade.
- **National Medicinal Plants Board** In order to promote medicinal plants sector, the Government of India has set up National Medicinal Plants Board (NMPB) on 24th November 2000. Currently the board is located in Ministry of AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy), Government of India. The primary mandate of NMPB is to develop an appropriate mechanism for coordination between various ministries/ departments/ organizations in India and implements support policies/programs for overall (conservation, cultivation, trade and export) growth of medicinal plants sector both at the Central /State and International level.
- **Aims & Objectives of the Board** In recent years cultivation of medicinal plants has started gaining momentum. However, still a significant part of our requirements continue to be met from wild sources. To meet increasing demand for medicinal plants, the NMPB focusses on in-situ & ex-situ conservation and augmenting local medicinal plants and aromatic species of medical significance. The NMPB also promote research & development, capacity building through trainings, raising awareness through promotional activities like creation of Home/School herbal gardens. NMPB also support programs for quality assurance and standardization through development of Good Agricultural and Collection Practices (GACPs), development of monographs laying down standards of quality, safety and efficacy; development of agro-techniques and credible institution a mechanism for certification of quality of raw drugs, seeds and planting material. Overall, NMPB's main objective is the development of medicinal plants sector through developing a strong coordination between various ministries/ departments/ organizations for implementation of policies / programs on medicinal plants.

Functions of National Pharmaceutical Pricing Authority

- **NPPA is an organization** of the Government of India which was established, inter alia, to fix/ revise the prices of controlled bulk drugs and formulations and to enforce prices and availability of the medicines in the country, under the Drugs (Prices Control) Order, 1995.
- **The organization** is also entrusted with the task of recovering amounts overcharged by manufacturers for the controlled drugs from the consumers.
- **It also monitors** the prices of decontrolled drugs in order to keep them at reasonable levels.
- **Functions of National Pharmaceutical Pricing Authority** To implement and enforce the provisions of the Drugs (Prices Control) Order in accordance with the powers delegated to it.
- **to deal** with all legal matters arising out of the decisions of the Authority;
- **to monitor** the availability of drugs, identify shortages, if any, and to take remedial steps;
- **to collect/ maintain** data on production, exports and imports, market share of individual companies, profitability of companies etc, for bulk drugs and formulations;
- **to undertake and/ or sponsor** relevant studies in respect of pricing of drugs/ pharmaceuticals;
- **to recruit/ appoint** the officers and other staff members of the Authority, as per rules and procedures laid down by the Government;
- **to render** advice to the Central Government on changes/ revisions in the drug policy;
- **to render** assistance to the Central Government in the parliamentary matters relating to the drug pricing.

Accessibility, Acceptability, Affordability: A National Perspective Pradhan Mantri Bhartiya Janaushadhi Pariyojana 2015

- **Bureau of Pharma PSUs of India(BPPI)** is the implementing agency of Pradhan Mantri Janaushadhi Pariyojana (PMBJP). BPPI was established in December, 2008 under the Department of Pharmaceuticals, Government of India. The Bureau has been registered as an independent society under the Societies Registration Act, 1860 as a separate independent legal entity in April, 2010. BPPI follows the provisions of GFR, 2017 as amended from time to time, the CVC guidelines, and instructions from the Department of Pharmaceuticals.
- **Making quality medicines** available at affordable prices for all, particularly the poor and disadvantaged, through exclusive outlets "Pradhan Mantri Bhartiya Janaushadhi Kendras", so as to reduce out of pocket expenses in healthcare.
- **Key features of Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):** State Governments or any organization / reputed NGOs / Trusts / Private hospitals / Charitable institutions / Doctors / Unemployed pharmacist/ individual entrepreneurs are eligible to apply for new Pradhan Mantri Bhartiya Janaushadhi Kendras.
- **The applicants** shall have to employ one B Pharma / D Pharma degree holder as Pharmacist in their proposed store.
- **Applications** shall be submitted to BPPI either online or offline.
- **Pradhan Mantri Bhartiya Janaushadhi Kendras** can be located within Government hospital premises as well as Private hospital premises or anywhere outside.
- **In addition to medicines** and surgical items supplied by BPPI, Pradhan Mantri Bhartiya Janaushadhi Kendras will be allowed to sell allied medical products commonly sold in chemist shops so as to improve the viability of running the Pradhan Mantri Janaushadhi Kendra.
- **BPPI shall source the medicines** both from Pharma PSUs as well as from Private companies. However, PSUs would have the first right to supply the products that they manufacture in their plants. BPPI shall ensure that private manufactures are only reputed organisations by incorporating strict terms and conditions in the tender specifications.

- **Tendering for medicines** shall be only through e tendering. All the tendering process shall be completely transparent giving equal opportunity for all the participants.
- **BPPI shall establish** a Central Ware House, C&F agents at different locations and Distributors in all the States/UTs.
- **On receipt of goods** at their central ware house, BPPI shall draw samples and sent them to NABL accredited laboratories for inspection. Only after receipt of quality certification from the inspecting laboratories, goods shall be dispatched to C&F agents and Distributors.
- **BPPI shall plan** and undertake suitable media activities so as to spread the message of generic medicines and to achieve the objectives of the PMBJP.
- **Financial support** to applicants: An amount of Rs.2.5 lakhs shall be extended to NGOs/agencies/individuals establishing Pradhan Mantri Bhartiya Janaushadhi Kendras in Government hospital premises where space is provided free of cost by Government to operating agency: Rs. 1 lakh reimbursement of furniture and fixtures Rs. 1 lakh by way of free medicines in the beginning Rs. 0.50 lakh as reimbursement for computer and peripherals, internet, etc. For the Pradhan Mantri Bhartiya Janaushadhi Kendras established anywhere else by private entrepreneurs / institutions / NGOs / Trusts / Charitable organizations which are linked with BPPI headquarters through internet shall be extended an incentive up to Rs. 2.5 lakhs. This will be given @ 15% of monthly sales subject to a ceiling of Rs. 10,000/- per month up to a limit of Rs. 2.5 lakhs. In north eastern States, i.e. naxal affected areas and tribal areas, the rate of incentive will be 15% and subject to monthly ceiling of Rs. 15,000 and total limit of Rs. 2.5 lakhs.
- **20% trade margin** shall be included in MRP for retailers and 10% for distributors.
- **Pradhan Mantri Bhartiya Janaushadhi** Kendras and Distributors will be allowed 2% of total sales or actual loss, whichever is lower, as compensation against expiry of medicines. Expired goods need not be returned to BPPI. Stocks expiring at the C&F level will entirely be the loss of BPPI.
- **Credit facility** will be given to all Pradhan Mantri Bhartiya Janaushadhi Kendras for 30 days against postdated cheques. Distributors will also get credit of 60 days against postdated cheques. C&F agencies will have to deposit a security amount depending upon the business.
- **BPPI** shall arrange suitable training program for the entrepreneurs who do not have any experience in running medicine shops.
- **Institutions / Charitable organisations / NGOs** who are procuring medicines for own consumption / free distribution to poor and needy will be allowed to procure medicines from BPPI CFA agents.
- **Pradhan Mantri Janaushadhi** medicines will be sold through "Mobile Pradhan Mantri Janaushadhi Vans" after all requisite approvals are obtained.

AirSewa Portal : One Stop Solution For Hassle Free Air Travel

- **The Minister of Civil Aviation** Shri Ashok Gajpathi Raju has said that his Ministry is committed to provide a hassle-free and comfortable air travel experience to people. To do this, he said, it is necessary to recognize the pattern of problems that people face, and make suitable systemic improvements in our working. The Minister launched the AirSewa portal and mobile app in New Delhi today. AirSewa is an initiative of the Ministry to offer people a convenient and hassle-free air travel experience. It will be operated through an interactive web portal as well as through a mobile app for both android and iOS platforms. The portal will include a mechanism for grievance redressal, backoffice operations for grievance handling, flight status/schedule information, airport information and FAQs.
- **Participating** in a panel discussion on the occasion Shri Jayant Sinha, Minister of State for Civil Aviation said that flight delays, problem in refunds, long queues and lack of proper facilities at airports and complaints of lost baggage are the most common problems that air travellers are facing today. He stressed upon the need to respond to these problems in a systematic rather than an adhoc manner. He said that AirSewa was an attempt to provide such a systematic approach to redressing passenger grievances. Shri Sinha said that although it was a major challenge to get the various players who are a part of the civil aviation ecosystem on to a common platform, this has been achieved through AirSewa .
- **With the launch of AirSewa**, passengers will be able to register their grievances through the mobile app or a web portal. The users will have the facility to upload voice or video along with an elaborate description of their issues. They will be given a unique reference number for each of their reported grievances which would also be communicated through an email as well as an SMS. The Users can track the status and response to these grievances through the mobile application as well as the web application based on the reference number provided. Once the grievance is closed the user has an option to provide his feedback and rate the overall experience and satisfaction.
- **Nodal officers** have been selected for all stakeholder agencies who will address the grievance in a time bound manner. Each grievance shared will be directed to the responsible nodal agency for resolution based on the grievance category chosen by the complainant. The dashboard shall be divided into three categories consisting of grievances pending within time line, grievances pending beyond time line and closed grievances. Each grievance shall have a resolution time line defined for initial response as well as final resolution. Each communication made by the nodal officer will be sent through an alert through email and SMS.
- **Users will have an option** to check the flight status and schedule between any of airports. Flights can be searched on the basis of flight number or for all flights to a particular airport. Airport information will display basic weather information and connecting flight details from the airport. Airport information will include basic details and contact information regarding airport services like wheel Chair, transport/parking, rest and relax, Wifi services etc.

Swachh Bharat Mission announces World Toilet Day Contest for District Collectors

- **The Ministry of Drinking Water** and Sanitation today announced the Swachh Bharat World Toilet Day Contest for districts and States. As the Swachh Bharat Mission enters its fifth and final year, the purpose of the Contest is to encourage all districts in India to re-intensify the sanitation people's movement with a special focus on ODF Sustainability.
- **For 10 days in the run-up** to the World Toilet Day, i.e. from 9th November to 19th November 2018, districts across the country will compete on a range of Swachhta activities to sustain and reinforce the behaviour change outcomes achieved by them so far.
- **As per the advisory issued by the Ministry**, Top 10 District Collectors, along with the Top 3 State Mission Directors/State Secretary in-charge of Sanitation will be recognized and awarded by the Swachh Bharat Mission and will also win a chance to interact and share experience with Swachh Bharat brand ambassador, and Actor Shri Akshay Kumar. Ministry has called upon districts and States for high participation in the contest and for qualitative Swachhta activity by engaging with the community.
- **The Contest does not apply to the five States** of, Rajasthan, Madhya Pradesh, Chhattisgarh, Telangana and Mizoram.
- **Districts can apply for the Contest** from the online portal sbm.gov.in/wtd2018. The application window will be open from World Toilet Day, i.e. November 19, 2018 to November 30, 2018.

Zika Virus strain that causes microcephaly not found in Rajasthan

- **Indian Council of Medical Research (ICMR)** under Department of Health Research is in the forefront of advanced research in virology and the ICMR-National Institute of Virology (NIV) is at par with leading scientific establishments across the world. ICMR-NIV, Pune has sequenced 5 Zika virus strains collected at different time points of the Jaipur outbreak. Advanced molecular studies of Zika virus strains, carried out through Next Generation Sequencing suggest that the known mutations linked to fetal microcephaly and high transmissibility of Zika virus in Aedes mosquitoes are not present in the current Zika virus strain that has affected Rajasthan.
- **However, the Government** is maintaining high vigil of the possibility of adverse pregnancy outcomes in women exposed to Zika virus as the strain may mutate in future or some other unknown/host factors may play a role in microcephaly /other birth defects.
- **The Health Ministry** is reviewing the situation on a daily basis. Around 2000 samples were tested for Zika virus positivity, of which 159 positive cases have been confirmed. Adequate numbers of testing kits have been provided to the Viral Research and Diagnostic Laboratories. The State Government has been supplied with IEC material prepared to create awareness about Zika virus disease and its prevention strategies. All pregnant mothers in the area are being monitored through NHM. Extensive surveillance and vector control measures are being taken up in the area as per protocol by the state government.
- **Zika virus disease** is an emerging disease currently being reported by 86 countries worldwide. Symptoms of Zika virus disease are similar to other viral infections such as dengue, and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache.
- **In India**, the first outbreak was reported in Ahmedabad in January/February 2017 and second outbreak in July, 2017 from Krishnagiri District in Tamilnadu. Both these outbreaks were successfully contained through intensive surveillance and vector management.
- **The disease** continues to be on disease surveillance radars of Union Health Ministry although it is no longer a Public Health Emergency of International Concern vide WHO notification since 18th November, 2016.
- **The situation continues to be monitored regularly.**

Ayurveda Day to be celebrated throughout the Country on 5th November

- **Ministry of AYUSH** observes Ayurveda Day every year on Dhanawantari Jayanti (Dhanteras). This year Ayurveda Day is being observed on 5th November 2018. On this occasion, Ministry is organising a "National Seminar on Entrepreneurship and Business Development in Ayurveda" in association with NITI Aayog on 4th & 5th November 2018 at Dr. Ambedkar International centre, Janapath, New Delhi, with the intention to encourage entrepreneurs and Ayurveda stakeholders towards businesses opportunities in the sector.
- **The Seminar** is a subsequent step to the challenges taken by the Ministry to increase Ayurveda Market share three fold by the year 2022. The seminar is expected to develop awareness among stakeholders about the business opportunities, encouraging young entrepreneurs to use of modern technologies and modern innovations in business development in the sector and to highlight opportunities at global level. The experts in marketing, finance management, innovation, telemedicine, the policy makers, experts in start-up as well as experienced entrepreneurs in Ayurveda pharmaceuticals and hospital industry will guide and share their experiences with the participants. The deliberations in the seminar are expected to educate the young entrepreneurs about the various possibilities of business development in Ayurveda sector, how to use the technology and the ease of business being facilitated by the Government for promoting their business in the field of Ayurveda. Ministry of AYUSH look forward to actualise the words of Prime Minister that 'Young entrepreneurs who are planning a start-up could find a lot of opportunities in holistic healthcare' / 'We have seen the IT revolution in last 30 years. Now, time has come for health revolution under the aegis of Ayurveda.
- **Nearly 800 participants** from across the country are expected to participate in the main function of 3rd Ayurveda day. "National Dhanwantari Ayurveda Award" comprising of Citation, Trophy (Dhanwantari Statue) and Cash reward of Rupees five lakh shall be conferred on this day to eminent Vaidyas. The Ministry of AYUSH has selected three renowned Ayurveda experts namely Vaidya Shiv Kumar Mishra, Vaidya Madhav Singh Bhagel and Vaidya Itoozhi Bhavadasan Namboothiri for the prestigious National Dhanwantari Ayurveda Award for the year 2018. The winners of the National level Ayurveda quiz conducted by All India Institute of Ayurveda (AIIA), New Delhi, will also be felicitated during function.
- **Another highlight observation** of the 3rd Ayurveda Day would be the launch of the AYUSH-Health Management Information System (A-HMIS), a dedicated software application for Electronic Health Record (EHR) for the AYUSH systems of Healthcare. A-HIMS which is being launched across 15 AYUSH units in different parts of the country in the first phase on 5th November 2018 is expected to revolutionise the way Ayurveda, Yoga, Unani, Siddha and Homoeopathy are practised in the country, by inducting modern IT-solutions into these systems.
- **Ministry of AYUSH has conducted** various activities throughout the country as a part of Ayurveda Day celebrations. The Ayurveda half marathon was one of the main activities in 100 cities throughout the country through All India Institute of Ayurveda (AIIA), New Delhi, Research Councils, Institute for Postgraduate Teaching & Research in Ayurveda (IPGTRA) Gujarat, and National Institute of Ayurveda (NIA) Jaipur. A spate of activities including Public Lectures, Exhibitions, Distribution of Medicinal plants, Patient-education drives and Social Media campaigns were also organised by the Central Council of Research in Ayurveda (CCRAS) through its units across the country.
- **All the State Governments**, State AYUSH Directorates, all Ayurveda colleges/ teaching institutions, AYUSH/Health Universities, Associations of Ayurveda Practitioners, Ayurveda Drug Industries and all supporters/ well-wishers and stakeholders of Ayurveda in India and abroad are also observing 3rd Ayurveda Day on 5th November, 2018 by undertaking various activities like organizing Public lectures / Seminars / Exhibition / Radio Talks etc. on the theme "Ayurveda for Public health" as a part of Ayurveda Day celebration.



Ministry of Food Processing Industries issues guidelines for OPERATION GREENS

- **Ministry of Food Processing Industries(MoFPI)** under Union Minister Smt Harsimrat Kaur Badal has approved the operationalisation strategy for Operation Greens today. Operation Greens was announced in the Budget speech of 2018-19 with an outlay of Rs 500 crores to stabilize the supply of Tomato, Onion and Potato(TOP) crops and to ensure availability of TOP crops throughout the country round the year without price volatility.
- **Approving the measures**, the Minister said "Price volatility of TOP crops wreaks havoc in the households of this country. This is a revolutionary scheme which has evolved after sustained dialogue with all stakeholders and we have decided the strategy to stabilize prices of TOP crops and to make sure that TOP crops reach all households in the country around the year." Smt Badal added "Our government has laid down special measures and grants-in-aid under the scheme to ensure enhanced production of TOP crops and to augment value chain".
- **The strategy** will comprise of a series of measures as decided by the Ministry which include:
 - **(I) Short term Price Stabilisation Measures** NAFED will be the Nodal Agency to implement price stabilisation measures. MoFPI will provide 50% of the subsidy on the following two components:
 - **Transportation of Tomato Onion Potato(TOP) Crops** from production to storage; Hiring of appropriate storage facilities for TOP Crops;
 - **(II) Long Term Integrated value chain development projects** Capacity Building of FPOs & their consortium Quality production Post-harvest processing facilities Agri-Logistics Marketing / Consumption Points Creation and Management of e-platform for demand and supply management of TOP Crops.
 - **The pattern of assistance** will comprise of grants-in-aid at the rate of 50% of the eligible project cost in all areas, subject to maximum Rs. 50 crores per project. However, in case where PIA is/are FPO(s), the grant-in-aid will be at the rate of 70% of the eligible project cost in all areas, subject to maximum Rs. 50 crores per project.
 - **Eligible Organisation** would include State Agriculture and other Marketing Federations, Farmer Producer Organizations (FPO), cooperatives, companies, Self-help groups, food processors, logistic operators, service providers, supply chain operators, retail and wholesale chains and central and state governments and their entities/organizations will be eligible to participate in the programme and to avail financial assistance.
 - **The applicant** fulfilling the eligibility criteria under the scheme is required to submit the online application on SAMPADA portal of the ministry (<https://sampada.gov.in/>) attaching therewith complete documents.
 - **Background of Operation Greens** In the budget speech of 2018-19, a new Scheme "Operation Greens" was announced on the line of "Operation Flood", with an outlay of Rs.500 crore to promote Farmer Producers Organizations, agri-logistics, processing facilities and professional management.
 - **Major objectives of "Operation Greens" are as under:** Enhancing value realisation of TOP farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market.
 - **Price stabilisation** for producers and consumers by proper production planning in the TOP clusters and introduction of dual use varieties.
 - **Reduction in post-harvest losses** by creation of farm gate infrastructure, development of suitable agro-logistics, creation of appropriate storage capacity linking consumption centres.
 - **Increase in food processing** capacities and value addition in TOP value chain with firm linkages with production clusters.
 - **Setting up** of a market intelligence network to collect and collate real time data on demand and supply and price of TOP crops.

Competition Commission of India

- **The National Conference** is being organised in association with Indian Institute of Corporate Affairs (IICA), a think tank under the aegis of Ministry of Corporate Affairs.
- **About Competition Commission Of India:** The Competition Commission of India (CCI) was established under the Competition Act, 2002 for the administration, implementation and enforcement of the Act, and was duly constituted in March 2009. Chairman and members are appointed by the central government.
- **The following are the objectives of the Commission:** To prevent practices having adverse effect on competition. To promote and sustain competition in markets. To protect the interests of consumers. To ensure freedom of trade.
- **Functions of the commission:** It is the duty of the Commission to eliminate practices having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade in the markets of India. The Commission is also required to give opinion on competition issues on a reference received from a statutory authority established under any law and to undertake competition advocacy, create public awareness and impart training on competition issues.
- **The Competition Act:** The Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007, prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and M&A), which causes or likely to cause an appreciable adverse effect on competition within India.
- **Committee to review the Act:** In pursuance of its objective of ensuring that Legislation is in sync with the needs of strong economic fundamentals, the Government recently constituted a Competition Law Review Committee to review the Competition Act headed by Secretary, Ministry of Corporate Affairs.

South Asian Association for Regional Cooperation (SAARC)

- **Why China is demanding a greater role?** China has a status of an observer state in South Asia, however an observer state can get involve with SAARC members on specific initiatives, but they do not have voting rights. China entered SAARC as an observer in 2005, supported by most member states.
- **India's concerns and fears:** If China is given a greater role, India fears that its neighbours will come together to oppose the country's interests, particularly under the influence of Pakistan and China. India's neighbours are attracted to China, because of its greater economic resources, as also it has the potential to counter India. China's influence can be witnessed even in Nepal. To enhance strategic ties with Nepal, China has been investing heavily in that country; it has opened land-port between Nepal and Tibet named as Kyirong which will affect the regional strategic balance.
- **The growing** friendship with China and Pakistan is viewed by many as a joint tactic to offset India's dominance in the South Asian region. One of the most famous project, is China-Pakistan Economic Corridor (CPEC) which strategically aims at providing links between the overland Silk Road and maritime Silk Road. Due to this project China becomes one of the major investors in Pakistan.
- **It has been** agreed that China's entry in SAARC as a full-member can give a push to SAARC to grow as a regional bloc as China's global economic influence can help SAARC in international forum. But, growing alliances between China and Pakistan may work against India and which will hamper the regional progress. It has also been feared that China may block the projects which are both strategically and economically important for India.
- **Way ahead:** China is becoming member of different regional blocs due to its growing economic and military might. China's active and aggressive diplomacy, trade and investments, many cooperative agreements with SAARC nations is thus enabling it to have a greater influence in south Asia. India needs to re-think its regional strategies as rise of China will impact India. Often it is viewed that the rise of China will decrease India's influence in South Asia.
- **About SAARC:** The South Asian Association for Regional Cooperation (SAARC) was established with the signing of the SAARC Charter in Dhaka on 8 December 1985. The Secretariat of the Association was set up in Kathmandu on 17 January 1987. SAARC comprises of eight Member States: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- **Important objectives of the Association** as outlined in the SAARC Charter are: to promote the welfare of the peoples of South Asia and to improve their quality of life; to accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realize their full potentials; to promote and strengthen collective self-reliance among the countries of South Asia.

Public Credit Registry (PCR)

- **The PCR will also include data** from entities like market regulator SEBI, the Corporate Affairs Ministry and the Insolvency and Bankruptcy Board of India to enable banks and financial institutions to get a 360-degree profile of existing and prospective borrowers on a real-time basis.
- **About Public Credit Registry: What is it?** The PCR will be an extensive database of credit information for India that is accessible to all stakeholders. The idea is to capture all relevant information in one large database on the borrower and, in particular, the borrower's entire set of borrowing contracts and outcomes.
- **Management of PCR:** Generally, a PCR is managed by a public authority like the central bank or the banking supervisor, and reporting of loan details to the PCR by lenders and/or borrowers is mandated by law. The contractual terms and outcomes covered and the threshold above which the contracts are to be reported vary in different jurisdictions, but the idea is to capture all relevant information in one large database on the borrower, in particular, the borrower's entire set of borrowing contracts and outcomes.
- **Need for a PCR:** A central repository, which, for instance, captures and certifies the details of collaterals, can enable the writing of contracts that prevent over-pledging of collateral by a borrower. In absence of the repository, the lender may not trust its first right on the collateral and either charge a high cost on the loan or ask for more collateral than necessary to prevent being diluted by other lenders. This leads to, what in economics is termed as, pecuniary externality – in this case, a spillover of one loan contract onto outcomes and terms of other loan contracts.
- **Furthermore,** absent a public credit registry, the 'good' borrowers are disadvantaged in not being able to distinguish themselves from the rest in opaque credit markets; they could potentially be subjected to a rent being extracted from their existing lenders who enjoy an information monopoly over them. The lenders may also end up picking up fresh clients who have a history of delinquency that is unknown to all lenders and this way face greater overall credit risk.
- **Benefits of having a PCR:** A PCR can potentially help banks in credit assessment and pricing of credit as well as in making risk-based, dynamic and counter-cyclical provisioning. The PCR can also help the RBI in understanding if transmission of monetary policy is working, and if not, where are the bottlenecks.
- **Further,** it can help supervisors, regulators and banks in early intervention and effective restructuring of stressed bank credits. A PCR will also help banks and regulators as credit information is a 'public good' and its utility is to the credit market at large and to society in general.
- **Task force on PCR:** The Reserve Bank of India (RBI) had formed a high-level task force on public credit registry (PCR) for India. The task force was chaired by Y M Deosthalee.
- **The task force** has suggested the registry should capture all loan information and borrowers be able to access their own history. Data is to be made available to stakeholders such as banks, on a need-to-know basis. Data privacy will be protected.

Saura Jalnidhi scheme

- **Key features of the scheme:** The beneficiary of this scheme will be farmers who have valid farmer identity cards and have minimum 0.5 acres of agricultural land.
- **Under this scheme,** farmers will be given 90% subsidy and 5,000 solar pumps. This will provide irrigation benefits in 2,500 acres of the state.
- **In the first phase,** this scheme will be available in those areas where electricity is not available for running the pump set.
- **Significance of the scheme:** The scheme will generate 1.52 lakh human day employments annually and provided livelihood to around 5,000 families and also reduce carbon footprints.
- **Under this scheme,** farmers will be provided with a well-equipped solar pump irrigation system in convergence mode. It will help to reduce burden of input cost on farmers and also increase agricultural income. It will promote the use of green energy and reduce pollution.

OSIRIS-Rex

- **Background:** The launch of the NASA OSIRIS-REx mission took place on September 8, 2016. Since then, the spacecraft has been two years travelling through space to reach its target, primitive asteroid Benu, in October, 2018.

- **About the mission:** OSIRIS-Rex stands for Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer.
- **OSIRIS-REx** is the third mission in NASA's New Frontiers program, which previously sent the New Horizons spacecraft zooming by Pluto and the Juno spacecraft into orbit around Jupiter.
- **What will the OSIRIS-Rex do?** OSIRIS-REx will spend two years travelling towards Benu, arriving at the asteroid in August 2018. The probe will orbit the asteroid for 3 years, conducting several scientific experiments, before returning to Earth, with the sample capsule expected to land in Utah, USA in September 2023.
- **Scientific Mission Goals:** During its three year orbit of Benu, OSIRIS-REx will be conducting a range of scientific experiments in order to better understand the asteroid.
- **As part of this**, the asteroid will be mapped using instruments on the probe, in order to select a suitable site for samples to be collected from.
- **The aim of the mission** is to collect a sample of regolith- the loose, soil-like material which covers the surface of the asteroid.
- **In July 2020**, the probe will move to within a few metres of Benu, extending its robotic arm to touch the asteroid's surface. The arm will make contact with the surface for just 5 seconds, during which a blast of nitrogen gas will be used to stir up the regolith, allowing it to be sucked into the sample collector.
- **OSIRIS-REx** has enough nitrogen on board for 3 sample collection attempts, and NASA are hoping to collect between 60 and 2000g of regolith material to bring back to Earth.
- **Why was Benu chosen?** Benu was selected for a the OSIRIS-REx mission from over 500,000 known asteroids, due to it fitting a number of key criteria. These include:
 - **Proximity to Earth:** In order for OSIRIS-REx to reach its destination in a reasonable timeframe, NASA needed to find an asteroid which had a similar orbit to Earth. Around 7000 asteroids are 'Near-Earth Objects' (NEOs), meaning they travel within around ~30million miles of the Earth. Out of these, just under 200 have orbits similar to Earth, with Benu being one of these.
 - **Size:** Small asteroids, those less than 200m in diameter, typically spin much faster than larger asteroids, meaning the regolith material can be ejected into space. Benu is around 500m in diameter, so rotates slowly enough to ensure that the regolith stays on its surface.
 - **Composition:** Benu is a primitive asteroid, meaning it hasn't significantly changed since the beginning of the Solar System (over 4 billion years ago). It is also very carbon-rich, meaning it may contain organic molecules, which could have been precursors to life on Earth.
 - **Additionally**, Benu is of interest as it is a Potentially Hazardous Asteroid (PHA). Every 6 years, Benu's orbit brings it within 200,000 miles of the Earth, which means it has a high probability of impacting Earth in the late 22nd Century.

Palau becomes first country to ban sunscreen to save coral reefs:

- **The Western Pacific nation of Palau** has become the first country to ban many kinds of sunscreen, in a move to protect its coral reefs from chemicals that scientists say cause significant damage.
- **Under the ban, which will take effect in 2020**, "reef-toxic" sunscreen — defined as containing one of 10 prohibited chemicals, a list that could grow later — can be confiscated from tourists when they enter the country, and retailers who sell it can be fined up to \$1,000.

Commission of Railway Safety - History

- **To exercise effective control** over the construction and operation of the first railways in India, which were entrusted to private companies, Consulting Engineers were appointed under the Government of India. Later when the Government undertook the construction of railways, the Consulting Engineers were designated as Government Inspectors. In 1883, their position was statutorily recognised. Later, the Railway Inspectorate was placed under the Railway Board which was established in 1905.

- **Under the Indian Railway Board Act, 1905** and Notification No.801 dated 24th March, 1905 of the Department of Commerce and Industry, the Railway Board was vested with powers and functions of the Central Government under various sections of the Railway Act and was authorised to make General Rules for the operation of Railways. The Railway Board is thus the Safety Controlling Authority for the working and operation of Government and Company managed railways.
- **Section 181(3) of the Government of India Act** of 1935 provided that functions for securing the safety, both of the travelling public and of persons operating the railways, including the holding of inquiries into the causes of accidents, should be performed by an authority independent of the Federal Railway Authority. Due to the outbreak of the war, the constitution of the Federal Railway Authority did not materialise and the Inspectorate continued to function under the Railway Board.
- **To avoid direct subordination of the Railway Inspectorate** to the Railway Board, the Pacific (Engines with 4-6-2 configuration of wheels are called "Pacific Locomotives") Locomotive Committee, headed by Lt. Col. A.H.L. Mount, then Chief Inspecting Officer of the British Railways, suggested in para 210 of their report, submitted in 1939, as under:- "We understand that, under the Govt. of India Act, 1935, it is contemplated that the Inspectorate will be separated from the control of the Railway Board. This is very desirable in so far as it will eradicate the present anomaly of the Board being the Inspecting as well as the executive Authority. We were informed that the Board fully appreciate the position, and would welcome the change, although it appears that, in practice, Government Inspectors have generally retained their freedom of judgement
- **The principle of separation** of the Railway Inspectorate from the Railway Board was endorsed in 1940 by the Central Legislature who recommended that "Senior Government Inspectors of Railways should be placed under the Administrative control of some authority of the Govt. of India other than the Railway Board." Accordingly, the Railway Inspectorate was placed under the administrative control of the Department of "Posts and Air" in May 1941 and continuously thereafter under whichever Ministry that held the portfolio of Civil Aviation.
- **The erstwhile Railway Inspectorate** was re-designated as the Commission of Railway Safety on 1.11.1961.

Commission of Railway Safety - Duties

- **The Commission of Railway Safety**, working under the administrative control of the Ministry of Civil Aviation of the Government of India, deals with matters pertaining to safety of rail travel and train operation and is charged with certain statutory functions as laid down in the Railways Act (1989), which are of an inspectorial, investigatory & advisory nature.
- **The Commission functions** according to certain rules viz. Statutory investigation into accidents rules framed under the Railways Act and executive instructions issued from time to time.
- **To inspect new railways** with a view to determine whether they are fit to be opened for the public carriage of passengers, and to report thereon to the Central Government as required by or under this Act;
- **To make such periodical** or other inspections of any railway or of any rolling stock used thereon as the Central Government may direct;
- **To make inquiry** under this Act into the cause of any accident on a Railway; to perform such other duties as are imposed on him by this Act or any other enactment for the time being in force relating to Railways.
- **sanctioning** the opening of new railway lines after inspection on behalf of the Central Government;
- **sanctioning** the execution of all works, including new works, affecting the safety of running lines;
- **when**, after inspecting a line already in use or a rolling stock already authorised, the Commissioner is of the opinion that their continued use will be attended with danger to the travelling public, he may report his opinion to the Central government, who may then order the closure of the line or the discontinuance of the use of rolling stock; and
- **to inspect such a closed line** and sanction its re- opening for carriage of passengers and also report to the Central Govt.on the fitness for use of discontinued rolling stock.

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Pilot Ganga Grams will be the role model for village cleanliness

- **Sustainable behavior** towards better sanitation is everyone's responsibility: Union Minister Uma Bharati
- **Union Minister for Drinking Water and Sanitation** Ms. Uma Bharati has said that maintaining sustainable behavior towards better sanitation is everyone's responsibility. She was speaking in Ganga Gram Swachhata Sannam at Chyavan Rishi Ashram in Chousa Village of Buxar district in Bihar yesterday. About four thousands Swachhagrahis, Ganga volunteers, youth organization members, students, women groups and people from all walks of life attended the sannam.
- **Ganga Gram** is a concept to transform the villages on the bank of river Ganga into ideal villages with emphasis on Open Defecation Free, Solid and Liquid Waste Management, Water Conservation, Ground Water Recharge, modern crematorium, tree plantation, organic and medicinal plants.
- **After declaration** of all 4465 Ganga Bank villages as ODF, the Ministry of Drinking Water and Sanitation is working in the direction of sustaining the ODF status of this area. In this regard, Ms. Uma Bharati appreciated the efforts made by district team, Panchayat representatives towards making Buxar district ODF.
- **She underlined that India** has shown to the world the commitment of the Government and achieved national sanitation coverage from a lowly 39 per cent to over 95 per cent. She urged people to participate in SLWM activities, not to litter around and pollute water sources, take care of their waste management and promote organic farming.

"India elected as a Member of the International Telecommunications Union (ITU) Council for another 4-year term (2019-2022)": Manoj Sinha

- **India has been elected** as a Member of the International Telecommunications Union (ITU) Council for another 4-year term (2019-2022). The elections to the Council were held during the ongoing ITU Plenipotentiary Conference 2018 at Dubai, UAE.
- **By securing 165 votes**, India ranked third among the 13 countries elected to the Council from the Asia-Australasia region, and eighth among the 48 countries elected to the Council globally. The ITU has 193 member states who elect representatives to the Council.
- **Commenting on this development**, Shri Manoj Sinha, Union Minister of State for Communications (Independent Charge) said, "We are delighted to see India as a member of the ITU Council once again. This is a recognition of the role our country plays in the area of Telecom and ICT on the global stage".
- **India has been an active member** of the ITU since 1869, earnestly supporting the development and propagation of telecom in the global community of nations. The country has been a regular member of the ITU Council since 1952, and has played an important role in harmonizing the contributions of member States from the region, always respecting the principles of equality and consensus-building.
- **"India shares the dream** and vision of ITU to realize the world as one nation and knowledge society", the Minister added, "Our strong partnership with the ITU is also demonstrated in the recent ITU decision to set up the ITU South Asia Area Office and Technology Innovation Centre in New Delhi. We are on target to have this Centre operational by January, 2019"

Women of India Organic Festival 2018 Culminates with a record sale of Rs. 2.75 Crores and Footfalls of 12 lakh

- **The participants of Women of India National Organic Festival 2018** also had the opportunity to enroll themselves in Mahila-E-Haat, which is an online marketing portal set up by the Ministry of Women & Child Development, to meet the aspirations and needs of women entrepreneurs.
- **This unique e-platform** exponentially strengthens the socio-economic empowerment of women beyond the Festival. The Women of India National Organic Festival is an annual affair and serves as a platform to celebrate and promote women farmers and entrepreneurs from different corners of India.

The Indian Forest (Amendment) Bill, 2017 The Indian Forest (Amendment) Bill, 2017 was introduced in Lok Sabha by Mr. Harsh Vardhan, Minister of Environment, Forest, and Climate Change on December 18, 2017.

- **The Bills replaces the Indian Forest (Amendment) Ordinance**, 2017 and amends the Indian Forest Act, 1927. The Act consolidates laws relating to forests, transit of forest-produce and the duty to be levied on them. Under the Act, the definition of tree includes palms, bamboos, stumps, brush-wood, and canes. The Bill amends this definition of tree to remove the word bamboos.
- **Since bamboo is defined as a tree under the Act**, its inter-state movement requires permit when in transit in other states. Consequent to the amendment, felling or transportation of bamboos growing in non-forest areas will not require any permits.

Regional connectivity scheme (RCS)

- **Under this scheme, the government** has allowed seaplanes to operate commercial passenger flights. Included among the 10 destinations that the government proposes to connect through seaplanes are the recently unveiled Statue of Unity at Sardar Sarovar Dam, Sabarmati Riverfront in Ahmedabad, Tehri Dam in Uttarakhand and Nagarjuna Sagar in Telangana.
- **About UDAN (Ude Desh ka Aam Nagrik) scheme:** UDAN (Ude Desh Ka Aam Nagrik) is the Government's initiative to make air travel to India's tier II and tier III cities affordable to the aam aadmi. The idea is to put smaller cities and remote regions on the aviation map, by getting domestic airlines to ply more regional routes.
- **Under the scheme**, the Government offers incentives to airlines to flag off new flights to neglected smaller cities and towns by providing Viability Gap Funding to make these operations profitable. Airlines are required to bid for exclusive rights to fly on the regional routes opened up under the scheme. They must sell a specific number of seats on each flight at a fixed fare of ₹2,500 for one hour of flying. In the case of helicopter operations, allowed for the first time now, fares are capped at ₹2,500 for a 30-minute flight.
- **Objectives of the scheme:** The primary objective of RCS is to facilitate / stimulate regional air connectivity by making it cheap and affordable. Promoting affordability of regional air connectivity is envisioned under RCS by supporting airline operators through: Concessions and Financial (viability gap funding or VGF) support.
- **Significance:** The scheme gives India's aviation sector a boost by giving a chance to small and first-time operators to be a part of the rapid growth in passenger traffic.

India's nuclear triad is complete

- **The submarine** recently returned from its first deterrence patrol, completing the establishment of the country's survivable nuclear triad. INS Arihant is now capable of prowling the deep seas carrying ballistic missiles equipped with nuclear warheads.

- **Significance:** This places India in the league of the few countries that can design, construct and operate ship submersible ballistic nuclear (SSBN). Given India's stated position of 'No-First-Use' (NFU) in launching nuclear weapons, the ship submersible ballistic nuclear (SSBN) is the most dependable platform for a second-strike. Because they are powered by nuclear reactors, these submarines can stay underwater indefinitely without the adversary detecting it. The other two platforms — land-based and air-launched are far easier to detect.
- **About INS Arihant:** Arihant was commissioned into service in August 2016. It has a displacement of 6000 tonnes and is powered by an 83 MW pressurised light-water reactor with enriched uranium.
- **India's NFU:** In 1998, India conducted nuclear tests under Pokhran-II and in 2003, it declared its nuclear doctrine based on credible minimum deterrence and a NFU policy while reserving the right of massive retaliation if struck with nuclear weapons first.
- **What is no first use nuclear doctrine?** No first use (NFU) refers to a pledge or a policy by a nuclear power not to use nuclear weapons as a means of warfare unless first attacked by an adversary using nuclear weapons. Earlier, the concept had also been applied to chemical and biological warfare.
- **India first adopted a "No first use" policy** after its second nuclear tests, Pokhran-II, in 1998. In August 1999, the Indian government released a draft of the doctrine which asserts that nuclear weapons are solely for deterrence and that India will pursue a policy of "retaliation only". The document also maintains that India "will not be the first to initiate a nuclear first strike, but will respond with punitive retaliation should deterrence fail" and that decisions to authorise the use of nuclear weapons would be made by the Prime Minister or his 'designated successor(s)'.
 • **Why India should retain this policy?** Adopting a no-first use policy enables New Delhi to keep the nuclear threshold high, especially as Pakistan tries to lower the threshold by developing tactical nuclear weapons, the Hatf-9 with 60km range.
- **It must also be noted** that New Delhi is not bordered by just one nuclear weapon state. China adopts a no-first use policy and, in spite of calls for Beijing to revise its no-first use doctrine, it is unlikely to do so. Hence, if New Delhi gave up its no-first use doctrine, it could give Beijing a chance to adopt a first strike policy and shift blame on India.
- **In fact, India's adoption** of a first strike policy would be an easy excuse for Beijing to give up its no-first use doctrine against the United States and Russia as well.
- **Moreover, India has always promoted** herself as a responsible nuclear weapon state. Hence, a first strike policy would severely damage India's reputation as a responsible nuclear weapon state. This means that while India would not be resilient to any nuclear attack by its adversaries, at the same time, it will not act as a villain who tries to bully its adversaries by threatening to strike first.
- **Also, it is India's no first use doctrine** that has enabled both Pakistan and India to keep their nuclear arsenal in a de-mated posture rather than a ready deterrent posture. This means nuclear warheads are not mated with the delivery systems. This reduces the chances of nuclear terrorism in Pakistan and also reduces the likelihood of an accidental launch of a nuclear weapon. A first strike policy by India may not have allowed Pakistan to keep their nuclear arsenal in a de-mated posture.
- **There is also the issue of ballistic missile defense** being developed by India which is highly destabilizing in nature and hence, New Delhi would continue to resort to using its no-first use doctrine in order to prevent instability in the South Asian region. A first-strike policy, coupled with a ballistic missile defense system, could provoke Pakistan to launch a nuclear pre-emptive strike against India.
- **By adopting a no-first use doctrine**, New Delhi has also made it evident that nuclear weapons are indeed the weapons of last resort. Abandoning this doctrine would make it evident that India considers the option of using nuclear weapons in the initial phases of the conflict. In fact, India's nuclear strategy is dependent on punitive retaliation. This strategy itself acts as deterrence against Pakistan.

OPERATION GREENS

- **The Strategy will comprise of a series of measures as decided by the Ministry:** Short term Price Stabilisation Measures: NAFED will be the Nodal Agency to implement price stabilisation measures. MoFPI will provide 50 percent of the subsidy on transportation of Tomato Onion Potato (TOP) Crops from production to storage; and hiring of appropriate storage facilities for TOP Crops.
- **Long Term Integrated value chain development projects:** Capacity Building of FPOs & their consortium. Quality production. Post-harvest processing facilities. Agri-Logistics. Marketing / Consumption Points. Creation and Management of e-platform for demand and supply management of TOP Crops.
- **About Operation Greens:** Operation Greens was announced in the Budget speech of 2018-19 with an outlay of Rs 500 crores to stabilize the supply of Tomato, Onion and Potato(TOP) crops and to ensure availability of TOP crops throughout the country round the year without price volatility.
- **Major objectives of "Operation Greens" are as under:** Enhancing value realisation of TOP farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market. Price stabilisation for producers and consumers by proper production planning in the TOP clusters and introduction of dual use varieties.

- **Reduction in post-harvest losses** by creation of farm gate infrastructure, development of suitable agro-logistics, creation of appropriate storage capacity linking consumption centres. Increase in food processing capacities and value addition in TOP value chain with firm linkages with production clusters. Setting up of a market intelligence network to collect and collate real time data on demand and supply and price of TOP crops.
- **Significance of Operation greens:** Operation Green (OG) wants to replicate the success story of Operation Flood, in fruits and vegetables, starting with three basic vegetables—tomatoes, onions and potatoes (TOP). The main objective of OG is to reduce price volatility in these commodities, and thereby helping farmers augment incomes on a sustainable basis, as also provide these basic vegetables to consumers at affordable prices.

Shakti- India's first indigenous microprocessor

- **About Shakti:** It is aimed at developing industrial-grade microprocessors and other components of the microprocessor ecosystem. It was designed, developed and booted by IIT Madras with microchip fabricated in ISRO's Semi-Conductor Laboratory at Chandigarh. It has been developed under project partly funded by Ministry of Electronics and Information Technology (MeitY), as part of two-decade-old efforts to develop indigenous microprocessors.
- **Significance:** The microprocessor will reduce dependency on imported microchips especially in communication and defence sectors and thus eliminate risk of cyber-attacks. It can be used in mobile computing, wireless and networking systems. It may also provide power to mobile phones, smart meters and surveillance cameras.

National Mission for Clean Ganga (NMCG)

- **The Mela** was organized with the objective to create awareness among school children on the importance of water in general and rivers in particular, so that they understand the importance of unpolluted, clean water and water security. Also, to foster respect for the natural environment and motivate children to become ambassadors of change, who influence and motivate others towards river rejuvenation and water conservation.
- **Facts for Prelims:** November 4 is symbolic as it marks the declaration of Ganga as the National River of India in 2008 and is dedicated to raising awareness about rejuvenating the holy river and teaching children to become environmentally aware and responsible citizens.
- **About NMCG:** The National Mission for Clean Ganga (NMCG) is the implementation wing of National Ganga Council which was set up in October 2016 under the River Ganga (Rejuvenation, Protection and Management) Authorities order 2016. The order dissolved National Ganga River Basin Authority.
- **NMCG** has a two tier management structure and comprises of Governing Council and Executive Committee. Both of them are headed by Director General, NMCG. Executive Committee has been authorized to accord approval for all projects up to Rs.1000 crore.
- **The order** envisages five tier structure at national, state and district level to take measures for prevention, control and abatement of environmental pollution in river Ganga and to ensure continuous adequate flow of water so as to rejuvenate the river Ganga as below.
- **National Ganga Council** under chairmanship of Hon'ble Prime Minister of India. Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Water Resources, River Development and Ganga Rejuvenation.
- **National Mission for Clean Ganga(NMCG).** State Ganga Committees. District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.

Ozone hole

- **Highlights of the study:** The study has confirmed the phenomenon by mapping the chemical composition of the atmosphere. The study revealed that chlorine levels declined by 0.8% each year between 2005 and 2016 and speculates that it could be the effect of the worldwide ban on the use of CFC. Previous research had hinted at the decrease in the depletion of ozone layer. Scientists believe that the ozone layer would fully recover by 2080.

- **What is ozone layer?** A layer of ozone envelops the Earth and keeps damaging ultraviolet, or UV, radiation from reaching living things on the planet's surface. The ozone layer exists mainly in the stratosphere, a layer of the atmosphere that reaches from 10 to 50 kilometers (about 6 to 30 miles) above the Earth's surface.
- **What is ozone hole?** The ozone hole is a region of depleted layers of ozone above the Antarctic region, whose creation is linked to increased cases of skin cancer.
- **Factors responsible for the depletion of ozone:** Depletion of ozone is due to many factors, the most dominant of which is the release of chlorine from CFCs (Chlorofluorocarbons) which destroys the ozone. CFCs are released by products such as hairsprays, old refrigerators etc.
- **What are CFCs?** Chlorofluorocarbons, or CFCs, are compounds made up of combinations of the elements chlorine, fluorine and carbon; aerosols, refrigerants and foams contain CFCs. When these CFCs enter the air, they rise up into the atmosphere to meet up with and destroy ozone molecules. First used in 1928, CFCs have since become more common as various other CFC compounds were created. Some of the better-known CFCs are the Freon compounds, which were used as cooling ingredients in refrigerators and air conditioners. CFCs have lifetimes from 50 to 100 years.
- **How CFCs destroy the ozone?** Once in the atmosphere, CFCs drift slowly upward to the stratosphere, where they are broken up by ultraviolet radiation, releasing the chlorine that catalytically destroys ozone.
- **The process is as follows:** UV radiation breaks off a chlorine atom from a CFC molecule. The chlorine atom attacks an ozone molecule (O₃), breaking it apart and destroying the ozone. The result is an ordinary oxygen molecule (O₂) and a chlorine monoxide molecule (ClO).
- **The chlorine monoxide molecule (ClO)** is attacked by a free oxygen atom releasing the chlorine atom and forming an ordinary oxygen molecule (O₂). The chlorine atom is now free to attack and destroy another ozone molecule (O₃). One chlorine atom can repeat this destructive cycle thousands of times.
- **Applications of CFCs:** CFCs have some interesting properties which can be fully exploited; therefore there are plenty of uses for these molecules. CFCs are not flammable; therefore they were used as propellants that would push other molecules out of the aerosol sprays. For the same reason CFCs were used to form foamed plastics. Also low flammability enabled people to use these molecules to dry clean hot electronic components of devices such as air conditioning.

ICGS Varaha:

- **What is it?** It is a new Offshore patrol vessel (OPV) launched by the Indian Coast Guard (ICG). It is fourth in the series of 98 M OPVs designed and built indigenously by Larsen & Toubro (L&T).
- **Key features:** It is fitted with advanced technology navigation and communication equipment, sensor and machinery. Its weaponry includes one 30 mm and two 12.7 mm guns with fire control system. It has been designed to attain maximum speed of 26 knots and has endurance of 5,000 nautical miles.
- **It also equipped** with an Integrated Bridge System (IBS), Automated Power Management System (APMS), Integrated Platform Management System (IPMS), and High Power External Fire Fighting (EFF) system



Gujarat government wants to rename Ahmedabad as Karnavati

- **Historical background:** Historically, the area around Ahmedabad has been inhabited since the 11th century, when it was known as Ashaval.
- **Chaulukya ruler Karna of Anhilwara** (modern Patan) had waged a successful war against the Bhil king of Ashaval and established a city called Karnavati on the banks of the Sabarmati river.
- **Sultan Ahmed Shah in 1411 A.D.** Had laid the foundation of a new walled city near Karnavati and named it Ahmedabad after the four saints in the area by the name Ahmed.

National Tiger Conservation Authority (NTCA)

- **Background:** Maharashtra government had permitted a hunter to kill the tigress- Avni. This move was widely criticised by the activists. The tigress, which is said to have killed 13 people, was shot dead in Yavatmal on November 2 by civilian hunter Asgar Ali, who was with a team of Forest Department officials.
- **About NTCA:** The National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under enabling provisions of the Wildlife (Protection) Act, 1972, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it under the said Act.
- **The National Tiger Conservation Authority** has been fulfilling its mandate within the ambit of the Wildlife (Protection) Act, 1972 for strengthening tiger conservation in the country by retaining an oversight through advisories/normative guidelines, based on appraisal of tiger status, ongoing conservation initiatives and recommendations of specially constituted Committees.
- **The functions of NTCA are as follows:** Ensuring normative standards in tiger reserve management Preparation of reserve specific tiger conservation plan Laying down annual/ audit report before Parliament Instituting State level Steering Committees under the Chairmanship of Chief Minister and establishment of Tiger Conservation Foundation. According approval for declaring new Tiger Reserves.

First India-Nepal passenger train on broad gauge to make first run in December

- **Key facts:** The train will run from Jayanagar in Bihar to Kurtha in Dhanusa district in Janakpur Zone of south-eastern Nepal, which is a 34 km stretch. No visa will be required for Indian and Nepalese nationals crossing the border through this stretch.
- **Significance:** After Beijing decided to extend its railway network up to Kathmandu, New Delhi proposed the construction of new railway links during Prime Minister K P Sharma Oli's recent visit to India. The move is being seen as part of efforts to counter China's plans to forge rail links with Nepal.

Chabahar port

- **The decision** by the Trump administration is seen as a recognition by Washington of India's role in development of the port on the Gulf of Oman, which is of immense strategic importance for the development of war-torn Afghanistan.
- **Background:** The US has imposed "the toughest ever" sanctions on a defiant Iran aimed at altering the Iranian regime's "behaviour". The sanctions cover Iran's banking and energy sectors and reinstate penalties for countries and companies in Europe, Asia and elsewhere that do not halt Iranian oil imports.
- **Where is Chabahar port?** Iran's Chabahar port is located on the Gulf of Oman and is the only oceanic port of the country. The port gives access to the energy-rich Persian Gulf nations' southern coast and India can bypass Pakistan with the Chabahar port becoming functional.
- **Why Chabahar port is crucial for India?** The first and foremost significance of the Chabahar port is the fact that India can bypass Pakistan in transporting goods to Afghanistan. Chabahar port will boost India's access to Iran, the key gateway to the International North-South Transport Corridor that has sea, rail and road routes between India, Russia, Iran, Europe and Central Asia.
- **Chabahar port** will be beneficial to India in countering Chinese presence in the Arabian Sea which China is trying to ensure by helping Pakistan develop the Gwadar port. Gwadar port is less than 400 km from Chabahar by road and 100 km by sea.
- **With Chabahar port** being developed and operated by India, Iran also becomes a military ally to India. Chabahar could be used in case China decides to flex its navy muscles by stationing ships in Gwadar port to reckon its upper hand in the Indian Ocean, Persian Gulf and Middle East.
- **With Chabahar port** becoming functional, there will be a significant boost in the import of iron ore, sugar and rice to India. The import cost of oil to India will also see a considerable decline. India has already increased its crude purchase from Iran since the West imposed ban on Iran was lifted.
- **Chabahar port** will ensure in the establishment of a politically sustainable connectivity between India and Afghanistan. This will, in turn, lead to better economic ties between the two countries.
- **From a diplomatic perspective**, Chabahar port could be used as a point from where humanitarian operations could be coordinated.

Quad countries to focus on maritime security

- **The Quad:** Regional coalition known as the 'Quad', the quadrilateral formation includes Japan, India, United States and Australia. All four nations find a common ground of being the democratic nations and common interests of unhindered maritime trade and security. The idea was first mooted by Japanese Prime Minister Shinzo Abe in 2007. However, the idea couldn't move ahead with Australia pulling out of it.
- **Significance Quad- grouping for the US:** The US believes the Quad, as one of the elements of its larger Indo-Pacific strategy for "a free, open and rules-based order" in face of an aggressive and expansionist China in the region, should eventually evolve into a ministerial-level dialogue imbued with a strong military dimension.
- **But Washington** also recognizes that New Delhi for now remains opposed to any militarization of the Quad, which was revived after a decade as a joint secretary-level dialogue in November 2017, with its second meeting being held in June this year. India has also made it clear that the US should not "conflate" the Indo-Pacific with the Quad, stressing the centrality of Asean in the former.
- **Way ahead:** Quad is an opportunity for like-minded countries to share notes and collaborate on projects of mutual interest. All four countries share a vision of an open and free Indo-Pacific. Each is involved in development and economic projects as well as in promoting maritime domain awareness and maritime security. The Quad grouping is one of the many avenues for interaction among India, Australia, Japan and the US and should not be seen in an exclusive context. Quad should not be seen in any comparative or in an exclusive context.
- **Maritime security and the need for it:** With a vast coastline of about 7600 kilometres, island territories on both sides of the peninsula are sizeable Exclusive Economic Zone and sea borne trade, the greater part of which moves by ship; there are many strands to India's composite maritime security including the safety of major ports plus aircraft carriers and nuclear submarines at strategic levels.

Border Area Development Programme (BADP)

- **Background:** The home ministry, till now, has released a total of Rs. 637.98 crore during the 2018-19 period to states having an International Border. The funds released are in addition to the Rs. 1,100-crore released in 2017-18 for the all-round development of villages located along the International Border in 17 states.
- **About Border Area Development Programme (BADP):** The Border Area Development Programme (BADP) has been implemented through 17 States (viz. Arunachal Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal) which constitute the International Land Borders.
- **The main objective of the BADP** is to meet the special developmental needs and well being of the people living in remote and inaccessible areas situated near the international border and to saturate the border areas with the entire essential infrastructure through convergence of Central/ State/ BADP/ Local schemes and participatory approach.
- **Funding and schemes covered:** The funds under BADP are provided to the States as a 100% non-lapsable Special Central Assistance. The programme is supplemental in nature and the budget allocation for the financial year 2015-16 is Rs.990 crore. The BADP schemes include construction of primary health centres, schools, supply of drinking water, community centres, connectivity, drainage to enable sustainable living in border areas.
- **It also covers schemes** or activities relating to Swachhta Abhiyan, skill development programmes, promotion of sports activities in border areas, promotion of rural tourism, border tourism, protection of heritage sites, construction of helipads in remote and inaccessible hilly areas, which do not have road connectivity.

Office of Coal Controller (earlier Coal Commissioner)

- **Office of Coal Controller (earlier Coal Commissioner)**, established in 1916, is one of the oldest offices in Indian Coal sector. Main aim behind setting up this office was to have Government control to adequately meet the coal requirement during First World War. Acute scarcity of coal necessitated promulgation of Colliery Control Order, 1944 for effective control on production, distribution and pricing of coal. Subsequently, it was revised by a more comprehensive order in 1945. Later in 1996, distribution and pricing of coal was deregulated. Thereafter, Colliery Control Order, 2000 superseded the previous order. Finally, the Colliery Control Rules, 2004, was published by Government of India in August, 2004.
- **Functions and Responsibilities** Functions of Coal Controller's Organisation are listed as below- Under Colliery Control Rules, 2004 – To lay down procedure and standard for sampling of coal. Inspection of collieries so as to ensure the correctness of the class, grade or size of coal. To issue directives for the purpose of declaration and maintenance of grades of coal of a seam mined in a colliery.
- **To act as the appellate authority** in case of dispute between consumers and owner arising out of declaration of grade and size of coal. To regulate disposal of stock of coal or the expected output of coal in the colliery.
- **Quality surveillance** with respect to maintenance of grade, loading of coal in wagons/ trucks according to laid down procedures regarding grades and sizes. To grant opening / re-opening permission of coal mine, seam or a section of seam or to subdivide a mine.
- **Under Coal Mines (Conservation & Development) Act, 1974** and Coal Mines (Conservation and Development) Amendment Rules, 2011- Assessment and collection of excise duty levied on all raw coal raised and dispatched.
- **Providing financial support to the coal operators for-** - Ensuring the conservation of coal resources: Stowing in UG mines. - Undertaking the development of coal mines in a scientific manner. - Undertaking research in relation to conservation of coal, development of coal mines and utilization of coal. - Protective works including blanketing with incombustible material, N₂ & CO₂ flushing, filling up of subsided areas, cutting of trenches etc. - Infrastructure development such as Road / Rail infrastructures in coalfields. Under Collection of Statistics Act, 2008 -
- **Coal Controller** has been made the statistical authority with respect to coal and lignite statistics. Entrusted the responsibility of carrying out Annual Coal & Lignite survey and publishing of Provisional Coal Statistics and Coal Directory of India. Submission of monthly coal data to different ministries of central and state Govt., national and international organization. Collection of Statistics relating to coal washeries. Under Coal Bearing Area (Acquisition and Development) Act, 1957-
- **Coal Controller** is the competent authority under this act to hear any objection to the Central Government's Notification relating to acquisition of coal bearing land and to furnish his reports to Central Govt.
- **Under the Coking Coal Mines (Nationalisation) act, 1972**, the Non-coking Coal Mines (Nationalisation) Act, 1973 and the Coal Mines (Special Provision) Act, 2015 Coal Controller also functions as the Commissioner of Payment to settle the claim cases of colliery owners of pre-nationalisation period under the above acts.
- **Commissioner of Payments** Coal Controller functions as the Commissioner of Payment to settle the claim cases of colliery owners of pre-nationalisation period under the Coking Coal Mines (Nationalisation) act, 1972, the Non-coking Coal Mines (Nationalisation) Act, 1973 and also for the Schedule-I Coal Mines as per the Coal Mines (Special Provision) Act, 2015



Earth has three moons

- **The new moons** exist at a distance of approximately 250,000 miles — more or less the same distance as our moon.
- **Background:** The presence of the dust 'moons' or Kordylewski clouds had been inferred by researchers since long before. But the first glimpse of the clouds was seen only in 1961 by Polish astronomer Kazimierz Kordylewski, after whom the dust clouds were named.
- **Facts about the newly discovered dust moons:** The new findings note that each Kordylewski cloud is about 15 by 10 degrees wide, or equal to 30 by 20 lunar disks in the night sky. They are spread over a space area that is almost nine times the width of Earth — about 65,000 by 45,000 miles in actual size.
- **The dust 'moons'** are huge but they are made of tiny dust particles that barely measure one micrometre across. When sunlight hits the dust particles, they glow very faintly, much like the zodiacal light we receive from the dust scattered in between planetary orbits.
- **Since these satellite** dust clouds emit an extremely faint light, they are very difficult to find amidst the star light, sky glow, galactic light and zodiacal light in the sky though they are as close to us as the moon.
- **About Kordylewski clouds:** The Kordylewski clouds are always changing. They might be stable in orbit and may have existed for millions of years, but the ingredients that make the clouds — the dust particles — are always getting swapped for others. Some escape to gravitational pulls from Earth or the moon, while others come from interplanetary spaces and meteor showers.
- **How Lagrange points in space helped find the extra 'moons'?** Speculations about Earth having multiple moons have taken turns in astronomer circles for years. It was realised that if extra moons did exist, they could only do so in stable points in Earth's orbit.
- **Lagrange points** are sweet spots in a planetary orbit where the pull of gravity working from two opposing celestial bodies is balanced due to the centripetal force of their orbits. Thus, an object at a Lagrange point will remain fixed at a constant distance from both the moon and Earth.
- **In the 1950s**, Kordylewski searched two Lagrange points — L4 and L5 — where he found the first glimpse of the two dust clouds orbiting Earth.
- **Can these dust 'moons' be dangerous or will they help us?** These huge clouds of dust could add much to space exploration efforts when it comes to fuel consumption and safety issues. Sometimes, satellites need to be parked at the Lagrange points so that the spacecraft consumes minimal fuel and can still stay in orbit.
- **The James Webb Space Telescope** will be set up at the L2 Lagrange point in 2020 for this purpose. Moreover, space agencies are also planning to use Lagrange points as transfer stations for Mars missions.

Ganga Gram Project

- **About Ganga Gram project:** Ganga Gram vision is an integrated approach for holistic development of villages situated on the banks of River Ganga with active participation of the villagers.
- **The objectives** of Ganga Gram Project include solid and liquid waste management, renovation of ponds and water resources, water conservation projects, organic farming, horticulture, and promotion of medicinal plants.

- **About Namami Gange Programme:** Namami Gange programme was launched as a mission to achieve the target of cleaning river Ganga in an effective manner with the unceasing involvement of all stakeholders, especially five major Ganga basin States – Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal. The programme envisages: River Surface Cleaning, Sewerage Treatment Infrastructure, River Front Development, Bio-Diversity, Afforestation and Public Awareness.
- **Implementation:** The program would be implemented by the National Mission for Clean Ganga (NMCG), and its state counterpart organizations i.e., State Program Management Groups (SPMGs). In order to improve implementation, a three-tier mechanism has been proposed for project monitoring comprising of a) High level task force chaired by Cabinet Secretary assisted by NMCG at national level, b) State level committee chaired by Chief Secretary assisted by SPMG at state level and c) District level committee chaired by the District Magistrate.
- **The program emphasizes** on improved coordination mechanisms between various Ministries/Agencies of Central and State governments.

International Telecommunications Union (ITU)

- **By securing 165 votes,** India ranked third among the 13 countries elected to the Council from the Asia-Australasia region, and eighth among the 48 countries elected to the Council globally. The ITU has 193 member states who elect representatives to the Council.
- **About International Telecommunication Union (ITU):** The International Telecommunication Union (ITU) is an agency of the United Nations (UN) whose purpose is to coordinate telecommunication operations and services throughout the world. Originally founded in 1865, as the International Telegraph Union, the ITU is the oldest existing international organization. ITU headquarters are in Geneva, Switzerland.
- **The ITU consists of three sectors:** Radiocommunication (ITU-R) — ensures optimal, fair and rational use of the radio frequency (RF) spectrum. Telecommunication Standardization (ITU-T) — formulates recommendations for standardizing telecommunication operations worldwide. Telecommunication Development (ITU-D) — assists countries in developing and maintaining internal communication operations.
- **Membership:** There are 193 Member States of the ITU, including all UN member states except the Republic of Palau, plus the Vatican City. Membership of ITU is open to only UN members, which may join the Union as Member States, as well as to private organizations like carriers, equipment manufacturers, funding bodies, research and development organizations and international and regional telecommunication organizations, which may join ITU as non-voting Sector Members.
- **Functions:** The ITU sets and publishes regulations and standards relevant to electronic communication and broadcasting technologies of all kinds including radio, television, satellite, telephone and the Internet.
- **The organization** conducts working parties, study groups and meetings to address current and future issues and to resolve disputes. The ITU organizes and holds an exhibition and forum known as the Global TELECOM every four years. Another important aspect of the ITU's mandate is helping emerging countries to establish and develop telecommunication systems of their own.
- **Although the recommendations** of the ITU are non-binding, most countries adhere to them in the interest of maintaining an effective international electronic communication environment.

United Nations Postal System

- **Key Facts:** The special event sheet (stamps) issued by UNPA are in denomination of US \$1.15. It contains ten stamps and tabs featuring festive lights and symbolic lamps known as diyas. The background of sheet features United Nations Headquarters building illuminated with message of "Happy Diwali" to celebrate the spirit of the festival.
- **The description** accompanying information about stamps mentioned that Diwali, also known as Deepawali is joyous and popular festival of lights, which is celebrated in India and by followers of many faiths across the world. It also said that during celebration clay lamps known as diyas are lit to signify the victory of good over evil. The festival also symbolises start of new year for many communities.
- **About United Nations Postal Administration (UNPA):** It is postal agency of United Nations. It issues postage stamps and postal stationery, denominated in United States dollars for United Nations offices in New York, in Swiss francs for offices in Geneva and in euros for the offices in Vienna. Postage rates charged are identical to those of the host nation.

World Food Programme (WFP)

- **As per the agreement**, Alibaba will lend its cutting-edge technology and resources to support digital transformation of WFP's operations.
- **"World Hunger Map"**: Alibaba Cloud, the cloud computing arm of Alibaba will work with WFP to develop digital "World Hunger Map". The map will help to monitor global hunger and operations to end scourge by 2030 which is one of UN's key Sustainable Development goals. It also aims to boost efficiency of interventions and shorten emergency response times.
- **About WFP**: The World Food Programme (WFP) is the food assistance branch of the United Nations and the world's largest humanitarian organization addressing hunger and promoting food security.
- **The WFP strives** to eradicate hunger and malnutrition, with the ultimate goal in mind of eliminating the need for food aid itself. It is a member of the United Nations Development Group and part of its Executive Committee. Born in 1961, WFP pursues a vision of the world in which every man, woman and child has access at all times to the food needed for an active and healthy life. The WFP is governed by an Executive Board which consists of representatives from member states.
- **The WFP operations** are funded by voluntary donations from world governments, corporations and private donors. WFP food aid is also directed to fight micronutrient deficiencies, reduce child mortality, improve maternal health, and combat disease, including HIV and AIDS.

National River Ganga (Rejuvenation, Conservation and Management) Bill, 2018

- **Highlights of the Bill**: The bill propose to ban the construction of jetties, ports or "permanent hydraulic structures" in the Ganga, unless permitted by the National Ganga Rejuvenation Authority. It proposes to create a management structure that will supervise the health of the 2,500-kilometre long Ganga which, the draft Bill defines, as 'India's national river.'
- **The Bill** lays down a host of restrictions to ensure the "uninterrupted, ecological flow" of the river. Currently, a host of dams in the upper stretches of the river lead to the river's flow being obstructed. The proposed legislation specifies that "unauthorized" activities that cause obstruction or discontinuity of water in the River Ganga due to engineered diversion of water or stoppage of water. Carrying out such activities are liable to a prison term of 3 years or fines upto ₹ 50 crore, or both.
- **The Armed Ganga Protection Corps (GPC)** personnel will be provided by the ministry of home affairs and will be deployed by the National Ganga Rejuvenation Authority. The GPC personnel will have power to arrest those who pollute the river covering offences like obstructing the flow of the river to commercial fishing.
- **The Bill has listed out a list of offences marked as cognizable which includes**: Construction activities causing obstruction in the river. Withdrawal of ground water for industrial or commercial consumption from the land fronting the river and its tributaries. Commercial fishing or aqua culture in the river and its tributaries. Discharging untreated or treated sewage into the river.
- **Background**: In July 2016, a committee was constituted under retired judge of the Allahabad High Court Justice Girdhar Malviya who had submitted a draft Bill last year named The National River Ganga (Rejuvenation, Protection and Management) Bill, 2017. Subsequently, a four-member committee was set up by the Ministry to examine that and the Ministry has circulated a Cabinet note which includes a revised version of that draft Bill

India Brand Equity Foundation (IBEF)

- **India Brand Equity Foundation (IBEF)** is a Trust established by the Department of Commerce, Ministry of Commerce and Industry, Government of India. IBEF's primary objective is to promote and create international awareness of the Made in India label in markets overseas and to facilitate dissemination of knowledge of Indian products and services. Towards this objective, IBEF works closely with stakeholders across government and industry
- **India**, today, is well established as a credible business partner, preferred investment destination, rapidly growing market, provider of quality services and manufactured products; and, stands on the threshold years of unprecedented growth.

- **India's Talent, Markets, Growth and Opportunity drive Brand India.** www.ibef.org is a knowledge centre for global investors, international policy-makers and world media seeking updated, accurate and comprehensive information on the Indian economy, states and sectors. IBEF regularly tracks government announcements in policy, foreign investment, macroeconomic indicators and business trends.
- **IBEF works with a network of stakeholders - domestic and international - to promote Brand India.**
- **A bouquet of communication resources** - posters, CD, magazine, e-newsletter(s), industry reports - comprise the India business kit that bring live the India business story.

The ECGC Limited (Formerly Export Credit Guarantee Corporation of India Ltd)

- **The ECGC Limited** (Formerly Export Credit Guarantee Corporation of India Ltd) is a company wholly owned by the Government of India based in Mumbai, Maharashtra.[1] It provides export credit insurance support to Indian exporters and is controlled by the Ministry of Commerce. Government of India had initially set up Export Risks Insurance Corporation (ERIC) in July 1957. It was transformed into Export Credit and Guarantee Corporation Limited (ECGC) in 1964 and to Export Credit Guarantee Corporation of India in 1983
- **ECGC Ltd**, was established in July, 1957 to strengthen the export promotion by covering the risk of exporting on credit.[2] It functions under the administrative control of the Ministry of Commerce & Industry, Department of Commerce, Government of India. It is managed by an Asset Management Company comprising representatives of the Government, Reserve Bank of India, banking, insurance and exporting community.[3]
- **Name of the company** has been changed from EXPORT CREDIT GUARANTEE CORPORATION OF INDIA LIMITED to ECGC Limited with effect from 8 August 2014 as per certificate issued by Deputy Registrar of Companies, Registrar of Companies, Mumbai.
- **ECGC Ltd** is the seventh largest credit insurer of the world in terms of coverage of national exports. The present paid-up capital of the company is Rs. 1200 crores and authorized capital Rs.5000 crores
- **Functions** Provides a range of credit risk insurance covers to exporters against loss in export of goods and services as well. Offers guarantees to banks and financial institutions to enable exporters to obtain better facilities from them. Provides Overseas Investment Insurance to Indian companies investing in joint ventures abroad in the form of equity or loan and advances.
- **Facilities by ECGC** Offers insurance protection to exporters against payment risks Provides guidance in export-related activities Makes available information on different countries with its own credit ratings Makes it easy to obtain export finance from banks/financial institutions Assists exporters in recovering bad debt Provides information on credit-worthiness of overseas buyers



Global Cooling Innovation Summit to be inaugurated in New Delhi.

- **To achieve dramatic breakthroughs** in cooling technologies ,Global Cooling Prize to be launched by Union Environment Minister.
- **Two-day Global Cooling Innovation Summit** will be inaugurated by Union Science & Technology Minister, Dr. Harsh Vardhan in New Delhi on 12th November 2018. The Summit is a first-of-its-kind solutions-focused event that will bring together leaders from around the world to explore concrete means and pathways to address the climate threat that comes from the growing demand from room air conditioners. The event is jointly organized by the Department of Science and Technology, Government of India, along with Rocky Mountain Institute, Alliance for An Energy Efficient Economy (AEEE), Conservation X Labs and CEPT University.
- **The summit** will also see the launching of Global Cooling Prize— Mission Innovation challenge that aims to spur development of a residential cooling solution that has at least five times (5x) less climate impact than today's standard. Global Cooling Prize is a competition with global reach and participation to achieve dramatic breakthroughs in cooling technologies. The objective of this competition would be to develop a cooling technology that requires radically less energy to operate, utilizes refrigerants with no ozone depletion potential and with low global warming potential, and has the potential to be cost-effective at scale.
- **This awards programme** will call world-wide attention to the most promising ideas across the globe. This award will celebrate successes and facilitate endeavours of innovators through providing recognition, encouragement and support. The award will also be able to build a collaborative platform that can utilize the potential of researchers so that public research contributes towards fostering innovation and create impact which is of social and economic good. This recognition will not only recognise the eminent contributions to clean energy research development and demonstration, but would also motivate younger researchers to focus on innovations needed in clean energy domain to make world a better place to live.

Bilateral Exercise Between Indian & Republic of Singapore Navies – SIMBEX 18 - marks Silver Jubilee this Year

- **The 25th edition of SIMBEX**, an acronym for "Singapore-India Maritime Bilateral Exercise" is scheduled from 10th to 21st November 2018 off Andaman Sea and Bay of Bengal. Bilateral cooperation between Singapore and India was first formalised when RSN ships began training with the Indian Navy in 1994. What began as a modest endeavour to exchange best practices in the field of Anti-Submarine Warfare (ASW), has in the recent years evolved into a complex high stakes exercise with both nations attaching premium in terms of time, complex advanced exercises and type of platforms involved.
- **Complementing India's 'Act-East' policy**, there have been a number of agreements and high level visits in the recent past between the two countries. Indo-Singapore bilateral relations have been on an upswing in the recent past. Both countries have a full calendar of more than 20 bilateral mechanisms, dialogues and exercises, many of which take place annually. In November 2015, the robust relationship between the two countries was elevated to 'Strategic Partnership'.
- **In June this year**, on the side-lines of the Shangrila Dialogue, Prime Minister Narendra Modi and Prime Minister Lee Hsien Loong of Singapore inked many agreements including those under the 'Defence and Strategic Partnership Sectors'. Key among them is the 'Implementation Agreement between Indian Navy and Republic of Singapore Navy concerning Mutual Coordination, Logistics and Services Support for Naval Ships', Submarines and Naval Aircraft (including Ship borne Aviation Assets) visits. The Implementation Agreement since coming in force has facilitated deployment of naval assets from bases of the other through logistics and services support.

Global IT Challenge for Youth with Disabilities 2018 Begins

- **The Global IT Challenge for Youth with Disabilities, 2018** was inaugurated here today by the Minister of State for Social Justice & Empowerment, Shri Krishan Pal Gurjar. The three day event is being organised by the Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment in association with Rehabilitation International Korea and their associated partner LG Electronics from 9th to 11th November, 2018.
- **The objective of the event** is to leverage IT skills among youth with disabilities and also to spread awareness about the application of Information and Computer Technology (ICT) in enhancing the quality of life of persons with disabilities especially in Asia-Pacific region. The award ceremony of the event will be held on 11th November, 2018. Secretary, DEPwD Smt. Shakuntala D. Gamlin, MD, LG Electronics India Ltd. Mr. Kim Ki Wan and Head of UNESCAP (South Asia) Mr. Nagesh Kumar and other distinguished guests were present on the occasion.
- **The Global ICT Challenge** for Youth with Disabilities is a capacity building project that helps youth with disabilities to overcome their limitations and challenge themselves for a better future by providing them with access to ICT and related experiences, improving their ability to leverage information and social participation while setting ICT agendas for participant countries related to disabilities and boosting international cooperation and exchange.
- **This year** around 100 youth with disabilities (visual disability, hearing disability, locomotor disability and intellectual disability/developmental disorder) from 18 countries namely, India, Indonesia, China, Vietnam, Malaysia, Thailand, Sri Lanka, Bangladesh, Nepal, Mongolia, Cambodia, Laos, Philippines, Korea, Kazakhstan, Kyrgyzstan, UK and UAE are participating in this event.
- **India** has nominated twelve youth with disabilities to participate in the event. These youth with disabilities have been selected on the basis of the National IT Challenge conducted by the Ministry through NIT Kurukshetra in June, 2018. India has been participating in the event since 2013 and has been winning awards ever since. Last year the event was held in Vietnam.

EARTH'S WATER A RESULT OF ASTEROID IMPACTS AND LEFTOVER GAS FROM SUN'S BIRTH

- **The study** notes that since comets contain a lot of ices, it could have supplied some water. Asteroids, which are not as water-rich yet still plentiful, could be a source as well.
- **Background:** The early ocean known as Arabia was formed 4 billion years ago on Mars, while the Deuteronilus ocean was formed 3.6 billion years ago. Both coexisted with the massive volcanic province Tharsis, located on the unseen side of the planet, which may have helped support the existence of liquid water; the water is now gone, perhaps frozen underground and partially lost to space, while the ancient seabed is known as the northern plains.
- **The study** challenges widely-accepted ideas about hydrogen in Earth's water by suggesting the element partially came from clouds of dust and gas remaining after the Sun's formation, called the solar nebula.
- **Significance:** The new finding fits neatly into current theories of how the Sun and the planets formed. It also has implications for habitable planets beyond the solar system. Astronomers have discovered more than 3,800 planets orbiting other stars, and many appear to be rocky bodies not greatly different from our own.

Dredging Corporation Of India

- **The consortium** of four ports consists of Vishakhapatnam Port Trust (Andhra Pradesh), Paradeep Port Trust (Odisha), Jawahar Lal Nehru Port Trust (Maharashtra) and Kandla Port Trust (Gujarat).
- **Present status:** Presently, Central Government holds 73.44% shares in DCIL.
- **Benefits:** Strategic sale of DCIL will further facilitate linkage of dredging activities with ports, keeping in view the role of DCIL in expansion of dredging activity in the country as well as potential scope for diversification of ports into third party dredging.
- **The co-sharing** of facilities between company as well as ports shall lead to savings for ports. This will also further provide opportunities for larger investment in DCIL as integration with ports shall help ineffective vertical linkage in value chain.
- **About Dredging Corporation of India Limited (DCIL):** It is a public sector unit (PSU) engaged in the business of dredging. It was established in March 1976 and is headquartered in Visakhapatnam, Andhra Pradesh. It reports to the Ministry of Shipping. It does dredging for Indian seaports exclusively. It is involved in capital dredging, beach nourishment, and land reclamation.

Strategic Petroleum Reserves (SPR)

- **Key facts:** The filling of the SPR will be under PPP model and is being undertaken to reduce budgetary support of Union Government. The SPR facility at Padur is underground rock cavern with total capacity of 2.5 million metric tonnes (MMT) having four compartments of 0.625 MMT each.
- **Background:** India has built 5.33 million tons of underground reserves in three locations, including Padur, under an earlier phase that can meet 9.5 days of the country's oil needs. The government purchased crude to fill the caverns in Visakhapatnam in Andhra Pradesh and half of another facility in Mangalore in Karnataka, while leasing out the other half to Abu Dhabi National Oil Co.
- **About SPR programme:** To ensure energy security, the Government of India had decided to set up 5 million metric tons (MMT) of strategic crude oil storages at three locations namely, Visakhapatnam, Mangalore and Padur (near Udipi). These strategic storages would be in addition to the existing storages of crude oil and petroleum products with the oil companies and would serve as a cushion during any external supply disruptions.
- **In the 2017-18 budget,** it was announced that two more such caverns will be set up Chandikhole in Jajpur district of Odisha and Bikaner in Rajasthan as part of the second phase.
- **The construction** of the Strategic Crude Oil Storage facilities is being managed by Indian Strategic Petroleum Reserves Limited (ISPRL), a Special Purpose Vehicle, which is a wholly owned subsidiary of Oil Industry Development Board (OIDB) under the Ministry of Petroleum & Natural Gas.
- **Need for strategic oil reserves:** In 1990, as the Gulf war engulfed West Asia, India was in the throes of a major energy crisis. By all accounts India's oil reserves at the time were adequate for only three days. While India managed to avert the crisis then, the threat of energy disruption continues to present a real danger even today.
- **It is unlikely that India's energy** needs will dramatically move away from fossil fuels in the near future. Over 80% of these fuels come from imports, a majority of which is sourced from West Asia. This is a major strategic risk and poses a massive financial drain for an embattled economy and its growing current account deficit.
- **To address energy** insecurity, the Atal Bihari Vajpayee government mooted the concept of strategic petroleum reserves in 1998. Today, with India consuming upwards of four million barrels of crude every day (January 2015 figures), the case for creating such reserves grows stronger.

Government approves mechanism for sale of enemy shares

- **A total number** of 6,50,75,877 shares in 996 companies of 20,323 shareholders are under the custody of Custodian of Enemy Property of India (CEPI).
- **Significance:** The decision will lead to monetisation of movable enemy property lying dormant for decades and the proceeds will be used for development and social welfare programmes.
- **Background:** Total shares, known as "enemy shares numbering 6,50,75,877 worth Rs 3,000 crore, are lying unutilised because enemy property act includes movable and immovable property. Of these 996 companies, 588 are functional/ active companies, 139 of these are listed with remaining being unlisted.
- **What are enemy properties?** When wars broke out between India and China in 1962, and India and Pakistan in 1965 and 1971, the central government took over properties of citizens of China and Pakistan in India under the Defence of India Acts. These Acts defined an 'enemy' as a country that committed an act of aggression against India, and its citizens.
- **The properties of enemies** in India were classified as enemy property. The properties included land, buildings, shares held in companies, gold and jewellery of the citizens of enemy countries. The responsibility of the administration of enemy properties was handed over to the Custodian of Enemy Property, an office under the central government.
- **Enemy properties Act:** After the Indo-Pakistan War of 1965, the Enemy Property Act was enacted in 1968, which regulates such properties and lists the custodian's powers. The government amended the Act in the wake of a claim laid by the heirs of Raja Mohammad Amir Mohammad Khan, known as Raja of Mahmudabad, on his properties spread across Uttar Pradesh and Uttarakhand.
- **The government** has vested these properties in the Custodian of Enemy Property for India, an office instituted under the Central government.

Bionic mushrooms

- **How was it developed?** Researchers used a robotic arm-based 3D printer to first print an “electronic ink” containing the graphene nanoribbons. This printed branched network serves as an electricity-collecting network atop the mushroom’s cap by acting like a nano-probe — to access bio-electrons generated inside the cyanobacterial cells.
- **Next, they printed a” bio-ink”** containing cyanobacteria onto the mushroom’s cap in a spiral pattern intersecting with the electronic ink at multiple contact points. At these locations, electrons could transfer through the outer membranes of the cyanobacteria to the conductive network of graphene nanoribbons. Shining a light on the mushrooms activated cyanobacterial photosynthesis, generating a photocurrent.
- **Significance and applications of Bionic mushrooms:** This bionic mushroom produces electricity. By integrating cyanobacteria that can produce electricity, with nanoscale materials capable of collecting the current, researchers were able to better access the unique properties of both, augment them, and create an entirely new functional bionic system.
- **The amount of electricity** these bacteria produce can vary depending on the density and alignment with which they are packed, such that the more densely packed together they are, the more electricity they produce.

NASA’s Ralph and Lucy

- **What are they?** Ralph is a space instrument that has travelled as far as Pluto, while Lucy is a mission payload, or the spacecraft which would be carrying various scientific instruments including Ralph to study the properties of the asteroids.
- **The mission** will be launched in 2021 and would be the very first space mission to study the Trojans.
- **About Jupiter’s Trojan asteroids:** The Trojan asteroids orbit Sun in two loose groups — one group is always ahead of Jupiter (called the Greek camp) in its path while the other is always behind (called the Trojan camp). The two clusters are stabilized at these two Lagrange points in a gravitational balancing act between the Sun and Jupiter.
- **As per the NASA** all of the Trojans are thought to be abundant in dark carbon compounds. Below an insulating blanket of dust, they are probably rich in water and other volatile substances. The Trojan asteroids in Jupiter’s orbit could be made from the same material as the outer planets which were formed during the birth of the solar system more than 4 billion years ago.
- **What are Lagrange points?** Lagrange points are sweet spots in a planetary orbit where the pull of gravity working from two opposing celestial bodies is balanced due to the centripetal force of their orbits.
- **About mission Lucy to Jupiter’s Trojan asteroids:** The name Lucy’ was taken from the name of the fossil of the earliest human ancestor yet discovered. Just like the finding of this skeleton had provided important insight into human evolution, scientists hope the Lucy mission will also be able to tell us more about our planetary origins.
- **The Lucy mission** will comprise a 12-year journey with a fly-by to seven different asteroids — six Trojan asteroids and a Main Belt asteroid — more than any other previous asteroid mission. The mission will get us up-close with both the clusters of Trojan asteroids.
- **The Lucy mission payload will explore the Trojan asteroids using:** The Long Range Reconnaissance Imager (L’LORRI). The Thermal Emission Spectrometer (L’TES). L’Ralph. L’LORRI will take high-definition photos of the Trojans, and L’TES will analyze the heat given off of the Trojans’ surface structures.
- **About NASA’s scientific instrument Ralph:** Ralph first launched aboard the New Horizons spacecraft in 2006 and obtained stunning flyby images of Jupiter and its moons. This was followed by a visit to Pluto where Ralph took the first high-definition pictures of the iconic minor planet.
- **The instrument** will fly by another Kuiper Belt object called 2014 MU69 — nicknamed Ultima Thule — in January 2019. Ralph’s observations of 2014 MU69 will provide unique insights into this small, icy world. Ralph enables the study of the composition and atmospheres of celestial objects.

China unveils 'Heavenly Palace' space station

- **About China's space station:** It is a 17-metre core module. Three astronauts will be permanently stationed in the 60-tonne orbiting lab, which will enable the crew to conduct biological and microgravity research.
- **Assembly** is expected to be completed around 2022 and the station would have a lifespan of around 10 years.
- **Significance: The International Space Station** – a collaboration between the United States, Russia, Canada, Europe and Japan – has been in operation since 1998 and is due to be retired in 2024.
- **China** will then have the only space station in orbit, though it will be much smaller than the ISS which weighs 400 tonnes and is as large as a football pitch.
- **About the International Space Station (ISS):** The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit. The ISS is now the largest artificial body in orbit.
- **The ISS consists of pressurised modules**, external trusses, solar arrays and other components. ISS components have been launched by Russian Proton and Soyuz rockets as well as American Space Shuttles.
- **The ISS serves** as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology and other fields.
- **The station** is suited for the testing of spacecraft systems and equipment required for missions to the Moon and Mars. The ISS maintains an orbit with an altitude of between 330 and 435 km by means of reboost manoeuvres using the engines of the Zvezda module or visiting spacecraft. It completes 15.54 orbits per day.
- **ISS is the ninth space station** to be inhabited by crews, following the Soviet and later Russian Salyut, Almaz, and Mir stations as well as Skylab from the US. The ISS programme is a joint project among five participating space agencies: NASA, Roscosmos, JAXA, ESA, and CSA.
- **The ownership** and use of the space station is established by intergovernmental treaties and agreements. The station is divided into two sections, the Russian Orbital Segment (ROS) and the United States Orbital Segment (USOS), which is shared by many nations.

Earliest cave paintings of animal discovered in Indonesia, dating back 40,000 years:

- **What?** The world's earliest-known cave painting of an animal has been discovered. Where? On Borneo in Indonesia. When? It dates back to at least 40,000 years ago.
- **Central Tribal University:** What? Union Cabinet has approved setting up of Central Tribal University. Where? The proposed university will come up in Andhra Pradesh after necessary amendment in the Central Universities Act, 2009.
- **About Central Tribal University:** It will be set up in Relli village of Vizianagaram District of Andhra Pradesh. It will be established under Thirteenth Schedule to Andhra Pradesh Reorganisation Act, 2014.
- **Beyond Fake News Project:** What is it? The British Broadcasting Corporation (BBC) has devised a new campaign that is aimed at fighting back against disinformation and fake news. It lays a major focus on global media literacy, including workshops and debates in countries like India.
- **The most highlighted initiatives under the Project includes:** In-depth research of Funding Sharing online behaviors, Rolling out media literacy workshops globally BBC Reality Check for upcoming elections



Global IT Challenge for Youth with Disabilities 2018

- **About the Global ICT Challenge for Youth with Disabilities:** The Global ICT Challenge for Youth with Disabilities is a capacity building project that helps youth with disabilities to overcome their limitations and challenge themselves for a better future by providing them with access to ICT and related experiences, improving their ability to leverage information and social participation while setting ICT agendas for participant countries related to disabilities and boosting international cooperation and exchange.
- **The objective of the event** is to leverage IT skills among youth with disabilities and also to spread awareness about the application of Information and Computer Technology (ICT) in enhancing the quality of life of persons with disabilities especially in Asia-Pacific region.
- **Participants:** This year around 100 youth with disabilities (visual disability, hearing disability, locomotor disability and intellectual disability/developmental disorder) from 18 countries are participating in the event.
- **The competition** is focused on strategies for strengthening IT skills of youth with disabilities as a critical requirement for enhancing their access to information and communication services on an equal basis with others. It is being held with a total of four events including e-Tool Challenge to evaluate the skills of using the MS Office programme and e-Life Map Challenge to evaluate the online information search ability in specific situations.
- **Significance of ICT:** Today, we have plethora of applications and softwares across the world that can be used for improving the life skills of persons with disabilities to enable them to lead the dignified life such ICT tools can work as communication bridge for the persons with disabilities. The use of ICT can reduce digital divide and expand social integration of persons with disabilities across communities and counties by creating an accessible global information network.
- **Way ahead:** India has always been in the forefront of software development in the world. However, there is a need to create deeper and wider awareness about the application of ICT at the grass root level for empowering the person with disabilities.

Pneumonia and diarrhoea in India

- **The report** is released by the International Vaccine Access Center (IVAC) at the Johns Hopkins Bloomberg School of Public Health. The report, released ahead of the 10th annual World Pneumonia Day, on November 12, reviews progress and gaps in coverage of interventions to "protect against, prevent and treat" pneumonia and diarrhoea.
- **Highlights of the report:** Even as vaccine coverage has significantly improved in India, other interventions against pneumonia and diarrhoea, the two major causes of child deaths in the country, declined in last one year.
- **ORS coverage dropped** by 13 percentage points, exclusive breastfeeding by 10 percentage points, whereas access to pneumonia care decreased by four percentage points in one year. With a total of 2,60,990 deaths of children under 5 years of age due to pneumonia and diarrhoea, India continues to top the list of 15 countries with the most casualties. While 1,58,176 children under 5 died of pneumonia, diarrhoea accounted for 1,02,813 deaths in 2016.
- **Female children** in India lose out on vaccination despite improvements in full immunisation coverage. Only 78 females were fully immunised for every 100 males fully immunised in poor areas of Delhi. Addressing these disparities can help reduce pneumonia and diarrhoea burden.
- **Globally, pneumonia** and diarrhoea cause 1.36 million deaths in children in the same category in 2016. Over two thirds of the global burden of pneumonia and diarrhoea mortality occurs in just 15 countries. Despite significant reductions of disease in recent years with improvements in access to and use of health interventions, nearly half a million pneumonia and diarrhoea deaths still occurred in just India and Nigeria.
- **The report lists** exclusive breastfeeding, vaccination, access to care and use of antibiotics, oral rehydration solution, and zinc supplementation as key interventions to help prevent and treat pneumonia and diarrhoea.

Advanced Motor Fuels Technology Collaboration Programme

- **The primary goal** of joining AMF TCP by India to bring down emissions and achieve higher fuel efficiency in transport sector.
- **What is Advanced Motor Fuels Technology Collaboration Programme?** AMF TCP is an international platform under the framework of International Energy Agency (IEA) for co-operation among countries to promote cleaner and more energy efficient fuels & vehicle technologies.
- **The activities of AMF TCP** are deployment and dissemination of Advanced Motor Fuels. It looks upon the transport fuel issues in a systemic way taking into account the production, distribution and end use related aspects.
- **AMF TCP also provides** an opportunity for fuel analysis, identifying new/ alternate fuels for deployment in transport sector and allied R&D activities for reduction in emissions in fuel intensive sectors.
- **India and Other Members:** Ministry of Petroleum & Natural Gas has joined AMF TCP as its 16th member in May, 2018. The other member Countries of AMF TCP are USA, China, Japan, Canada, Chile, Israel, Germany, Austria, Sweden, Finland, Denmark, Spain, Republic of Korea, Switzerland and Thailand.
- **Benefits for India:** India's association with AMF TCP will help in furthering its efforts in identification & deployment of suitable fuels for transport sector for higher efficiency and lesser emissions. The benefits of participation in AMF TCP are shared costs and pooled technical resources.
- **The duplication of efforts** is avoided and national Research and Development capabilities are strengthened. There is an information exchange about best practices, network of researchers and linking research with practical implementation.
- **After becoming member**, India will initiate R&D in other areas of its interest in advanced biofuels and other motor fuels in view of their crucial role in substituting fossil fuel imports.

Global Cooling Innovation Summit

- **About the Global Cooling Innovation Summit:** The Summit is a first-of-its-kind solutions-focused event that will bring together leaders from around the world to explore concrete means and pathways to address the climate threat that comes from the growing demand from room air conditioners.
- **The event is jointly** organized by the Department of Science and Technology, Government of India, along with Rocky Mountain Institute, Alliance for An Energy Efficient Economy (AEEE), Conservation X Labs and CEPT University.
- **Global Cooling Prize:** The summit will also see the launching of Global Cooling Prize— Mission Innovation challenge that aims to spur development of a residential cooling solution that has at least five times (5x) less climate impact than today's standard.
- **Global Cooling Prize** is a competition with global reach and participation to achieve dramatic breakthroughs in cooling technologies. The objective of this competition would be to develop a cooling technology that requires radically less energy to operate, utilizes refrigerants with no ozone depletion potential and with low global warming potential, and has the potential to be cost-effective at scale.
- **Significance:** This awards programme will call world-wide attention to the most promising ideas across the globe. This award will celebrate successes and facilitate endeavours of innovators through providing recognition, encouragement and support.
- **The award** will also be able to build a collaborative platform that can utilize the potential of researchers so that public research contributes towards fostering innovation and create impact which is of social and economic good.
- **This recognition** will not only recognise the eminent contributions to clean energy research development and demonstration, but would also motivate younger researchers to focus on innovations needed in clean energy domain to make world a better place to live.

SIMBEX 18 – marks Silver Jubilee this Year:

- **The 25th edition** of SIMBEX, an acronym for "Singapore-India Maritime Bilateral Exercise" is being held off Andaman Sea and Bay of Bengal. SIMBEX 2018 will be the largest edition since 1994 in terms of scale and complexity.

World's first AI news anchor debuts in China:

- **Context:** The world's first artificial intelligence (AI) news anchor made "his" debut at the ongoing fifth World Internet Conference in east China's Zhejiang province.
- **Key facts:** The AI news anchor has a male image with a voice, facial expressions and actions of a real person. He learns from live broadcasting videos by himself and can read texts as naturally as a professional news anchor.
- **The AI news anchor** was jointly developed by Xinhua and the Chinese search engine company, Sogou.com. The AI anchor has become a member of reporting team and can work 24 hours a day on its official website and various social media platforms, reducing news production costs and improving efficiency.



The Companies Amendment Ordinance 2018 The Companies (Amendment) Ordinance, 2018 was promulgated on November 2, 2018.

- **It amends several provisions in the Companies Act, 2013 relating to penalties, among others.** Issue of shares at a discount: The Act prohibits a company from issuing shares at a discount, except in certain cases. On failure to comply, the company is liable to pay a fine between one lakh rupees and five lakh rupees. Further, every officer in default may be punished with imprisonment up to six months or fine between one lakh rupees and five lakh rupees. The Ordinance changes this to remove imprisonment for officers as a punishment. Further, the company and every officer in default will be liable to pay a penalty equal to the amount raised by the issue of shares at a discount or five lakh rupees, whichever is lower. The company will also be liable to refund the money received with interest at 12% per annum from the date of issue of the shares.
- **Commencement of business:** The Ordinance states that a company may not commence business, unless it (i) files a declaration within 180 days of incorporation, confirming that every subscriber to the Memorandum of the company has paid the value of shares agreed to be taken by him, and (ii) files a verification of its registered office address with the Registrar of Companies within 30 days of incorporation. If a company fails to comply with these provisions and is found not to be carrying out any business, the name of the Company may be removed from the Register of Companies.
- **Registration of charges:** The Act requires companies to register charges (such as mortgages) on their property within 30 days of creation of charge. The Registrar may permit the registration within 300 days of creation. If the registration is not completed within 300 days, the company is required to seek extension of time from the central government.
- **The Ordinance changes this to permit registration of charges:** (i) within 300 days if the charge is created before the Ordinance, or (ii) within 60 days if the charge is created after the Ordinance. If the charge under the first category is not registered within 300 days, it must be completed within six months from the date of the Ordinance. If the charge under the second category is not registered within 60 days, the Registrar may grant another 60 days for registration. If a person wilfully furnishes false or incorrect information, or suppresses material information which is required to be registered under this provision, he will be liable for fraud under the Act.
- **Change in approving authority:** Under the Act, change in period of financial year for a company associated with a foreign company, has to be approved by the National Company Law Tribunal. Similarly, any alteration in the incorporation document of a public company which has the effect of converting it to a private company, has to be approved by the Tribunal. Under the Ordinance, these powers have been transferred to central government.
- **Declaration of beneficial ownership:** If a person holds beneficial interest of at least 25% shares in a company or exercises significant influence or control over the company, he is required to make a declaration of his interest. Under the Act, failure to declare this interest is punishable with a fine between one lakh rupees and ten lakh rupees, along with a continuing fine for every day of default. The Ordinance provides that such person may either be fined, or imprisoned for up to one year, or both.
- **Remuneration for independent directors:** The Act restricts an independent director from entitlement to stock options. It further states that he may receive sitting fees, commission, and reimbursement of expenses. The Ordinance removes this provision.
- **Disqualification of directorship:** Under the Act, a person cannot be a director in more than 20 companies. The Ordinance provides that contravening this provision will be a ground for disqualification from directorship.
- **Adjudication of penalties:** The Act allows the central government to appoint adjudicating officers to decide penalties under the Act. The Ordinance states that these officers, in addition to imposing penalties, may direct the defaulting entity to rectify the default.
- **Compounding:** Under the Act, a regional director can compound (settle) offences with a penalty of up to five lakh rupees. The Ordinance increases this ceiling to Rs 25 lakh.
- **Repeat defaulters:** Under the Ordinance, if a company, or an officer, or other person commits a default again within three years of the previous case, the entity will be liable to twice the penalty as provided for such default.

IONS 10th anniversary celebrations to commence today

- **The Chairman** Chiefs of Staff Committee (COSC) and Chief of the Naval Staff (CNS) Admiral Sunil Lanba, PVSM, AVSM, ADC accompanied by Mrs Reena Lanba, President Navy Wives Welfare Association (NWWA) arrived at Kochi on 12 Nov 18 for the 10th anniversary commemorative activities of the Indian Ocean Naval Symposium (IONS) scheduled on the 13 and 14 Nov 18 at Kochi. On his arrival at the Naval Air Station, INS Garuda, he was received by Vice Admiral AK Chawla, AVSM, NM, VSM, the Flag Officer Commanding-in-Chief (FOC-in-C), Southern Naval Command.
- **The CNS would be the Chief Guest** for the inaugural event, the IONS Seminar, scheduled on the 13 Nov 18 at the Lulu Bolgatty International Convention Centre, which will be attended by Chiefs and senior representatives from the navies of the majority of member nations. He would also be Flagging Off the "Tall Ships' Sail Together" event on 14 Nov 18.
- **In line with the vision** of the Hon'ble Prime Minister, Shri Narendra Modi – "SAGAR" (Security and Growth for All in the Region) - the theme for the 10th anniversary seminar is "IONS as a Catalyst for SAGAR". 'SAGAR' is in consonance with India's 'Act East' policy and the nation's diplomatic, economic and military outreach in the region.
- **26 of the 32 countries** which constitute the total membership of IONS would be participating in the seminar which aims to discuss maritime issues pertaining to cooperative capacity-building to deal with common security concerns in the region. The IONS initiative endeavours to generate a flow of information among naval professionals so as to enable a common understanding of regional maritime issues and in turn facilitate generation of mutually beneficial maritime security outcomes.

Department of Biotechnology (DBT), India and Wellcome Trust, UK-(India Alliance), completes 10 year of partnership.

- **Environment**, Lifestyle Diseases, Infectious Diseases and Diseases of the Brain should be the priorities of the India Alliance for the next phase: President Next phase should focus on encouraging more clinicians to carry out research: Dr. Harsh Vardhan
- **The Department of Biotechnology (DBT)** under the Ministry of Science and Technology, in collaboration with the Wellcome Trust, to support a three-tier fellowship programme on biomedical research at post-doctoral level, celebrated 10 years of their joint partnership in an event in New Delhi today. The Wellcome Trust is an independent charity funding research to improve human and animal health. Established in 1936 and with an endowment of around £15 billion, it is the largest non-governmental source of funds for biomedical research in the United Kingdom. The aim of setting up the fellowship jointly with Wellcome Trust was to create a system comparable to the best in the world, taking India on the path of becoming a leader in key areas of life sciences and biomedical research.
- **Speaking on the occasion President of India**, Shri Ram Nath Kovind said that as the partnership between the Department of Biotechnology and the Wellcome Trust completes its first decade, this is an opportune moment for the India Alliance to draft its priorities for the next phase. Today, through science and technology, humans wield unimaginable power over the future of our planet. We therefore have a responsibility like never before. And scientists, particularly bio-scientists, are our soldiers and generals in the battle to safeguard our planet, our species and our future.
- **The President** suggested four frontlines in this battle. He said that the first is the environment. Our air, water and soil must be cleaned. While we do so, we must mitigate the consequences on human and livestock health. The second frontline is that of lifestyle diseases. Diabetes, hypertension and cardiac diseases are on the rise. The third frontline is infectious disease. While we take on known infectious diseases, lesser-known ones threaten to expand. The final frontline is diseases of the brain. Factors that include urban stress and a significant elderly population have left India facing a mental health epidemic. Preventive measures, relevant to our genetics and our lifestyle, are in the realm of theory, waiting to be discovered. We must discover these if our people are to age well, with full mental capacities.
- **Union Science and Technology Minister**, Dr. Harsh Vardhan while congratulating the partnership emphasized the need for added incentive for biomedical research and creating opportunities that encourage more clinicians to carry out research. The Union Minister said that he was happy to note that the DBT Wellcome Trust partnership was addressing this issue in a major way.
- **Other dignitaries** who were present at the event including Principal Scientific Adviser to the Govt. Of India, Prof. K. VijayRaghavan, Secretary, Department of Biotechnology, Dr. Renu Swaroop and Director, Wellcome Trust, Dr Jeremy Farrar, expressed hope that the partnership in its next phase with increased vigour, will look to set up mechanisms to strengthen veterinary research, develop mechanisms to engage with Universities around the country to better equip researchers there to apply and receive competitive funding for their research, look for more effectively administering collaborative research Grants that aim to solve important scientific problems through an interdisciplinary approach among other things.
- **The current programme** is being delivered by a Special Purpose Vehicle (SPV), a public trust registered as the DBT/Wellcome Trust India Alliance. The Trust receives equal contribution from both DBT and WT for the running the fellowship grant scheme. The joint commitment of DBT and WT has been up to UK £16 million each year (£8 million each), amounting to a total of UK £160 million / INR 1296 crore over a 10-year period. The scheme was announced in 2008. Fellowships are available across the full spectrum of biomedical research (human and veterinary) - from fundamental molecular and cellular studies through to clinical and public health research. Research projects can be based in the laboratory, the clinic or the field and may involve experimental, theoretical approaches as well as translational approaches

- **In the past 10 years**, the alliance has awarded 320 fellowships to researchers in 93 institutions across 34 Indian cities. More than 900 PhDs, postdoctoral scientists, undergraduates and research technicians trained in the laboratories of India Alliance Fellows. Nearly 2500 researchers were trained in Science Communication workshops and more than 900 PhDs, postdoctoral scientists, undergraduates and research technicians were trained in the laboratories of India Alliance Fellows. Facilitating "Brain Gain" nearly 68% awardees are from India while the rest are from overseas.

Double jeopardy

- **Background:** The judgment is based on an appeal filed by the State of Mizoram against an order passed by the Gauhati High Court in August 2015.
- **The corruption case** was filed by the Aizawl police in February 2009 for misappropriation of public money. During inquiry, it was detected that the respondent had acquired valuable assets disproportionate to known sources of income.
- **The first invalid sanction** for prosecution was issued by the Commissioner-Secretary, Department of Personnel & Administrative Reforms (DP & AR) directly without the Governor's approval.
- **Following the discharge** of the accused by the special court, the Governor accorded a fresh sanction in December 2013. However, the high Court upheld a Special Court decision to decline to entertain a second chargesheet filed in a corruption case against the accused on the ground of double jeopardy.
- **What has the Court ruled?** Article 20 (2) of the Constitution mandates that a person cannot be prosecuted or punished twice for the same offence. The court held that if an accused has not been tried at all and convicted or acquitted, the principles of double jeopardy cannot be invoked at all. If an earlier order of sanction was found to be invalid, there is no bar for the competent authority to issue a proper order of sanction for prosecution.
- **The courts** are not to quash or stay the proceedings under any Act merely on the ground of an error, omission or irregularity in the sanction granted by the authority unless it is satisfied that such error, omission or irregularity has resulted in failure of justice, the SC observed.
- **About Article 20- Protection in respect of conviction for offences:** No person shall be convicted of any offence except for violation of the law in force at the time of the commission of the act charged as an offence, nor be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of the commission of the offence. No person shall be prosecuted and punished for the same offence more than once. No person accused of any offence shall be compelled to be a witness against himself.
- **Key facts:** Article 20 has taken care to safeguard the rights of persons accused of crimes. Persons here means the citizens, non-citizens as well as corporations. This article cannot be suspended even during an emergency in operation under article 359. Article 20 also constitutes the limitation on the legislative powers of the Union and State legislatures.
- **Ex-Post facto Law Article 20 (1):** It says that no person shall be convicted of any offence except for violation of a law in force at the time of the commission of the Act charged as an offence, nor be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of the commission of the offence. This is called Ex-Post facto Law. It means that legislature can not make a law which provides for punishment of acts which were committed prior to the date when it came into force. This means that a new law can not punish an old act.
- **Doctrine of Double Jeopardy:** Article 20(2) says that no person shall be prosecuted and punished for the same offence more than once. This is called Doctrine of Double Jeopardy. The objective of this article is to avoid harassment, which must be caused for successive criminal proceedings, where the person has committed only one crime.
- **There are two aspects** of Doctrine of Jeopardy viz. *autrefois convict* and *autrefois acquit*. *Autrefois convict* means that the person has been previously convicted in respect of the same offence. The *autrefois acquit* means that the person has been acquitted on a same charge on which he is being prosecuted. Please note that Constitution bars double punishment for the same offence. The conviction for such offence does not bar for subsequent trial and conviction for another offence and it does not matter the some ingredients of these two offences are common.
- **Self Incrimination Law:** Article 20(3) of the constitution says that no person accused of any offence shall be compelled to be a witness against himself. This is based upon a legal maxim which means that No man is bound to accuse himself. The accused is presumed to be innocent till his guilt is proved. It is the duty of the prosecution to establish his guilt.



Running of freight trains in a Block through “Convoy Movement”

- **Shri Piyush Goyal** chairs a review meeting with senior officers of Railway Board and Zonal Railways on this innovative Freight Convoy Initiative
- **Shri Piyush Goyal** has been closely following up on the implementation of this initiative This would help in improving mobility of rakes required for coal loading as well as other commodities
- **Running of freight trains** in a block through Convoy Movement by creating coaching free corridors has been a major initiative undertaken since September, 2018, for improving freight throughput, especially on the coal carrying routes. Minister of Railways & Coal, Shri Piyush Goyal has been closely following up on the implementation of this initiative.
- **This innovative way** of running freight traffic has been successfully implemented on Korba-Bilaspur-Anupur-New Katni-Agasod/Bina-Jhansi-Kota routes, Ghaziabad-Allahabad-Pt. Deen Dayal Upadaya Junction routes and Bilaspur-Jharsuguda-Rourkela sections. This convoy system was also tried on the Asansol-Jhajha-Barauni section (251.65 kms) on 3rd/4th November, 2018 which was successful.
- **In order to maximize throughput** during the coaching free corridors, detailed planning of loads, locomotives and crews is being done. Senior officers are deputed in the control offices to monitor the planning, ordering and running of freight trains in the convoy. Traffic inspectors and loco inspectors are deputed to foot-plate in the locomotives of the freight trains to ensure no time loss takes place in the clearance of block sections.
- **Shri Piyush Goyal, Minister of Railways and Coal** chairing a review meeting of the senior officers of Railway Board and Zonal Railways on this innovative Freight Convoy Initiative applauded the all out efforts put in by Railway Officers and staff in successful implementation of this movement. He further said that successful endeavors should be made to expand the Freight Capacity of Indian Railways without compromising the overall passenger movement and maintenance requirements.

Government approves the process of constitution of new Boards of Governors for the IIMs as per the IIM Act 2017.

- **The Government has today approved** the process of constitution of new Boards of Governors for the IIMs as per the IIM Act 2017."The process of constitution of Boards for the IIMs, which have been given full powers of running the institutions, is a major development which signals complete autonomy of quality institutions in higher education and will ensure quality expansion of higher education", said Prakash Javadekar, Minister for Human Resources Development after approving the process of constitution of Boards for the (20) IIMs in accordance with the IIM Act 2017.
- **This process** is in accordance with the provisions of the Section 10 of the IIM Act 2017, and has been approved in consultation with the Ministry of Law and Justice.
- **The IIM Act** is a historical step of the Govt which for the first time, provided comprehensive autonomy to the higher educational institutions. In accordance with the spirit of the Act, Govt has decided to immediately withdraw the Govt nominees who are in excess of the provisions of the Act. This will pave way for complete control of the institutions by reputed academicians and alumni.
- **The process of constitution** of the first Boards as laid down in Section 10 of the Act would be kicked off with the (3) Ex-officio members. who will select Chairperson, who shall normally be the current Chairperson and would be given the full term under the new Act(except where there are issues of ineligibility). Then on, the Chairperson would lead the further process of constitution of the Boards as laid down under the Act.
- **Thereafter**, the Board consisting of Chairperson and ex-officio members will co-opt (5) alumni from each of the IIMs, who will normally be the current serving members, except in cases of ineligibility.

- **In the first meeting of the Board**, the regulations for selection of (4) eminent persons and two faculty members would be framed; and based on this, normally the current serving persons would be selected for a full term. This process is expected to be completed before 15th Dec 2018.
- **On completion of the constitution of the Boards** in the above manner, the Rules under the IIM Act would be issued, which would bring out the operational details more clearly.



National Green Tribunal (NGT)

- **What's the issue?** Stubble burning is adversely affecting environment and public health. The problem has not been fully tackled and the adverse impacts on the air quality and consequent impacts on the citizens' health and lives are undisputed.
- **What needs to be done- Supreme Court's observations?** The problem is required to be resolved by taking all such measures as are possible in the interest of public health and environment protection. Incentives could be provided to those who are not burning the stubble and disincentives for those who continue the practice.
- **The existing Minimum Support Price (MSP) Scheme** must be so interpreted as to enable the States concerned to wholly or partly deny the benefit of MSP to those who continue to burn the crop residue. Secretary, Union Ministry of Agriculture and Farmers' Welfare has also been directed to be present to "find a lasting solution." The Central government should convene a meeting with the States.
- **About the National Green Tribunal (NGT):** What is it? NGT has been established under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. **Ambit:** The tribunal deals with matters relating to the enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property.
- **Members:** Sanctioned strength: currently, 10 expert members and 10 judicial members (although the act allows for up to 20 of each).
- **Chairman:** is the administrative head of the tribunal, also serves as a judicial member and is required to be a serving or retired Chief Justice of a High Court or a judge of the Supreme Court of India. **Selection:** Members are chosen by a selection committee (headed by a sitting judge of the Supreme Court of India) that reviews their applications and conducts interviews. The Judicial members are chosen from applicants who are serving or retired judges of High Courts.
- **Expert members** are chosen from applicants who are either serving or retired bureaucrats not below the rank of an Additional Secretary to the Government of India (not below the rank of Principal Secretary if serving under a state government) with a minimum administrative experience of five years in dealing with environmental matters. Or, the expert members must have a doctorate in a related field.
- **Other facts:** The Tribunal is not bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice. The Tribunal's dedicated jurisdiction in environmental matters shall provide speedy environmental justice and help reduce the burden of litigation in the higher courts.
- **The Tribunal** is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.

ISPRL, ADNOC sign MoU to explore storage of crude oil at Padur

- **Key facts:** ISPRL is an Indian government-owned company mandated to store crude oil for emergency needs. ADNOC is the only foreign oil and gas company, so far, to invest by way of crude oil in India's strategic petroleum reserves program.
- **Benefits of the agreement:** India is an important oil market and the MoU underscores the strategic energy partnership between the UAE and India that leverages the UAE and ADNOC's expertise and oil resources.
- **The agreement** will allow ISPRL to explore, with ADNOC, opportunities related to the possible storage of ADNOC crude at Padur, which would help to significantly strengthen the country's strategic petroleum reserves. It also reflects the strong bonds of cooperation between India and the UAE and provides a foundation for strengthening and expanding the strategic energy relationship between the two nations.

- **Background:** ISPRIL has already built 5.33 million tonnes of underground storage capacity at three locations – Visakhapatnam (1.33 million tonnes), Mangalore (1.5 million tonnes) and Padur (2.5 million tonnes), that can meet around 9.5 days of the country's oil needs as per consumption data of last financial year.
- **In June 2018,** the Union Government had announced the creation of two new reserves, a 4 million tonnes storage facility at Chandikhol in the eastern state of Odisha and an additional 2.5 million-tonne facility at Padur.

SpiNNaker- World's largest brain-like supercomputer

- **What is it?** It is the world's largest supercomputer designed to work in the same way as the human brain. It has been switched on for the first time. The newly formed million-processor-core Spiking Neural Network Architecture (SpiNNaker) machine is capable of completing more than 200 million million actions per second, with each of its chips having 100 million transistors.
- **What are biological neurons?** The SpiNNaker machine, designed and built in The University of Manchester in the UK, can model more biological neurons in real time than any other machine on the planet. Biological neurons are basic brain cells present in the nervous system that communicate primarily by emitting 'spikes' of pure electro-chemical energy. Neuromorphic computing uses large scale computer systems containing electronic circuits to mimic these spikes in a machine.
- **What is unique about SpiNNaker?** SpiNNaker is unique because, unlike traditional computers, it does not communicate by sending large amounts of information from point A to B via a standard network. Instead it mimics the massively parallel communication architecture of the brain, sending billions of small amounts of information simultaneously to thousands of different destinations.
- **How it works?** Researchers eventually aim to model up to a billion biological neurons in real time and are now a step closer. To give an idea of scale, a mouse brain consists of around 100 million neurons and the human brain is 1,000 times bigger than that.
- **One billion neurons** is one per cent of the scale of the human brain, which consists of just under 100 billion brain cells, or neurons, which are all highly interconnected via approximately one quadrillion synapses.
- **One of the fundamental uses** for the supercomputer is to help neuroscientists better understand how our own brain works. It does this by running extremely large scale real-time simulations which simply aren't possible on other machines.
- **For example,** SpiNNaker has been used to simulate high-level real-time processing in a range of isolated brain networks. This includes an 80,000 neuron model of a segment of the cortex, the outer layer of the brain that receives and processes information from the senses.
- **Potential for neurological breakthroughs:** It also has simulated a region of the brain called the Basal Ganglia – an area affected in Parkinson's disease, meaning it has massive potential for neurological breakthroughs in science such as pharmaceutical testing. The power of SpiNNaker has even recently been harnessed to control a robot, the SpOmnibot. This robot uses the SpiNNaker system to interpret real-time visual information and navigate towards certain objects while ignoring others.

India's first multi-modal terminal on inland waterways in Varanasi

- **Key facts:** The first consignment containing food and beverage had set sail from Kolkata in the last week of October. This is the first of the four multi-modal terminals being constructed on the National Waterway-1 (river Ganga) as part of the World Bank-aided Jal Marg Vikas project of the Inland Waterways Authority of India.
- **Benefits of container movement on inland waterways:** Container cargo transport comes with several inherent advantages. Even as it reduces the handling cost, allows easier modal shift, reduces pilferages and damage, it also enables cargo owners to reduce their carbon footprints.
- **About Jal Marg Vikas Project: What is it?** The Jal Marg Vikas Project seeks to facilitate plying of vessels with capacity of 1,500-2,000 tonnes in the Haldia-Varanasi stretch of the River Ganga. The major works being taken up under JMVP are development of fairway, Multi-Modal Terminals, strengthening of river navigation system, conservancy works, modern River Information System (RIS), Digital Global Positioning System (DGPS), night navigation facilities, modern methods of channel marking etc.
- **Implementation:** The JMVP, which is expected to be completed by March, 2023, is being implemented with the financial and technical support of the World Bank. The project will enable commercial navigation of vessels with the capacity of 1500-2,000 tons on NW-1.

- **Its objective** is to promote inland waterways as a cheap and environment-friendly means of transportation, especially for cargo movement. The Inland Waterways Authority of India (IWA) is the project implementing agency.
- **NW 1:** Ganga-Bhagirathi-Hooghly river system from Allahabad to Haldia was declared as National Waterway No.1. The NW-1 passes through Uttar Pradesh, Bihar, Jharkhand and West Bengal and serves major cities and their industrial hinterlands.

Climate risk from rise in Indian AC units

- **Concerns:** The refrigerants used for cooling are the major contributors to global warming, and if left unchecked, they could cause global temperatures to rise by 0.5 degrees Celsius. Under a business-as-usual growth trajectory, about 4.5 billion room air-conditioners are estimated to be installed by 2050 — a nearly four-fold jump from today's installed base, with emerging economies observing a five-fold increase.
- **HFCs are a family of gases** that are largely used in refrigerants at home and in car air-conditioners. However, they substantially worsen global warming. India, China, the United States and Europe have committed themselves to reducing the use of HFC by 85% by 2045.
- **In 2016**, India was a signatory to a compact of 107 countries to “substantially phase” out a potent greenhouse gas, called hydrofluorocarbons (HFC), by 2045 and move to prevent a potential 0.5 C rise in global temperature by 2050.
- **Need for energy efficiency in the area of air- conditioning:** Every one degree increase in the air-conditioner temperature setting results in saving of 6% of electricity consumed. The new campaign will result in substantial energy savings and also reduce greenhouse gas emission.
- **Besides**, normal human body temperature is approximately 36-37 degree Celsius, but large number of commercial establishments, hotels and offices maintain temperature around 18-21 degree Celsius. This is not only uncomfortable but is actually unhealthy. Setting the temperature in the range of 18-21 degree Celsius compels people to wear warm clothing or use blankets; therefore, this is actually wastage of energy.
- **Efforts by government in this regard:** Union Power Ministry has launched a campaign to promote energy efficiency in the area of air-conditioning. This initiative is launched on voluntary basis to increase awareness and encourage consumers to adopt the guidelines. It will save energy and reduce greenhouse gases.

Bilateral Naval Exercise ‘Samudra Shakti’:

- **Exercise ‘Samudra Shakti’:** The aim of the exercise is to strengthen bilateral relations, expand maritime co-operation, enhance interoperability and exchange best practices. The exercise seeks to promote India's solidarity with Indonesia towards ensuring good order in the maritime domain and to strengthen existing bonds between the navies of the two nations.

‘Ambassador of Conscience’ Award:

- **Context:** Amnesty International has stripped Myanmar's leader Aung San Suu Kyi of its highest honour, the ‘Ambassador of Conscience’ award, over her indifference to atrocities committed by the Myanmar military against and increasing intolerance of freedom of expression.
- **What's the issue?** The Amnesty International, an international human rights group, named Suu Kyi as its 2009 Ambassador of Conscience Award recipient when she was still under house arrest for her opposition to Myanmar's oppressive military. However, considering her failure to speak out and her shielding of the security forces from accountability for the violence against the Rohingya, the organisation withdrew the honour from her.

Public Service Broadcasting Day:

- **The Public Service Broadcasting Day** was observed across India on November 12, 2018. The day is observed every year to commemorate the first and last visit of the Father of the Nation Mahatma Gandhi to the studio of All India Radio, Delhi in 1947.
- **Mahatma Gandhi** had on November 12, 1947 visited the studio of All India Radio to address the displaced people from Pakistan who were temporarily settled in Kurukshetra, Haryana after the partition of the Indian subcontinent.

Prime Minister interacts with the members of his Science, Technology and Innovation Advisory Council (PM-STIAC)

- **The Prime Minister**, Shri Narendra Modi, today met and interacted with the members of his Science, Technology and Innovation Advisory Council (PM-STIAC). This Council renders advice on all matters related to Science, Technology and Innovation and monitors the implementation of the Prime Minister's vision on these issues.
- **Members of the Council** briefed the Prime Minister on various steps being taken to nurture innovation and research in key sectors of science and technology.
- **The Prime Minister** emphasized that the fruits of science, technology and innovation must reach the common man, solve common day-to-day problems, and facilitate ease of living for the people of India. In this context, he urged the Council members to work towards establishing strong linkages between the educational institutions, R&D labs, industry and various government departments. He reiterated the need to break silos among academic and research institutions.
- **The Prime Minister** called for development of suitable platforms and mechanisms which can identify and nurture scientific talent among schoolchildren, and link them to Atal Tinkering Labs at the district and regional level. In this context, the Prime Minister mentioned some priority areas of research such as raising agricultural income, solutions for chronic and genetic diseases such as sickle cell anaemia, waste management and cyber security.
- **The meeting was attended** by Principal Scientific Advisor to the Prime Minister, Prof. K. VijayRaghavan, members of the Council, and senior officers of the Government of India.

Cyclonic storm 'GAJA' over West central and adjoining East central & South Bay of Bengal: Cyclone Alert for Tamil Nadu & Puducherry coast: Yellow Message

- **The Cyclonic storm 'GAJA'** over Westcentral and adjoining Eastcentral & South Bay of Bengal moved west-northwestwards with a speed of 12 kmph during past 06 hours and lay centred at 1130 hrs IST of today, the 13th November, 2018 over West central and adjoining East central & South Bay of Bengal near latitude 13.5°N and longitude 86.6°E, about 690 km east-northeast of Chennai (Tamil Nadu) and 790 km east-northeast of Nagappattinam (Tamil Nadu).
- **It is likely to move** west-southwestwards and intensify further into a Severe Cyclonic Storm during next 24 hours. While moving west-southwestwards further, it is likely to weaken gradually on 15th November and cross Tamil Nadu coast between Pamban and Cuddalore as a Cyclonic Storm during 15th November afternoon.

Dr. Satya Pal Singh Launches Leadership for Academicians Program (LEAP) and Annual Refresher Programme In Teaching (ARPIT) for higher education faculty

- **Dr. Satya Pal Singh**, Minister of State, Ministry of Human Resource Development, launched two new initiatives; Leadership for Academicians Programme (LEAP) and Annual Refresher Programme In Teaching (ARPIT) today at New Delhi. He also released information brochures of both the initiatives during the event. While addressing the gathering, Dr Satya Pal Singh said that developing good teachers is an arduous task and if teachers show enough commitment,

ARPIT will go a long way in empowering the teaching faculty. Committed teachers will develop confidence and competence and must become effective communicators so that they can spread knowledge like the rays of the sun. Combining the qualities of a good teacher and an effective leader is still more daunting task but not an impossible task, the Minister said. LEAP will fulfill this critical need which will make higher education institutions perform their roles of developing better students who will be future torch bearers. A leader must talk for all generations, present and future; only then institutional growth can be achieved, Dr. Satya Pal Singh explained.

- **Shri Prakash Javadekar**, Union Minister of Human Resource Development in his video message lauded these initiatives which are set to transform quality of teaching and improve leaders, thereby enhancing the quality of higher education institutions. He highlighted the need for constant updation to keep abreast of recent developments which will enrich the teaching learning experiences. Combining academic and administrative leadership is an equal requirement for those heading educational institutions and he hoped that LEAP will help in creating better higher education leaders of tomorrow. He appealed to all faculties in higher education to take benefit of these two initiatives.
- **The launch event was graced by Secretary (HE), Chairman UGC**, Vice-Chairman AICTE and senior officials of the Department of Higher Education, UGC and AICTE. It was attended by Vice-Chancellors, Directors, heads of autonomous bodies, Project Coordinators of National Resource Centres of ARPIT and representatives of LEAP training institutions.
- **Shri R Subrahmanyam**, Secretary (HE) stated that these two initiatives are extremely significant as they will create transformative teachers and leaders.
- **Prof D P Singh, Chairman, UGC** in his concluding remarks assured that UGC will shortly bring out a notification recognizing ARPIT for career advancement of faculty. He urged all Vice-Chancellors and Directors to encourage their faculty across all disciplines to register and complete these refresher courses.
- **Leadership for Academicians Programme (LEAP)** is a three weeks Flagship leadership development training programme (2 weeks domestic and one week foreign training) for second level academic functionaries in public funded higher education institutions. The main objective is to prepare second tier academic heads who are potentially likely to assume leadership roles in the future. The programme would provide senior faculty, with high academic credentials, the required leadership and managerial skills including skills of problem-solving, handling stress, team building work, conflict management, developing communication skills, understanding and coping with the complexity and challenges of governance in HEIs, financial & general administration.
- **The implementation of LEAP Programme** will be through 15 NIRF top ranked Indian Institutions namely, Indian Institute of Technology Roorkee; IIT Kanpur; NIT Trichy; Indian Institute of Science Education and Research (IISER) Kolkata; Jawaharlal Nehru University; IIT (BHU); University of Delhi; Indian Institute of Technology Bombay; TISS Mumbai; University of Hyderabad ; NIEPA, Indian Institute of Technology Kharagpur; Jamia Milia Islamia; Banaras Hindu University and AMU.
- **The foreign Universities** identified for the training are also within the top 100 in the world global rankings. The foreign collaborating institutions are University of Michigan; NTU Singapore; Harvard University; Purdue University, USA ; University of Chicago; University of Pennsylvania / Stanford; Monash University; London School of Economics/ Oxford University; University of Cambridge and University of Virginia, USA.
- **Annual Refresher Programme** in Teaching (ARPIT), a major and unique initiative of online professional development of 15 lakh higher education faculty using the MOOCs platform SWAYAM. For implementing ARPIT, 75 discipline-specific institutions have been identified and notified as National Resource Centres (NRCs) in the first phase, which are tasked to prepare online training material with focus on latest developments in the discipline, new & emerging trends, pedagogical improvements and methodologies for transacting revised curriculum.
- **In 2018**, the inaugural year itself, the NRCs are expected to cater to around 13 lakh faculty of the total 15 lakh faculty in higher education. The courses cover a diverse range of topics such as, inter alia, Indian culture & Heritage Studies, Pedagogical Innovations & Research Methodology, Latest Trends in Pedagogy and Assessment, Personal-Emotional Development and Counselling , Neural Networks and Deep Learning & Knowledge discovery, ICT in Science and Maths teaching, Innovation and Best Practices in Educational Skills, Leadership and Governance in Higher Education, Public Policy and Administration, English Language Teaching, Hindi Literature & Linguistics, Methodology of Teaching Sanskrit, Effective Creations and Innovative Researches in Medieval Gujarati Literature, Tribal and Regional languages, Urdu, French Studies, Tools, techniques and experiments in Earth Science, Mathematics, Statistics, Zoology, Chemistry, Physics, Biotechnology , Biomechanics, Marine Science, Calculus, Real Time Power Analysis and Smart Grid, Civil Infrastructure for Smart City Development, Engineering Mechanics, Design Spectrum, DIY Manufacturing Technology, Advanced Concepts in Fluid Mechanics, Energy Systems Engineering, Engineering Mechanics, Physics of Semiconductors and Devices, Internet of Things, Astronomy and Astrophysics, Electrical Engineering, Bio-Medical engineering, Metallurgical Engineering and Materials Sciences, Chemical Engineering, Aerospace Engineering, Tourism and Hospitality Management, Political Science, Economics, Psychology, Development Perspectives in Agriculture, Gender/Women's studies, Law, Disaster Management, Climate change, Library & Information Science, Ethics, Human Rights and Environment , Social and Rural Development, Anthropology etc. Currently, registrations are open for the online refresher courses on SWAYAM platform, <https://swayam.gov.in/courses/public>
- **The course is a 40 hour** module with 20 hours of video content and 20 hours of non-video content. They are offered in a highly flexible format and can be done at one's own pace and time. There are built-in assessment exercises and activities as part of the academic progression in the course. At the end of the course, they will be a terminal assessment which can be either online or a written examination. All faculties who have successfully completed the online refresher course will be certified. The courses will remain open from 1st November, 2018 to 28th February, 2019. All in-service teachers, irrespective of their subject and seniority are requested to register and complete these refresher courses which will help them in career advancement.
- **NRCs are located** in a mixed range of institutions such as, Central Universities, IISc, IUCAA, IITs, IISERs, NITs, State Universities under the Ministry's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT); UGC's Human Resource Development Centres (HRDCs), National Institutes for Technical Teachers Training (NITTTRs), IITs and IGNOU.
- **Out of 75 institutions**, already 68 have uploaded their courses and started registering the teachers. Till now, more than 30,000 teachers have enrolled to obtain online professional development training. Necessary regulations will be taken out by UGC, recognising the MOOCs based online refresher training of teachers for the CAS (Career Advancement Scheme). The production of MOOCs courses by the teachers is also recognised for the CAS. This is expected to be a major incentive for the higher education faculty to undergo training through MOOCs courses and also to produce MOOCs courses.

- **ARPIT will be an ongoing exercise** so that every year NRCs will continuously develop new refresher module in their earmarked discipline each year. The training materials will be uploaded and made available through SWAYAM. NRC will publish the list of the faculty who have been certified. The NRCs will revolutionize professional development of faculty by catering to massive numbers by leveraging ICT and online technology platform of SWAYAM.

Curtain Raiser: INDO-Russian joint exercise INDRA 2018

- **The joint military exercise** between Indian and Russia EXERCISE INDRA 2018 on combating insurgency under the aegis of United Nations (UN) is being conducted at Babina Field Firing Ranges, Babina Military Station from 18 November 2018. Company sized contingents of the 5th Army of the Russian Federation and a Mechanised Infantry Battalion of Republic of India will participate in the training exercise spanning for eleven days including induction and de-induction of the Russian contingent. The training will be supervised by a joint directing panel comprising of senior officials of both the national contingents.
- **The aim of the exercise** is to practice joint planning and conduct to enhance interoperability of the two Armies in the peace keeping/ enforcement environment under the aegis of the UN. It focuses upon training on enhancing team building, special tactical level operations such as Cordon and Search, house intervention, handling and neutralisation of Improvised Explosive Devices and integrated employment of force multipliers. The primary focus of the tactical field exercise is to share best practices amongst the militaries and hone existing skills of the troops in the backdrop of interoperability between the two Armies in the peace keeping/ enforcement environment. The topics chosen for the exercise are both live and contemporary affecting both the nation alike.
- **The tenth exercise** in the series of Exercise INDRA is aimed at sending a strong message to the world with an intent of appreciation of interoperability between Indian and Russian Armies for joint tactical level operations in the peace keeping / enforcement environment under the aegis of UN.

MNRE circulates draft Indian Wind Turbine Certification Scheme (IWTCS)

- **Ministry of New and Renewable Energy**, in consultation with National Institute of Wind Energy Chennai, has prepared a draft of new Scheme called Indian Wind Turbine Certification Scheme (IWTCS) incorporating various guidelines Turbine Certification Scheme (IWTCS).
- **The IWTCS is a consolidation of relevant National and International Standards (IS/IEC/IEEE)**, Technical Regulations and requirements issued by Central Electricity Authority (CEA), guidelines issued by MNRE and other international guidelines. It has also strived to incorporate various best practices from other countries to ensure the quality of the wind energy projects.
- **The draft Scheme** enlists the guidelines for the benefit of all the stakeholders from concept to lifetime of wind turbine, including Indian Type Approved Model (ITAM), Indian Type Certification Scheme (ITCS), Wind Farm Project Certification Scheme (WFPCS) and Wind Turbine Safety & Performance Certification Scheme (WTSPCS).
- **The IWTCS** is envisaged to assist and facilitate the following stakeholders; (i.) Original Equipment Manufacturers (OEMs) (ii.) End Users -Utilities, SNAs, Developers, IPPs, Owners, Authorities, Investors and Insurers (iii.) Certification Bodies (iv.) Testing Laboratories
- **Wind energy** has matured over the decades to be the mainstream source of renewable power generation in India. The steady growth of the sector has seen different types of wind turbines with diverse performance and safety criteria. The Ministry of New and Renewable Energy (MNRE), Government of India through various policies and schemes has facilitated the healthy and orderly growth of the wind energy sector. The guideline for the recognition of the certification schemes in India by MNRE was paramount for the success of quality wind turbines installed in India. The successful evaluation under the recognised schemes resulted in the wind turbines being listed in the Revised List of Models and Manufacturers (RLMM). This listing has resulted in stakeholders having confidence on the quality of the wind turbines offered by various manufacturers in India. Wind sector in India is growing at a rapid pace with increased utilization of wind energy for the power development. The modern wind turbines have higher hub heights, larger rotor diameter, higher capacity and improved Capacity Utilization Factor (CUF) along with technological improvements. Under these developments, there is a need for comprehensive document which provides the complete technical requirements which shall have to be complied by the wind turbines for the safe and reliable operation by all the stakeholders viz, OEMs, Independent Power Producers (IPPs), wind farm developers, Financial Institutions, Utilities and others. Also, there is a need for technical regulations which shall facilitate common ground for OEMs, Developers, Investors and Financial Institution for systematic development.
- **Type Certification** of wind turbines plays an active role in ensuring that wind turbines in India meet the requirements of requisite IS/IEC/IECRE standards in vogue. Internationally, IEC /IECRE Certification schemes for wind turbines are well recognized and widely used and the IWTCS in its formulation has incorporated the rules and procedures of IS/IEC/IECRE.

DIPP hosts Global Digital Content Market 2018

- **DG, WIPO addressing Press Conference in New Delhi** The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, is hosting a conference on Global Digital Content Market (GDCM)2018, on 14th- 15th November 2018, in New Delhi. The conference will feature sessions on music, film, broadcasting and publishing, as well as collective management, emerging models and the implications for the market and policy makers.
- **India has been chosen** as a host nation for the conference by World Intellectual Property Organization (WIPO) due to the strong creative industry in the country in films, music and media. The focus for this year's conference is the Asia Pacific region. The GDCM 2018 will see participation of professionals from various creative fields, the digital industry around the world and delegates of the diplomatic community from Missions to the United Nations.
- **The aim of GDCM 2018** is to give industry stakeholders a platform to come together and discuss new avenues in the films, music, gaming and creative industry along with points of challenge that is presented due to the changing creative landscape because of the disruption brought about by digital technologies. It is hoped that through the GDCM 2018 an exchange of knowledge, culture and good practices amongst the nations of the Asia Pacific region will take place. GDCM is a platform to discuss vital issues and enhance development of the digital and IP generating industries such as publishing, films, music, and gaming all of which are major contributors to the Indian GDP. The presence of key stakeholders from India in GDCM will place it on the global digital stage.
- **GDCM 2018 is the second edition** of the conference. The first conference was held in Geneva 2016. Speaking at a press conference today in New Delhi, Mr. Francis Gurry, the Director General of World Intellectual Property Organization (WIPO), Geneva, said that the aim of WIPO is to ensure that a creative artist continues to be protected and receives better remuneration on the digital platform. He appreciated India's efforts of integration with international systems through the National IPR policy 2016 under which the Government of India has taken efforts for creating an environment in the country that is conducive for the generation of Intellectual Property Rights (IPRs) by increasing awareness among the citizens on the subject and strengthening IPR enforcement mechanisms.
- **Secretary DIPP, Ramesh Abhishek**, informed in the press conference that India's rank in the Global Innovation Index 2018 has improved by 24 places from that of 2015 and now ranks 57th. India is the top-ranked economy in Central and Southern Asia and has now outperformed on innovation relative to its GDP per capita for seven years in a row.
- **Secretary DIPP** further stated that to better equip the enforcement agencies to deal with IP related crimes 33 enforcement training programmes have already been conducted in 9 states in order to train police, customs and the judiciary for tackling cases on IP. Government has also pulled down 80 rogue websites to combat online piracy. India has recently approved accession to the WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT) that has increased the coverage of protection of copyrights in the international IP regime as it is extended to even the internet and digital environment. This will bring the Indian creative industry under and international copyright system, secure distribution of their work and provide them with a level playing field.
- **Secretary DIPP** also informed that large scale augmentation of man power of Indian IP offices has been done which has brought down pendency of IP applications. Trademark registration has increased by leaps and bounds and patent applications have quadrupled in 2017-18 as compared to 2015-16. These efforts are being made to ensure that the country moves towards realizing the goals of Creative India; Innovative India.



Shri Mandaviya Says Bhoomi Rashi Portal has Changed the Process of Land Acquisition System in the Country

- **He Says the Portal** has Made the Land Acquisition Process speedy, Transparent and Error Free
- **Union Minister of State** for Road Transport & Highways, Shipping and Chemical & Fertilizers, Shri Mansukh Mandaviya has expressed confidence over the successful implementation of the Bhoomi Rashi Portal in Land Acquisition process for roads and highways sector in the country.
- **Speaking in New Delhi** today Shri Mandaviya said that digitalization in India is reaching new heights under the able leadership of Prime Minister Shri Narendra Modi, and the Bhoomi-Rashi portal of Ministry of Road Transport & Highways is an excellent testimony to this success.
- **The portal** allows for totally digital and paper-less processing of land acquisition cases, and has resulted in transparent, quick, corruption-free and error-free handling of land acquisition cases. It has also made the possible real-time tracking of activities and generation of reports relating to land acquisition.
- **Shri Mandaviya** informed that revenue records of about 7 lakh villages across the country have been integrated in the portal. He said, this digital change has drastically reduced the time taken for issuance of land acquisition notifications from 3-6 months to 1-2 weeks.
- **The Minister** informed that while during the past two years, about a thousand land acquisition notifications could be issued every year, over 1700 notifications have already been issued by the Ministry in the first seven months of this financial year.
- **Shri Mandaviya** further said that the process has also brought transparency in the system. Earlier the approved compensation amount used to be parked with the CALA (Competent Authority for Land Acquisition) but with BhoomiRashi portal this amount directly transferred into the account of the person concerned, through Public Financial Management System which is an integral part of the portal.
- **In addition to this**, the process is also environment friendly since there is no physical movement of files – all work is done digitally. Shri Mandaviya said the BhoomiRashi portal is truly a success story of Digital India.

Shri J P Nadda addresses the 3rd meeting of the “National Council on India’s Nutrition Challenges” The Health Ministry has taken up several focused and targeted schemes for addressing nutrition challenges in the country: J P Nadda

- **“The Health Ministry** has taken up several focused and targeted schemes for addressing nutrition challenges in the country in a convergence mode with the other Ministries. We have focussed on Immunisation, detection and supplementation.” This was stated by Shri J P Nadda, Union Minister for Health and Family Welfare at the 3rd meeting of the “National Council on India’s Nutrition Challenges” in presence of Smt Maneka Sanjay Gandhi, Minister of Women and Child Development.
- **Dr. Rajiv Kumar**, Vice Chairman, NITI Aayog, Dr. Vinod Kumar Paul, Member, Health & Nutrition, NITI Aayog, Shri Rakesh Shrivastava, Secretary (WCD), Smt Preeti Sudan, Seceratry (Health), Shri Rajesh Kotecha, Secretary AYUSH and other representatives of stakeholder Ministries like M/o Drinking Water and Sanitation, M/o Food & Public Distribution and representatives of States of Chattisgarh, Tamil Nadu and Bihar among others were present at the meeting.
- **Shri Nadda** further assured that the Health Ministry will proactively address the challenges of nutrition in the country. He said that the Health Ministry has accorded high priority to address wide spread under nutrition in the country. There are different programme and schemes undertaken by the Ministry of Health and Family Welfare to address the problem of under-nutrition amongst the children, he stated.
- **Highlighting the initiatives of the Ministry**, Shri Nadda said that the Health Ministry is one of the key stakeholders for implementation of POSHAN Abhiyaan. “During POSHAN Maah (September 2018), 1.83 lakhs of activities have been conducted by MoHFW and Department of Health in the States and UTs with involvement of 2.58 Cr participants,” Shri Nadda stated. He further said that in order to promote and support breastfeeding, Government has implemented

"MAA- Mothers' Absolute Affection" programme to improve breastfeeding coverage and appropriate breastfeeding practices in the country. A greater emphasis is laid on capacity building of the health workers on lactation management at both community and facility levels and 360 degree IEC campaign to create awareness regarding breastfeeding, he emphasized.

- **Shri Nadda said that under the Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishore Swasthya Karyakram (RKSK)**, systematic efforts are undertaken to detect nutrition deficiency among children and adolescents respectively. He added that the Ministry organises National De-worming Day twice in a year and around 26.7 Cr of children were administered Albendazole during Feb round 2018.
- **Shri Nadda** also stressed on the need for involving local leaders and sensitising them towards nutrition initiatives of the Government so that they can raise awareness about it amongst the people.
- **The Meeting Discussed Action Taken Report** on the recommendations of the last National Council Meeting and the brief on POSHAN MAAH outcomes, Specifications of smart phones and growth monitoring devices, third Party outcome based evaluation of PoshanAbhiyan, roll out of e-ILA (e-incremental learning approach- Technology developed to support the field functionaries to improve their knowledge and skills in an ongoing incremental manner) and many other issues concerning effective implementation of PoshanAbhiyan.

Union Agriculture Minister launches NCDC's new scheme to promote young entrepreneurs in cooperatives

- **Rs 1000 crore CSIF fund** has been created and has special incentive for cooperatives of North Eastern region, Aspirational Districts and cooperatives with women/SC/ST/PwD members
- **To cater to the needs** and aspirations of the youth, the National Cooperative Development Corporation (NCDC) has come up with a youth-friendly scheme "Yuva Sahakar-Cooperative Enterprise Support and Innovation Scheme" for attracting them to cooperative business ventures.
- **"NCDC has created a dedicated fund** with liberal features enabling youth to avail the scheme," Union Minister of Agriculture and Farmers' Welfare Shri Radha Mohan Singh said at the launch of the scheme.
- **The Central Government has been encouraging 'Start-Ups'** for ease of doing business, non-conventional opportunities are emerging and are being encouraged. The conducive environment is being leveraged by private and corporate sectors and 'Hub Start-ups' are being promoted. The newly launched scheme would encourage cooperatives to venture into new and innovative areas.
- **The scheme will be linked to Rs 1000 crore** 'Cooperative Start-up and Innovation Fund (CSIF)' created by the NCDC. It would have more incentives for cooperatives of North Eastern region, Aspirational Districts and cooperatives with women or SC or ST or PwD members. The funding for the project will be up to 80% of the project cost for these special categories as against 70% for others. The scheme envisages 2% less than the applicable rate of interest on term loan for the project cost up to Rs 3 crore including 2 years moratorium on payment of principal. All types of cooperatives in operation for at least one year are eligible.
- **The Minister explained that this scheme** is expected to meet the needs of today's youth. He added that NCDC, being the most preferred financial institution in the world of cooperatives, has embarked on Sahakar 22, a Mission for Doubling Farmers' Income by 2022.
- **The Minister while complimenting the NCDC** on its remarkable performance since 2014 stated that the NCDC had an excellent track record and would provide the required handholding for making the scheme a success.
- **The NCDC has the unique distinction** of being the sole statutory organisation functioning as an apex financial and developmental institution exclusively devoted to cooperative sector. It supports cooperatives in diverse fields apart from agriculture and allied sectors. It is an ISO 9001:2015 compliant organisation and has a distinctive edge of competitive financing. It has extended financial assistance of Rs 63702.61 crore during 2014-2018 (as on November 13), 220% more than Rs 19850.6 during 2010-14.

Leadership for Academicians Program (LEAP)

- **About the Leadership for Academicians Programme (LEAP):** Leadership for Academicians Programme (LEAP) is a three weeks Flagship leadership development training programme (2 weeks domestic and one week foreign training) for second level academic functionaries in public funded higher education institutions.
- **The main objective** is to prepare second tier academic heads who are potentially likely to assume leadership roles in the future.

- **The programme** would provide senior faculty, with high academic credentials, the required leadership and managerial skills including skills of problem-solving, handling stress, team building work, conflict management, developing communication skills, understanding and coping with the complexity and challenges of governance in HEIs, financial & general administration.
- **The implementation** of LEAP Programme will be through 15 NIRF top ranked Indian Institutions namely. The foreign Universities identified for the training are also within the top 100 in the world global rankings.

Annual Refresher Programme in Teaching (ARPIT)

- **About Annual Refresher Programme in Teaching (ARPIT):** Annual Refresher Programme in Teaching (ARPIT) is a major and unique initiative of online professional development of 15 lakh higher education faculty using the MOOCs platform SWAYAM.
- **For implementing ARPIT,** 75 discipline-specific institutions have been identified and notified as National Resource Centres (NRCs) in the first phase, which are tasked to prepare online training material with focus on latest developments in the discipline, new & emerging trends, pedagogical improvements and methodologies for transacting revised curriculum.
- **ARPIT** will be an ongoing exercise so that every year NRCs will continuously develop new refresher module in their earmarked discipline each year. The training materials will be uploaded and made available through SWAYAM. NRC will publish the list of the faculty who have been certified. The NRCs will revolutionize professional development of faculty by catering to massive numbers by leveraging ICT and online technology platform of SWAYAM.
- **NRCs are located** in a mixed range of institutions such as, Central Universities, IISc, IUCAA, IITs, IISERs, NITs, State Universities under the Ministry's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT); UGC's Human Resource Development Centres (HRDCs), National Institutes for Technical Teachers Training (NITTTRs), IIITs and IGNOU.

Indian Health Fund

- **Key Facts:** The aim for selecting these innovators aims at leveraging technology for improving early detection and prompt treatment along with promoting diagnostics feasible for primary health care facilities.
- **It also aims** to supporting national efforts to effectively tackle eradicate these diseases which is crucial health challenges in India.
- **Government** has set a target of eliminating TB by 2025 and malaria by 2030. India contributes to 27% of the global TB burden and 68% of all malaria cases in the Southeast Asia region
- **What is Indian Health Fund (IHF)?** IHF was launched in 2016 by Tata Trusts in collaboration with The Global Fund, to drive innovations towards key infectious disease challenges in India. It supports individuals and organisations with already germinated innovative strategies, services, products, such that they become sustainable and scalable solutions in addressing TB and malaria.
- **The initiative** is a long-term exercise aligned with country's goal of eliminating TB by 2025 and malaria by 2030. It will promote innovative solutions such that they are widely accessible and are affordable.

Indian Ocean Naval Symposium (IONS)

- **The commemorative Special Cover** of IONS 10th Anniversary celebrations depicts a map of the Indian Ocean and littoral countries of the IOR, signifying the geopolitical importance of the region.
- **About IONS:** IONS, the 21st century's first significant international maritime security initiative launched in February 2008, provides a forum for discussion of regional maritime issues and promotes friendly relationships among member nations. It presently has 24 members and eight observer navies.

- **It is a voluntary** initiative that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region by providing an open and inclusive forum for discussion of regionally relevant maritime issues and, in the process, endeavors to generate a flow of information between naval professionals that would lead to common understanding and possibly agreements on the way ahead.
- **Under the charter of business adopted in 2014**, the grouping has working groups on Humanitarian Assistance and Disaster Relief (HADR), Information Security and Interoperability (IS&I) and anti-piracy now renamed as maritime security.

New index to check ease of doing agri-business

- **Ease of Doing Agri-Business Index:** The new Ease of Doing Agri-Business Index will rank the States on the basis of reforms in the sector as well as their investment in agriculture, increased productivity, reduction of input costs, and risk mitigation measures.
- **The Agri Ministry** will consider rewarding the higher performing States both in absolute and incremental terms by linking the performance with allocation from flexi funds made available in various flagship.
- **The proposed index** will focus on reforms, with marketing reforms (25%) and governance and land reforms (20%) carrying almost half of the weight of the parameters in its scoring system.
- **Parameters:** The parameters are process-oriented, and are meant to evolve as and when new reforms or initiatives are proposed. Another major parameter which States will be rated on is their success in reducing the cost of farm inputs (20%) by distributing soil health cards and encouraging organic farming and micro-irrigation.
- **Risk mitigation** measures such as crop and livestock insurance carry a 15% weightage, while increased productivity and investment in agriculture carry a 10% weight each.
- **Way ahead:** As agriculture is a State subject, the success of policies and reform initiatives proposed at the Centre is dependent on implementation by the States. To ensure that reform agenda of the government is implemented at a desired pace by all State governments, there is a need to develop a competitive spirit between the States.

Indian Wind Turbine Certification Scheme (IWTCS)

- **About the Indian Wind Turbine Certification Scheme (IWTCS):** The IWTCS is a consolidation of relevant National and International Standards (IS/IEC/IEEE), Technical Regulations and requirements issued by Central Electricity Authority (CEA), guidelines issued by MNRE and other international guidelines. It also incorporates various best practices from other countries to ensure the quality of the wind energy projects.
- **The draft Scheme** enlists the guidelines for the benefit of all the stakeholders from concept to lifetime of wind turbine, including Indian Type Approved Model (ITAM), Indian Type Certification Scheme (ITCS), Wind Farm Project Certification Scheme (WFPACS) and Wind Turbine Safety & Performance Certification Scheme (WTSPCS).
- **The IWTCS** is envisaged to assist and facilitate the following stakeholders; (i.) Original Equipment Manufacturers (OEMs) (ii.) End Users -Utilities, SNAs, Developers, IPPs, Owners, Authorities, Investors and Insurers (iii.) Certification Bodies (iv.) Testing Laboratories.
- **Need for a scheme in this context:** Wind sector in India is growing at a rapid pace with increased utilization of wind energy for the power development. The modern wind turbines have higher hub heights, larger rotor diameter, higher capacity and improved Capacity Utilization Factor (CUF) along with technological improvements.
- **Under these developments**, there is a need for comprehensive document which provides the complete technical requirements which shall have to be complied by the wind turbines for the safe and reliable operation by all the stakeholders viz, OEMs, Independent Power Producers (IPPs), wind farm developers, Financial Institutions, Utilities and others. Also, there is a need for technical regulations which shall facilitate common ground for OEMs, Developers, Investors and Financial Institution for systematic development.

Global Digital Content Market 2018

- **Key facts:** The conference will feature sessions on music, film, broadcasting and publishing, as well as collective management, emerging models and the implications for the market and policy makers.
- **India has been chosen** as a host nation for the conference by World Intellectual Property Organization(WIPO) due to the strong creative industry in the country in films, music and media. The focus for this year's conference is the Asia Pacific region.
- **About Global Digital Content Market (GDCM)2018:** GDCM is a platform to discuss vital issues and enhance development of the digital and IP generating industries such as publishing, films, music, and gaming all of which are major contributors to the Indian GDP.
- **The GDCM 2018** will see participation of professionals from various creative fields, the digital industry around the world and delegates of the diplomatic community from Missions to the United Nations.
- **The aim of GDCM 2018** is to give industry stakeholders a platform to come together and discuss new avenues in the films, music, gaming and creative industry along with points of challenge that is presented due to the changing creative landscape because of the disruption brought about by digital technologies.

INDRA 2018:

- **What is it?** It is a joint military exercise between Indian and Russia on combating insurgency under the aegis of United Nations (UN).
- **Why in News?** The latest edition is being conducted at Babina Field Firing Ranges, Babina Military Station.
- **The aim of the exercise** is to practice joint planning and conduct to enhance interoperability of the two Armies in the peace keeping/ enforcement environment under the aegis of the UN.
- **It focuses** upon training on enhancing team building, special tactical level operations such as Cordon and Search, house intervention, handling and neutralisation of Improvised Explosive Devices and integrated employment of force multipliers.

#PowerOf18 campaign:

- **What is it?** It is a campaign launched by Twitter India aimed at encouraging youth to contribute in public debates and participate in civic engagement for the 2019 general elections.
- **Significance:** The campaign will serve as resource for young Indians to find more information about elections, support social causes they are passionate about and join public conversation.



NITI Aayog organizes South Asian Regional Conference on Urban Infrastructure

- **NITI Aayog**, the premier think tank of the Government of India, partnered with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the Asian Development Bank (ADB) to host a South Asian regional conference at PravasiBharatiya Kendra in the capital today to discuss the key issues, perspectives and the way forward in the Urban Infrastructure.
- **The two day conference** on "Urban Infrastructure: New Approaches to Public & Private Partnerships and Municipal Finance Innovations", being held on November 15-16, was inaugurated by CEO, NITI Aayog, Amitabh Kant, Secretary, Department of Economic Affairs, Ministry of Finance Subhash Chandra Garg. UN Resident Coordinator in India, Yuri Afanasiev, Country Director, ADB India Kenichi Yokoyama, and Director & Head, UNESCAP S&SW Office, Dr Nagesh Kumar were present on this occasion.
- **Union Minister of State** (Independent Charge) in the Ministry of Housing and Urban Affairs), Shri Hardeep Singh Puri addressed the closing session on Day One of the Conference and received the rapporteurs' presentations, summarising best practices related to new approaches to PPP & Municipal Financing.
- **In the inaugural address**, CEO NITI Aayog, Amitabh Kant emphasized upon the need to ensure adequate return on investments in infrastructure through properly structured Special Purpose Vehicles (SPVs) and de-risking of projects. He said that it is required to evolve unique models and systems of urban planning which are creative, innovative and sustainable, and suited for South Asian countries.
- **Secretary, Department of Economic Affairs**, Ministry of Finance, Subhash Chandra Garg emphasised on the need to decentralised urbanisation, with porous boundaries between urban & rural areas as the key to sustainable urbanisation. He said that the future areas of growth & development are infrastructure & digitalised delivery of goods & services.
- **Considering the quantum deficit** in infrastructure implementation today vis-à-vis the demand, it is extremely imperative to focus on newer means of implementing and financing urban infrastructure. In India alone, until 2040, estimated investments of around \$4.5 trillion are required in the infrastructure space. With respect to urban needs, the population in South Asia is expected to grow by around 250 million till 2030, while that in India is expected to reach around 590 million during the same period.
- **There are an estimated 98 million** people who reside in the slums of Indian cities and are disproportionately deprived of access to basic services and infrastructure. These gaps must be addressed, so that the cities grow equitably and in an environmentally responsible way.
- **Background: The South Asian regional conference** is a first of its kind, with participation from across the South Asian region including leaders from the government, industry, research organizations, academia, think tanks and civil society. The Conference aims to review overall issues and assess the sustainability of PPPs and urban finance in South Asia, specifically India, while broadening the knowledge base and engaging on international best practices. Components of the Conference include keynote and breakout sessions, panel discussions, presentation and a variety of stakeholder consultations.
- **Countries need to explore innovative models** to implement infrastructure projects. Public-private partnerships (PPPs) have been one such option that enables governments to optimally share the risks associated with a project's life cycle. However, for making government procurement more dynamic, it is imperative to focus on wider options. Furthermore, to implement urban infrastructure in India, a deeper deliberation is required on the means of democratising the governance at the city level with a view towards providing greater operational and fiscal autonomy to Urban Local Bodies (ULBs). These challenges and the emerging opportunities necessitate focusing on the institutional environment to improve the delivery of sustainable urban infrastructure and services and evaluating alternatives for long term, predictable financing.

NITI Aayog Constitutes Himalayan State Regional Council

- **NITI Aayog has constituted** the 'Himalayan State Regional Council' to ensure sustainable development of the Indian Himalayan region. The Council has been constituted to review and implement identified action points based on the Reports of five Working Groups, which were established along thematic areas to prepare a roadmap for action.

- **Recognizing the uniqueness** of the Himalayas and the challenges for sustainable development, Five Working Groups were constituted by NITI Aayog on June 2, 2017.
- **These Working Groups** were tasked with preparing a roadmap for action across five thematic areas namely,
- **Inventory and Revival** of Springs in Himalayas for Water Security, Sustainable Tourism in Indian Himalayan Region, Shifting Cultivation: Towards Transformation Approach, Strengthening Skill & Entrepreneurship (E&S) Landscape in Himalayas, and Data/Information for Informed Decision Making. The five thematic reports were released by the NITI Aayog in August, 2018 and framed the action points for the Terms of Reference of the Council constituted.
- **The Himalayan State Regional Council** will be chaired by the Dr VK Saraswat, Member, NITI Aayog and will consist of the Chief Secretaries of the Himalayan States as well as the Secretaries of key Central Ministries, senior officers of NITI Aayog as well as special invitees.
- **The Himalayan States Regional Council** will be the nodal agency for the Sustainable development in the Himalayan Region which consists of the twelve States namely Jammu & Kashmir, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, two districts of Assam namely Dima Hasao and KarbiAnglong and Darjeeling and Kalimpong in West Bengal.
- **The terms of reference of the Council** states that it shall monitor the implementation of action points for Central Ministries, Institutions and 12 Himalayan State Governments in Indian Himalayan Region which include river basin development and regional cooperation, spring mapping and revival across Himalayas in phased manner for water security; develop, implement and monitor tourism sector standards as well as bring policy coherence, strengthen skill & entrepreneurship with focus on identified priority sectors, among other action points.

Ministry of Tourism rolls out online Certification programme for Tourist Facilitators

- **The Union Tourism Secretary**, Smt. Rashmi Verma rolled out the Incredible India Tourist Facilitator Certification (IITFC) Programme in New Delhi, today. The Union Tourism Minister, Shri. K.J. Alphons, had earlier launched the IITFC on 27th September, 2018 on the occasion of National Tourism Awards function & World Tourism Day. With its roll out today, the participants will now be able to register for this programme through an online digital platform. IITFC will enable Indian citizens to develop and enhance the skills associated with tourism, and where one can incorporate knowledge about facilitating tourists across the country.
- **The certification program** comprises of basic and advanced self-paced courses designed in a manner that the users can learn at their own time, space, path and pace. The course kicks off today with a basic introductory module alongside the registration process. This will be followed by payment initiation on 19th November 2018, where any 10+2 pass out candidate can enroll in the basic course comprising of 7 modules aimed at training the facilitators for knowledge, skills and attitude domains at a nominal charge of INR2000. Successful completion of this program would enable the learner to become a Certified Tourist Facilitator of Ministry of Tourism, Government of India. A refresher course is also proposed for launch in due time for those already in the field seeking at an advanced level course to enhance their skill set.
- **Speaking on the occasion Smt. Rashmi Verma** said that the concept of 'tourist guide' has changed world over and the new age tourist facilitators are 'story tellers'. The Secretary added that this online programme will have lot of advantages like job creation for local people, harness the local experience and traditional knowledge and also it has the flexibility of any age or any place people to join. This initiative will also ensure an enriching experience for the tourists, as this initiative will address the issue of shortage of tourist guides as well as it will provide a lot of competition which will further ensure in providing best tourist facilitators, the Secretary added.
- **The IITFC program aspires to reach out** to a far-flung audience encompassing a diversity of candidates ranging from an enthusiastic student who has recently qualified for higher secondary to an ambitious homemaker willing to grasp tourist facilitation skills from the comfort of their home. It will also act as an enabler for transforming a local citizen with no specified skills having proficiency in a regional language into a potential bread earner for their households.
- **The online learning management programme** has been developed by M/s Wipro Limited and the content supported by the Indian Institute of Tourism & Travel Management.
- **During this event, the Ministry** also exchanged four MoUs with M/s. Yatra Online under 'Adopt-a-Heritage', 'Apni Dharohar Apni Pehchan' for adoption of (i) Qutub Minar in New Delhi (ii) Ajanta Caves in Maharashtra (iii) Leh Palace in Jammu and Kashmir and (iv) Hazara Rama Temple and Hampi in Karnataka.

Dr. Rajendra Prasad Central Agricultural University has begun work on five new themes targeted by the Union Agriculture Ministry for the development of agriculture in the country.

- **Responsibility for a village** has been given to every agricultural scientist to create awareness among farmers about modern agricultural methods
- **Union Minister of Agriculture and Farmers' Welfare** Shri Radha Mohan Singh has said that Dr. Rajendra Prasad Central Agricultural University has begun work on five new themes targeted by Union Agriculture Ministry for the development of agriculture sector. These include "har khet ko pani", increase the production of pulses, soil health, doubling farmers' income and more crop per drop. He informed that in two years, positive results have started to appear. Major works include irrigation through solar power and single phase pumps, seed production of pulse crops, soil testing in farmers' fields through six mobile soil testing laboratories, food processing to double the income of farmers, mushroom production, honey production, research on reduction of post-harvest losses and efficient irrigation system.
- **Speaking on the occasion of the first convocation** ceremony of Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur (Bihar) he stated that the Modi government has granted a lot of support to strengthen this University. Horticulture and Forestry College, Centre of Excellence on Embryo transfer & indigenous breed, a new centre for beekeeping, modern processing center for jaggery production etc are important steps in this direction. Apart from this, a center for Sahiwal breed in Bettiah, training centre by National Cooperative Development Corporation, seed storage and sale centre by National Seeds Corporation, fish production by cage culture in all KVKs are also proposed. Shri Singh said that Hon'ble Prime Minister Shri Narendra Modi has launched four new projects to accelerate the 'Lab to Farm' programme for all-round development of agriculture. In order to increasing the connectivity of farmers with scientists, technical assessment, evaluation, training and capacity building, the government has initiated the Farmer First program.
- **Considering the importance of capacity development** for entrepreneurship in rural youth, Student READY (Rural Entrepreneurship Awareness Development Yojana) program has been started and in order to create new opportunities of employment generation for the youth in agriculture and to prevent their migrations, Attracting and Retaining of Youth in Agriculture (ARYA) has been started. The Minister said that under the "Mera Gaon Mera Gaurav" program, agricultural experts of agricultural universities and ICAR have been given the responsibility of a village in order to create awareness among farmers about scientific farming. The Minister hoped that the university is soon counted among the leading universities of the country and the seeds & technologies developed here bring prosperity to the farmers of Bihar and the country thereby doubling their income.

Rs 75 commemorative coin to mark anniversary of Tricolour hoisting by Bose

- **Hoisting of Tricolour: During his visit to Andaman in on December 30, 1943**, Subhash Chandra Bose hoisted the Tricolor for the first time at Cellular Jail of Port Blair, much before India attained Independence declaring the island as the free territory from the British rule.
- **On the same occasion, he announced the freedom** of Andaman & Nicobar Islands, the first Indian Territory, from the British rule. The island at that time was liberated from British rule by Japan which captured it during the World War – II.
- **Bose named Andaman Island as Shaheed and Nicobar Island** as Swaraj and appointed INA General AD Loganathan as the governor of the Islands. Azad Hind Government was not merely a Government in Exile anymore but had its own land, own currency, civil code and stamps.

'Yuva Sahakar-Cooperative Enterprise Support and Innovation Scheme'

- **Key facts: The scheme would encourage cooperatives to venture into new and innovative areas.** NCDC has created a dedicated fund with liberal features enabling youth to avail the scheme. The scheme will be linked to Rs 1000 crore 'Cooperative Start-up and Innovation Fund (CSIF)' created by the NCDC. It would have more incentives for cooperatives of North Eastern region, Aspirational Districts and cooperatives with women or SC or ST or PwD members.
- **The funding for the project** will be up to 80% of the project cost for these special categories as against 70% for others. The scheme envisages 2% less than the applicable rate of interest on term loan for the project cost up to Rs 3 crore including 2 years moratorium on payment of principal. All types of cooperatives in operation for at least one year are eligible.
- **About NCDC:** National Cooperative Development Corporation (NCDC) was established by an Act of Parliament in 1963 as a statutory Corporation under Ministry of Agriculture & Farmers Welfare. It has many regional centres to provide the financial assistance to Cooperatives/Societies/Federations.

India votes against UNGA draft resolution on use of death penalty

- **UN Against Death Penalty:** The draft resolution, taken up in the Third Committee (Social, Humanitarian, Cultural) of the General Assembly was approved with a recorded vote of 123 in favour, 36 against and 30 abstentions.
- **The draft aimed** to ensure that it is not applied on the basis of discriminatory laws or as a result of discriminatory or arbitrary application of the law. The resolution sought to promote a moratorium on executions with the aim of abolishing death penalty.
- **India was among the countries** that voted against the resolution, which would have the Assembly call on all States to respect international standards on the rights of those facing death penalty.
- **India's views:** India has voted against the resolution as a whole, as it goes against statutory law in India. The death penalty is exercised in 'rarest of rare' cases, where the crime committed is so heinous that it shocks the conscience of the society.
- **Indian law provides** for all requisite procedural safeguards, including the right to a fair trial by an independent Court, presumption of innocence, the minimum guarantees for defence, and the right to review by a higher court.

Mega Food Park

- **Facts for Prelims:** A 3rd Mega Food Park has been sanctioned by the Ministry in Maharashtra and is under implementation in Wardha District while the first Park was inaugurated on 1st of March 2018 in Satara district.
- **About Mega Food Parks:** Ministry of Food Processing Industries is implementing Mega Food Park Scheme in the country. The Scheme of Mega Food Park aims at providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers so as to ensure maximizing value addition, minimizing wastages, increasing farmers' income and creating employment opportunities particularly in rural sector.
- **These food parks** give a major boost to the food processing sector by adding value and reducing food wastage at each stage of the supply chain with particular focus on perishables.
- **A maximum grant** of R50 crore is given for setting up a MFP, in minimum 50 acres of contiguous land with only 50% contribution to the total project cost.
- **Mode of operation:** The Scheme has a cluster based approach based on a hub and spokes model. It includes creation of infrastructure for primary processing and storage near the farm in the form of Primary Processing Centres (PPCs) and Collection Centres (CCs) and common facilities and enabling infrastructure at Central Processing Centre (CPC).
- **The PPCs are meant** for functioning as a link between the producers and processors for supply of raw material to the Central Processing Centres. CPC has need based core processing facilities and basic enabling infrastructure to be used by the food processing units setup at the CPC. The minimum area required for a CPC is 50 acres.
- **The scheme is demand-driven** and would facilitate food processing units to meet environmental, safety and social standards.

Young Champions Awards

- **The awards were presented** to the top six most innovative solutions from across the country, which were shortlisted through the Atal Tinkering Marathon.
- **Background:** On October 2 last year, AIM's Atal Tinkering Labs (ATL) had launched a six month long nationwide challenge called the Atal Tinkering Marathon, across six different thematic areas, namely, clean energy, water resources, waste management, healthcare, smart mobility and agri-technology. The objective was to encourage students to observe community problems and develop innovative solutions.
- **What are ATLs?** With a vision to 'Cultivate one Million children in India as Neoteric Innovators', Atal Innovation Mission is establishing Atal Tinkering Laboratories (ATLs) in schools across India.
- **Objective:** The objective of this scheme is to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc.

- **Financial Support:** AIM will provide grant-in-aid that includes a one-time establishment cost of Rs. 10 lakh and operational expenses of Rs. 10 lakh for a maximum period of 5 years to each ATL.
- **Eligibility:** Schools (minimum Grade VI – X) managed by Government, local body or private trusts/society can set up ATL.
- **Significance of ATLS:** Atal Tinkering Labs have evolved as epicenters for imparting these 'skills of the future' through practical applications based on self-learning. Bridging a crucial social divide, Atal Tinkering Labs provide equal opportunity to all children across the spectrum by working at the grassroot level, introducing children to the world of innovation and tinkering.
- **Need for such labs:** As the world grapples with evolving technologies, a new set of skills have gained popular acceptance and have come to be in high demand. For India to contribute significantly during this age of rapid technological advancement, there is an urgent need to empower our youth with these 'skills of the future'.
- **Equipped with modern technologies** to help navigate and impart crucial skills in the age of the Fourth Industrial Revolution, the ATLS are at the vanguard of the promoting scientific temper and an entrepreneurial spirit in children today.

GSAT-29

- **About GSLV Mk III:** GSLV Mk III is a three-stage heavy lift launch vehicle developed by the Indian Space Research Organisation (ISRO). Two massive boosters with solid propellant constitute the first stage, the core with liquid propellant forms the second stage and the cryogenic engine completes the final stage.
- **About GSAT-29:** GSAT-29 is a multiband, multi-beam communication satellite, intended to serve as test bed for several new and critical technologies. Its Ku-band and Ka-band payloads are configured to cater to the communication requirements of users including those from remote areas especially from Jammu & Kashmir and North-Eastern regions of India.
- **In addition,** the Q/V-Band communication payload onboard is intended to demonstrate the future high throughput satellite system technologies. Geo High Resolution Camera will carry out high resolution imaging. Optical Communication Payload will demonstrate data transmission at a very high rate through optical communication link.
- **Significance of the launch:** The success of GSLV MkIII-D2 marks an important milestone in Indian space programme towards achieving self-reliance in launching heavier satellites. The success of this flight also signifies the completion of the experimental phase of GSLV Mark III.

UP cabinet approves renaming of Faizabad as Ayodhya, Allahabad as Prayagraj:

- **Context:** Uttar Pradesh Government has approved renaming of Faizabad and Allahabad divisions as Ayodhya and Prayagraj respectively. What next? Now, the proposal will now go to Central before the city is officially renamed.
- **Justification for name change:** Allahabad's ancient name was 'Prayag', but was changed after 16th-century Mughal emperor Akbar built fort near 'Sangam', the holy confluence of three rivers viz. Ganga, Yamuna and Saraswati. Akbar named the fort and its neighbourhood 'Ilahabad'. Later, Akbar's grandson Shah Jahan renamed the entire city as 'Allahabad'. But the area near the 'Sangam', the site of the Kumbh Mela, continues to be known as 'Prayag'.
- **Ayodhya** has been associated with Lord Ram and is known as his birth place. Ayodhya has been the capital of various dynasties, including the Ikshvaku dynasty of which Lord Ram is a descendent.

Point Calimere Wildlife Sanctuary:

- **Why in News?** Point Calimere Wildlife Sanctuary in Vedaranyam Range has been closed for a week in view of water-logging caused by a heavy spell of rainfall. A study notes that the water quality at the Point Calimere Wildlife Sanctuary might be unsafe for avifauna to feed and breed.

- **Key facts:** It is located in Nagapattinam district of Tamil Nadu spreads across an area of 30 sq.km and comprises sandy coastal, saline swamps and thorn scrub forests around the backwater.
- **It is a protected area and a Ramsar site.** It harbors the single-largest stretch of the unique dry-evergreen forest in the country besides open grasslands and tidal mudflats is of interest to tourists.
- **Around 100 species** of birds including the Greater Flamingo, Painted Stork, Little Sting, Sea Gull and Brown-headed gull have been making their presence felt since September.
- **Blackbuck (Antelope Cervicapra)** is the flagship species of the sanctuary. Other important animals are the spotted deer, black-napped hare, wild boar, Indian jackal, feral horses, palm civet, short-nosed fruit bat, jungle cat and monitor lizard.



shri jual oram inaugurates “aadi mahotsav” organized by m/o tribal affairs from 16th to 30th november, 2018 in delhi

- **Shri Jual Oram**, Union Minister for Tribal Affairs inaugurated the “Aadi Mahotsav” a National Tribal Festival to celebrate, cherish and promote the spirit of tribal craft, culture, cuisine and commerce at Delhi Haat, INA today. Shri Jaswant Singh Suman Bhai Babhor, and Shri Sudarshan Bhagat Ministers of State for Tribal Affairs and several dignitaries were present on the occasion. The Mahotsav has been organized by the Ministry of Tribal Affairs and TRIFED from 16-30 November, 2018 at Dilli Haat, INA; from 21-30 November, 2018 at Nehru Park and from 16-19 November, 2018 at Central Park, New Delhi.
- **Delivering inaugural address**, Shri Jual Oram, said that the Tribes constitute over 8% population. This is a very significant number. In real terms, it corresponds to 10 crore Indians. The national objective of inclusive development (Sabka Vikas) includes the development of Tribes as an important component. The Mahotsav comprises of display and sale of items of tribal art and craft, tribal medicine & healers, tribal cuisine and display of tribal folk performance, in which tribal artisans, chefs, folk dancers/musicians from 23 States of the country are participating and providing a glimpse of their rich traditional culture.
- **He said that the theme of the festival is:** “A Celebration of the Spirit of Tribal Culture, Craft, Cuisine and Commerce”. The Mahotsav features exhibition-cum-sale of tribal handicrafts, art, paintings, fabric, jewellery and much more through 100 stalls. Over 200 tribal artisans and artists from different States creating a Mini-India are participating in the festival.
- **Shri Oram** said that the Adivasi way of life is guided by primal truths, eternal values and a natural simplicity. The greatness of the tribes lies in this that they have managed to retain the primal skills and natural simplicity. Their creations issue from the depths of time. This quality gives their arts and crafts a timeless appeal. The crudest tribal handicraft instantly touches a primal instinct in all of us. This is particularly true in tribal music and dance. A colourful cultural programme was also organized on the occasion in collaboration with Ministry of Culture.
- **More than 600 Artisans** from 23 States, 80 Tribal Chefs from more than 20 States and 14 Dance Troupes comprising more than 200 Artists will participate in the Mahotsav. The highlights of the Mahotsav are – Live demo for making Mahua wine, TAA Ras and Candy Mahua Imli Chutney etc; Live demo for making Lac bangles; Painting demo for 4 different schools of painting i.e. Worli, Pithora, Gond and Saura; Fashion show for tribal textiles, fashion accessories etc. (23rd November) and Tribal Cuisines making and sale from different States.

CSIR-CRRI organizes a two day international conference on pavement technology and road infrastructure engineering

- **Shri Nitin Gadkari** calls upon the experts to promote the use of indigenous building material and precast technology in the highways sector
- **Says the focus** should be on improving quality while reducing cost
- **CSIR-Central Road Research Institute** has organized a two-day international conference titled “Pavements and Computational Approaches” from 16-17 November 2018, at its premises in New Delhi. The objective of the conference is to deliberate upon advancements in pavement technology and road infrastructure engineering across the world, with special emphasis to the requirements of developing countries. Experts will discuss issues related to design and construction of pavements, material characterization, computational analysis and modelling. Deliberations during the conference are likely to bring out new thoughts on technology up-gradation and its successful implementation in the field.
- **Shri Nitin Gadkari**, Union Minister of Road Transport & Highways, Shipping, Water Resources, River Development & Ganga Rejuvenation has said in a video message that the mission of the Road Transport & highways Ministry is to build high quality roads at low costs. He called upon the experts at the conference to be ready to experiment with innovative technology, make all possible use of indigenous raw material including waste material, and promote pre-cast technology. He said the thrust of technological innovation should be on reducing costs and time for completion of projects without any compromise on quality.

- **The ageing infrastructure**, road congestion, growth in heavy vehicle traffic, and insufficient maintenance have rendered the road transport inefficient in developing countries. Major challenges to the road network require a clear focus on enhanced pavement design, construction, performance evaluation, management and preservation for developing long-lasting, low-maintenance pavements. Within this milieu, enhanced and optimized solutions to the current problems have a key role in developing and preserving the road infrastructure. Dedicated R&D efforts are needed in the theme areas such as development of smart materials, innovative design and maintenance technologies, improved data analysis approaches for pavement performance and management, improvements in material behaviour characterization, use of soft computing tools for analysis and modelling of pavements.

Himalayan State Regional Council

- **About the Council:** Composition: The Himalayan State Regional Council will be chaired by the Dr VK Saraswat, Member, NITI Aayog and will consist of the Chief Secretaries of the Himalayan States as well as the Secretaries of key Central Ministries, senior officers of NITI Aayog as well as special invitees.
- **Objective:** The Council has been constituted to review and implement identified action points based on the Reports of five Working Groups, which were established along thematic areas to prepare a roadmap for action.
- **Functions:** The Himalayan States Regional Council will be the nodal agency for the Sustainable development in the Himalayan Region which consists of the twelve States namely Jammu & Kashmir, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, two districts of Assam namely Dima Hasao and Karbi Anglong and Darjeeling and Kalimpong in West Bengal.
- **The terms of reference** of the Council states that it shall monitor the implementation of action points for Central Ministries, Institutions and 12 Himalayan State Governments in Indian Himalayan Region which include river basin development and regional cooperation, spring mapping and revival across Himalayas in phased manner for water security; develop, implement and monitor tourism sector standards as well as bring policy coherence, strengthen skill & entrepreneurship with focus on identified priority sectors, among other action points.
- **Background:** Recognizing the uniqueness of the Himalayas and the challenges for sustainable development, Five Working Groups were constituted by NITI Aayog on June 2, 2017. The five thematic reports were released by the NITI Aayog in August, 2018 and framed the action points for the Terms of Reference of the Council constituted.
- **These Working Groups** were tasked with preparing a roadmap for action across five thematic areas namely:
 - **Inventory and Revival of Springs** in Himalayas for Water Security Sustainable Tourism in Indian Himalayan Region. Shifting Cultivation: Towards Transformation Approach. Strengthening Skill & Entrepreneurship (E&S) Landscape in Himalayas. Data/Information for Informed Decision Making.

“Aadi Mahotsav”

- **The theme of the festival is:** “A Celebration of the Spirit of Tribal Culture, Craft, Cuisine and Commerce”.
- **About Aadi Mahotsav:** The Mahotsav will comprise of display and sale of items of tribal art and craft, tribal medicine & healers, tribal cuisine and display of tribal folk performance, in which tribal artisans, chefs, folk dancers/musicians from 23 States of the country shall participate and provide glimpse of their rich traditional culture.
- **The festival** will feature exhibition-cum-sale of tribal handicrafts, art, paintings, fabric, jewellery and much more through 100 stalls. Over 200 tribal artisans and artists from different States creating a Mini-India will be participating in the festival.
- **Significance of the event:** As the name of this event Aadi Mahotsav suggests, it is its ‘Aadi’ factor that is important about them. The Adivasi way of life is guided by primal truths, eternal values and a natural simplicity. The greatness of the tribes lies in this that they have managed to retain the primal skills and natural simplicity. Their creations issue from the depths of time. This quality gives their arts and crafts a timeless appeal. The crudest tribal handicraft instantly touches a primal instinct in all of us. This is particularly true in tribal music and dance.

Swadesh Darshan Scheme

- **These projects** are “Development of North East Circuits: Bhalukpong- Bomdila – Tawang Project & Nafra- Seppa- Pappu, Pasa, Pakke Valleys- Sangdupota- New Sagalee- Ziro- Yomcha Project”.
- **About Swadesh Darshan Scheme:** The Tourism Ministry had launched ‘Swadesh Darshan’ scheme with an objective to develop theme-based tourist circuits in the country. These tourist circuits will be developed on the principles of high tourist value, competitiveness and sustainability in an integrated manner.
- **Features of Swadesh Darshan Scheme:** The scheme is 100% centrally funded for the project components undertaken for public funding.
- **To leverage the voluntary funding** available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector.
- **Funding of individual project** will vary from state to state and will be finalised on the basis of detailed project reports prepared by PMC (Programme Management Consultant).
- **A National Steering Committee** (NSC) will be constituted with Minister in charge of M/O Tourism as Chairman, to steer the mission objectives and vision of the scheme.
- **A Mission Directorate** headed by the Member Secretary, NSC as a nodal officer will help in identification of projects in consultation with the States/ UTs governments and other stake holders.
- **PMC** will be a national level consultant to be appointed by the Mission Directorate.

East Asia Summit

- **India** has been participating in the EAS since its very inception in 2005.
- **About East Asia Summit:** The East Asia Summit (EAS) is a forum held annually by leaders of, initially, 16 countries in the East Asian, Southeast Asian and South Asian regions. Membership expanded to 18 countries including the United States and Russia at the Sixth EAS in 2011.
- **EAS meetings** are held after annual ASEAN leaders' meetings. The first summit was held in Kuala Lumpur, Malaysia on 14 December 2005.
- **EAS is an initiative** of ASEAN and is based on the premise of the centrality of ASEAN.
- **EAS has evolved** as a forum for strategic dialogue and cooperation on political, security and economic issues of common regional concern and plays an important role in the regional architecture.
- **There are six priority** areas of regional cooperation within the framework of the EAS. These are – Environment and Energy, Education, Finance, Global Health Issues and Pandemic Diseases, Natural Disaster Management, and ASEAN Connectivity. India endorses regional collaboration in all six priority areas.
- **Evolution of EAS:** The concept of an East Asia Grouping was first promoted in 1991 by the then Malaysian Prime Minister, Mahathir bin Mohamad. The final report of the East Asian Study Group in 2002, established by the ASEAN+3 countries (i.e. China, Japan and ROK), recommended EAS as an ASEAN led development limited to the ASEAN +3 countries.
- **However, the ASEAN Ministerial Meeting (AMM)** held in Vientiane on July 26, 2005 welcomed the participation of ASEAN, China, Japan, Republic of Korea, Australia, India and New Zealand, in the first EAS. USA and the Russian Federation were formally included as members of the EAS at the 6th EAS held in Bali, Indonesia on 19 November 2011.

World Customs Organisation (WCO)

- **Outcomes of the meeting:** The meeting deliberated upon various issues including the steps required for the capacity building and reforms in customs.
- **It also discussed** and deliberated upon amended Kyoto protocol, digital customs, e-commerce among other issues.

- **Summary of various efforts** made by National Trade Facilitation Committee (NTFC) for trade facilitation was also tabled in the meeting.
- **World Customs Organisation (WCO):** What is it? WCO is independent intergovernmental body whose mission is to enhance effectiveness and efficiency of Customs administrations. It was established in 1952 as Customs Co-operation Council (CCC). It is the only international organization with competence in Customs matters and is considered as voice of international Customs community.
- **It is headquartered in Brussels, Belgium.**
- **Composition:** It represents 182 Customs administrations across the globe that collectively process approximately 98% of world trade.
- **Functions:** It plays leading role in discussion, development, promotion and implementation of modern customs systems and procedures. It offers range of Conventions and other international instruments, as well as technical assistance and training services to its members. It also actively supports its members in their endeavours to modernize and build capacity within their national Customs administrations.
- **Objectives:** It aims to enhance efficiency and effectiveness of member customs administrations and assist them to contribute successfully to national development goals, particularly revenue collection, national security, trade facilitation, community protection, and collection of trade statistics.

Network for Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC)

- **The general assembly** of 22 prominent cooperative organizations from eight countries unanimously decided to focus on C2C and capacity development to meet challenges of climate change as transformative cooperatives.
- **About NEDAC:** NEDAC was set up in 1991 by the United Nations' Food and Agriculture Organisation (FAO), the International Cooperative Alliance (ICA) and the International Labour Organisation (ILO). NEDAC sensitises Governments in the region on the role of agricultural cooperatives in promoting agricultural and rural development to ensure rural food and livelihood security for millions of people in Asia and Pacific.

NIPUN

- **The initiative** is aimed at imparting in-service online training and information to police personnel through specialised courses available online which have been designed by experts in various fields.
- **The online courses** on this portal have been designed in collaboration with University Grant Commission (UGC), FICCI, NHRC, NCPCR and Janaki Devi Memorial College, Delhi University under project CLAP "The Collaborative Learning and Partnership".
- **It will have online courses** and resources on law, standing orders, investigation checklists, forms for case files, latest High Court and Supreme Court rulings. It is envisioned that Investigating Officers (IOS) will be able to take benefit of this information during course of their duty or while handling case.
- **Significance:** Through this portal Delhi Police officers can now access information by just logging on the portal. They can take course from anywhere at any time. It will make easier for the police officer to upgrade their skills and re-enforce their learning while balancing training time along with their daily routine work.

MCGS Huravee:

- **Context:** Maldivian Coast Guard Ship (MCGS) Huravee has successfully completed her refit at Naval Dockyard Visakhapatnam and the ship was formally handed over to Maldives recently.

- **Background:** MCGS Huravee was originally commissioned as INS Tillanchang, a Trinkat class patrol vessel built by Garden Reach Shipbuilders and Engineers, Kolkatta in Mar 2001 and was subsequently gifted to Maldives by the Govt of India in Apr 2006 to strengthen the strategic partnership between the two nations and work together to ensure the maritime safety of the Indian Ocean Region.

Cherry Blossom:

- **Context:** India International Cherry Blossom festival is scheduled to be held from November 14 to 17 in Shillong, Meghalaya.
- **Significance:** This festival is the world's only autumn cherry blossom festival. The festival is organised by Government of Meghalaya's Forest & Environment Department as well as by the Institute of Bioresources & Sustainable Development (IBSD) in collaboration with Indian Council for Cultural Relations (ICCR).
- **Aim:** The aim of the festival is to celebrate the unique autumn flowering of Himalayan Cherry Blossoms. The Cherry Blossom tree flowers only for a short period in a year. The festival will showcase full pink and white cherry blossoms found all along the roadside of the famous Ward Lake. Alongside, the festival will also showcase the region's food, wine and crafts in addition with several cultural events.

IndusInd Bank launches India's first interactive credit card with buttons:

- **IndusInd Bank** launches India's first interactive credit card with buttons.
- **The card empowers** customers with a choice of payment options such as EMI, Reward Points or Credit at the push of a button at the point of sale.
- **The card** has been created in partnership with Dynamics Inc, which is headquartered in Pittsburgh USA, and designs and manufactures intelligent, battery powered payment cards.

Barnard's star b:

- **What is it?** Astronomers have discovered a frozen planet with a mass over three times that of the Earth, orbiting the closest solitary star to the Sun.
- **Key facts:** **The potentially** rocky planet is a 'super-Earth' and orbits around its host star once every 233 days, said researchers from Queen Mary University of London.
- **The planet lies** at a distant region from the star known as the 'snow line' This is well beyond the habitable zone in which liquid water, and possibly life, could exist.
- **The planet's surface** temperature is estimated to be around -170°C, they said. However, if the planet has a substantial atmosphere the temperature could be higher and conditions potentially more hospitable.
- **Barnard's star b** is the second closest known exoplanet to our Sun. The closest lies just over four light-years from Earth. That exoplanet, Proxima b, orbits around the red dwarf Proxima Centauri.

UPSC = Fever



SIMBEX-2018 – 25 Glorious Years and Counting

- **After an intense sea phase of SIMBEX**, Singapore India Maritime Bilateral Exercise in the Andaman Sea and Bay of Bengal, ships of the Republic of Singapore Navy (RSN) arrived Visakhapatnam on 16 November. In what could be termed an unprecedented level of interoperability between the two navies – ships, submarines and aircraft of India and Singapore - undertook multi-dimensional exercises at sea with perhaps very high degree of complexity. After the initial harbour phase at Port Blair, the exercises witnessed action at sea and have now shifted gears to the second harbour phase at Visakhapatnam which is home to the Eastern Naval Command (ENC) of the Indian Navy.
- **Few in 1994 would have predicted** that the maiden basic Anti-Submarine Warfare exercises that were held that year between navies of India and Singapore would transform into one of the most high level maritime exercises in the years to come and sustain itself for quarter of a century – a milestone like no other. SIMBEX marked its 25th anniversary and is currently underway. This year, the exercises are being conducted in four phases, two each in harbour at Port Blair and Visakhapatnam and two sea phases in the Bay of Bengal.
- **Phase 1 of the 25th edition of SIMBEX** has already witnessed over a dozen ships and submarines and a never seen before number of weapon firings at sea. The action now shifts to the harbour activities at Visakhapatnam before they kick off the intensive Second Phase of the exercise. In addition to the number of Operational Conferences towards planning and preparing for the final sea phase scheduled from 19 to 21 November, friendly Volleyball and Basketball matches would also be played between the two navies. The highlight of the sporting activity is the participation of personnel from RSN in the Vizag-Navy Marathon on 18 November off RK Beach. It is a signature event in the state of Andhra Pradesh and Visakhapatnam's largest community event with participants from armed forces, corporate sector, government sector, educational institutions including international participants. The event attracts a large scale tourist population for participation from various states and countries. Personnel from the RSN would be participating in the 10K Friendship Run. Personnel from Singapore Navy also savoured the local culture and cuisine during their stay at Visakhapatnam.
- **To mark the historic Silver Jubilee of SIMBEX**, Naval Chiefs from both the participating countries would also be in Visakhapatnam. Admiral Sunil Lanba, the Chief of the Naval Staff of the Indian Navy would host Rear Admiral Lew Chuen Hong, the Chief of Navy of the RSN at the SIMBEX Silver Jubilee Dinner on 18 November.
- **On 19 November**, the Silver Jubilee Commemoration Ceremony would be held at Naval Dockyard, Visakhapatnam. In a symbol of growing trust and comfort levels between the two navies, the event will witness unveiling of the SIMBEX logo, and release of commemorative Indian Special Postage Cover and Singaporean Postage Stamp. The simultaneous release of Postal Cover and Stamp by Indian and Singaporean Postal department respectively also highlights the significance of this historic occasion between the two nations. Earlier, in June this year, the Prime Ministers of both – India and Singapore, on the sidelines of the Shangri La Dialogue held at Singapore had remarked that they looked forward to the 25th and enhanced edition of bilateral annual naval exercise SIMBEX.

Maternity Benefit Act

- **Need for incentives:** In March 2017, the Centre amended the Maternity Benefit Act to increase paid maternity leave from 12 to 26 weeks for all women employees in establishments employing ten or more people. However, while implementation of the provision was good in the public sector, it was poor for those with private sector or contract jobs.
- **There is also a wide perception** that private entities are not encouraging women employees because if they are employed, they may have to provide maternity benefit to them, particularly 26 weeks of paid holiday. Therefore, the extended maternity leave has become a deterrent for female employees who are asked to quit or retrenched on flimsy grounds before they go on maternity leave.
- **The Maternity Benefit Act:** The Maternity Benefit Act, 1961, applies to establishments employing 10 or more than 10 persons in factories, mines, plantation, shops & establishments and other entities.
- **The main purpose of this Act** is to regulate the employment of women in certain establishments for certain period before and after child birth and to provide maternity benefit and certain other benefits. The Act was amended through the Maternity Benefit (Amendment) Act, 2017.

- **The amendment has brought in major changes to the law relating to maternity benefits. These are:** It extends the period of maternity benefit from 12 weeks to 26 weeks of which not more than eight weeks can precede the date of the expected delivery. This exceeds the International Labour Organisation's minimum standard of 14 weeks and is a positive development. However, a woman who has two or more surviving children will be entitled to 12 weeks of which not more than six weeks can precede the date of the expected delivery.
- **Women who legally adopt** a child below the age of three months or a "commissioning mother" will be entitled to maternity benefit for 12 weeks from the date on which the child is handed over to her. A commissioning mother is defined as a biological mother who uses her egg to create an embryo implanted in another woman.
- **It gives discretion** to employers to allow women to work from home after the period of maternity benefit on mutually agreeable conditions. This would apply if the nature of work assigned to the woman permits her to work from home
- **It requires establishments** having 50 or more employees to have a crèche facility, either separately or along with common facilities. Further, employers should allow the woman to visit the crèche four times a day, which "shall also include the interval for rest allowed to her."
- **It introduces** a provision which requires every establishment to intimate a woman at the time of her appointment of the maternity benefits available to her. Such communication must be in writing and electronically.

How the Antarctic Circumpolar Current helps keep Antarctica frozen?

- **It's significance:** The Antarctic Circumpolar Current, or ACC, is the strongest ocean current on our planet. It extends from the sea surface to the bottom of the ocean, and encircles Antarctica. It is vital for Earth's health because it keeps Antarctica cool and frozen.
- **The ACC carries an estimated 165 million** to 182 million cubic metres of water every second (a unit also called a "Sverdrup") from west to east, more than 100 times the flow of all the rivers on Earth. It provides the main connection between the Indian, Pacific and Atlantic Oceans.
- **The tightest geographical constriction** through which the current flows is Drake Passage, where only 800 km separates South America from Antarctica. While elsewhere the ACC appears to have a broad domain, it must also navigate steep undersea mountains that constrain its path and steer it north and south across the Southern Ocean.
- **What is the Antarctic Circumpolar Current?** Antarctica is a frozen continent surrounded by icy waters. Moving northward, away from Antarctica, the water temperatures rise slowly at first and then rapidly across a sharp gradient. It is the ACC that maintains this boundary.
- **The ACC** is created by the combined effects of strong westerly winds across the Southern Ocean, and the big change in surface temperatures between the Equator and the poles.
- **Ocean density increases** as water gets colder and as it gets more salty. The warm, salty surface waters of the subtropics are much lighter than the cold, fresher waters close to Antarctica. The depth of constant density levels slopes up towards Antarctica. The westerly winds make this slope steeper, and the ACC rides eastward along it, faster where the slope is steeper, and weaker where it's flatter.
- **Fronts and bottom water:** In the ACC there are sharp changes in water density known as fronts. The Subantarctic Front to the north and Polar Front further south are the two main fronts of the ACC (the black lines in the images). Both are known to split into two or three branches in some parts of the Southern Ocean, and merge together in other parts. Scientists can figure out the density and speed of the current by measuring the ocean's height, using altimeters.
- **The path of the ACC** is a meandering one, because of the steering effect of the sea floor, and also because of instabilities in the current. The ACC also plays a part in the meridional (or global) overturning circulation, which brings deep waters formed in the North Atlantic southward into the Southern Ocean. Once there it becomes known as Circumpolar Deep Water, and is carried around Antarctica by the ACC. It slowly rises toward the surface south of the Polar Front.
- **Once it surfaces**, some of the water flows northward again and sinks north of the Subarctic Front. The remaining part flows toward Antarctica where it is transformed into the densest water in the ocean, sinking to the sea floor and flowing northward in the abyss as Antarctic Bottom Water. These pathways are the main way that the oceans absorb heat and carbon dioxide and sequester it in the deep ocean.
- **Changing current:** The ACC is not immune to climate change. The Southern Ocean has warmed and freshened in the upper 2,000 m. Rapid warming and freshening has also been found in the Antarctic Bottom Water, the deepest layer of the ocean.
- **Waters south of the Polar Front** are becoming fresher due to increased rainfall there, and waters to the north of the Polar Front are becoming saltier due to increased evaporation. These changes are caused by human activity, primarily through adding greenhouse gases to the atmosphere, and depletion of the ozone layer. The ozone hole is now recovering but greenhouse gases continue to rise globally.

- **Winds have** strengthened by about 40% over the Southern Ocean over the past 40 years. Surprisingly, this has not translated into an increase in the strength of the ACC. Instead there has been an increase in eddies that move heat towards the pole, particularly in hotspots such as Drake Passage, Kerguelen Plateau, and between Tasmania and New Zealand.
- **Scientists** have observed much change already. The question now is how this increased transfer of heat across the ACC will impact the stability of the Antarctic ice sheet, and consequently the rate of global sea-level rise.

Ramayana Express

- **All you need to know about Ramayan Circuit:** Ramayana Circuit is one of the fifteen thematic circuits identified for development under Swadesh Darshan scheme of Ministry of Tourism. Sitamarhi, Buxar, Darbhanga in Bihar are among the fifteen sites identified initially for development under this circuit in the country.
- **The destinations** are chosen according to the places where Lord Ram is believed to have travelled across India.
- **The 15 destinations** are — Ayodhya, Shringverpur and Chitrakoot in Uttar Pradesh, Sitamarhi, Buxar and Darbhanga in Bihar, Chitrakoot in Madhya Pradesh, Nandigram in West Bengal, Mahendragiri in Odisha, Jagdalpur in Chhattisgarh, Bhadrachalam in Telangana, Rameshwaram in Tamil Nadu, Hampi in Karnataka and Nashik and Nagpur in Maharashtra.

OSIRIS-Rex

- **This arm and its sampler head**, known as the Touch-and-Go Sample Acquisition Mechanism or TAGSAM, is critical to the mission's goal of retrieving at least 60 grams of material from the surface of Bennu and returning this sample to Earth by 2023. The collection device will act something like a reverse vacuum cleaner.
- **Background:** The launch of the NASA OSIRIS-REx mission took place on September 8, 2016. Since then, the spacecraft has been two years travelling through space to reach its target, primitive asteroid Bennu, in October, 2018.
- **About the mission:** OSIRIS-Rex stands for Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer.
- **OSIRIS-REx** is the third mission in NASA's New Frontiers program, which previously sent the New Horizons spacecraft zooming by Pluto and the Juno spacecraft into orbit around Jupiter.
- **What will the OSIRIS-Rex do?** OSIRIS-REx will spend two years travelling towards Bennu, arriving at the asteroid in August 2018. The probe will orbit the asteroid for 3 years, conducting several scientific experiments, before returning to Earth, with the sample capsule expected to land in Utah, USA in September 2023.
- **Scientific Mission Goals:** During its three year orbit of Bennu, OSIRIS-REx will be conducting a range of scientific experiments in order to better understand the asteroid. As part of this, the asteroid will be mapped using instruments on the probe, in order to select a suitable site for samples to be collected from.
- **The aim of the mission** is to collect a sample of regolith- the loose, soil-like material which covers the surface of the asteroid.
- **In July 2020**, the probe will move to within a few metres of Bennu, extending its robotic arm to touch the asteroid's surface. The arm will make contact with the surface for just 5 seconds, during which a blast of nitrogen gas will be used to stir up the regolith, allowing it to be sucked into the sample collector.
- **OSIRIS-REx** has enough nitrogen on board for 3 sample collection attempts, and NASA are hoping to collect between 60 and 2000g of regolith material to bring back to Earth.
- **Why was Bennu chosen?** Bennu was selected for a the OSIRIS-REx mission from over 500,000 known asteroids, due to it fitting a number of key criteria. These include:
 - **Proximity to Earth:** In order for OSIRIS-REx to reach its destination in a reasonable timeframe, NASA needed to find an asteroid which had a similar orbit to Earth. Around 7000 asteroids are 'Near-Earth Objects' (NEOs), meaning they travel within around ~30million miles of the Earth. Out of these, just under 200 have orbits similar to Earth, with Bennu being one of these.

- **Size:** Small asteroids, those less than 200m in diameter, typically spin much faster than larger asteroids, meaning the regolith material can be ejected into space. Bennu is around 500m in diameter, so rotates slowly enough to ensure that the regolith stays on its surface.
- **Composition:** Bennu is a primitive asteroid, meaning it hasn't significantly changed since the beginning of the Solar System (over 4 billion years ago). It is also very carbon-rich, meaning it may contain organic molecules, which could have been precursors to life on Earth.
- **Additionally,** Bennu is of interest as it is a Potentially Hazardous Asteroid (PHA). Every 6 years, Bennu's orbit brings it within 200,000 miles of the Earth, which means it has a high probability of impacting Earth in the late 22nd Century.

Experimental Advanced Superconducting Tokamak (EAST)

- **For comparison,** the core of our real Sun only reaches about 27 million degrees Fahrenheit — meaning the EAST reactor was, briefly, more than six times hotter than the closest star.
- **About Experimental Advanced Superconducting Tokamak (EAST):** It is an experimental superconducting tokamak magnetic fusion energy reactor in Hefei, China. The Hefei-based Institute of Plasma Physics is conducting the experiment for the Chinese Academy of Sciences. It has operated since 2006. It was later put under control of Hefei Institutes of Physical Science.
- **How it works?** The EAST stands at 11 metres tall, has a diameter of 8 metres and weighs about 360 tonnes.
- **It uses a ring** to house heavy and super-heavy isotopes — atomic variations — of hydrogen known as deuterium and tritium. The isotopes are heated by powerful electric currents within the tokamak, tearing electrons away from their atoms and forming a charged plasma of hydrogen ions.
- **Powerful magnets** lining the inner walls of EAST then contain the plasma to a tiny area to maximise the chance that the ions will fuse together. When the ions fuse they give off a large amount of energy, which can then be harnessed to run a power plant and produce electricity.
- **Way ahead:** Not only is EAST's new plasma temperature milestone remarkable because, wow, it's really hot, it's also the minimum temperature scientists believe is needed to produce a self-sustaining nuclear fusion reaction on Earth.
- **Now that China's "artificial sun"** is capable of heating plasma to the necessary temperature, researchers can focus on the next steps along the path to stable nuclear fusion.

Central and State Statistical Organizations(COCSSO):

- **Context:** The 26th edition of Central and State Statistical Organizations (COCSSO) Conference was recently organized by the Ministry of Statistics and Programme Implementation (MoSPI) in collaboration with Directorate of Economics and Statistics, Government of Himachal Pradesh at Dharamshala, Himachal Pradesh.
- **About COCSSO:** COCSSO is an annual conference which provides a platform for the Central and State statisticians to exchange views and discuss common issues relating to statistical activities. The theme of the 26th Conference was "Quality Assurance in Official Statistics".



Rani Lakshmbai of Jhansi

- **Who was Rani Lakshmbai?** Rani Lakshmbai, one of the warriors of India's struggle for Independence, was born as Manikarnika Tambe in 1828 in Varanasi. In 1842, Lakshmbai got married to Gangadhar Rao Newalkar, the Maharaja of Jhansi and got the name of Rani Lakshmbai. Few years after marriage, in 1851, Manikarnika gave birth to a boy but he couldn't survive and died after four months.
- **Then Lakshmbai and Gangadhar Rao** adopted Rao's cousin's son, Anand Rao, who was later renamed as Damodar. Soon after they adopted Anand, Maharaja died due to an illness in 1853. Rani Lakshmbai was just 18 at that time.
- **The East India Company** took advantage of the Maharaja's death and applied the Doctrine of Lapse. The British rulers did not accept little Damodar Rao, as the legal heir of late Maharaja Gangadhar Rao and Rani Lakshmi Bai. Their plan was to annex Jhansi on the ground that it did not have any legal heir.
- **In March 1854**, Rani of Jhansi was granted an annual pension of 60,000 and was ordered to leave the Jhansi fort. She was firm on the decision not to give up the dominion of Jhansi to the British. She died on June 17, 1958, martyring her life for India's freedom.

J&K all set for President's rule

- **What's the issue?** Since J&K has a separate Constitution, Governor's rule is imposed under Section 92 for six months after an approval by the President. In case the Assembly is not dissolved within six months, President's rule under Article 356 is extended to the State. Governor's rule expires in the State on January 19.
- **Governor's rule in J&K:** The imposition of governor's rule in J&K is slightly different than that in other states. In other states, the president's rule is imposed under the Article 356 of Constitution of India. In J&K, governor's rule is mentioned under Article 370 section 92 – 'Provisions in case of failure of constitutional machinery in the State.'
- **Article 370 section 92: Provisions in case of failure of constitutional machinery in the State:** If at any time, the Governor is satisfied that a situation has arisen in which the Government of the State cannot be carried on in accordance with the provisions of this Constitution, the Governor may by Proclamation:
 - **Assume to himself** all or any of the functions of the Government of the State and all or any of the powers vested in or exercisable by anybody or authority in the State.
 - **Make such incidental** and consequential provisions as appear to the Governor to be necessary or desirable for giving effect to the objects of the Proclamation, including provisions for suspending in whole or in part the operation of any provision of this Constitution relating to anybody or authority in the State.
 - **Related key facts:** Any such Proclamation may be revoked or varied by a subsequent Proclamation. Any such Proclamation whether varied under subsection (2) or not, shall except where it is a Proclamation revoking a previous Proclamation, cease to operate on the expiration of six months from the date on which it was first issued.
 - **If the Government** or by a Proclamation under his section assumes, to himself any, of the powers of the Legislature to make his laws, any law made by him in the exercise of that power shall, subject to, the terms there of continue to have effect until two years have elapsed from the date on which the proclamation ceases to have effect, unless sooner.
 - **No Proclamation** under this section shall, except where it is a Proclamation revoking a previous Proclamation, be laid before each House of the Legislature as soon as it is convened.
- **What is President's Rule in the Indian context?** The imposition of Article 356 of the Constitution on a State following the failure of constitutional machinery is called President's Rule in India. Once the President's Rule has been imposed on a state, the elected state government will be temporarily dissolved, and the Governor, who is appointed by the government at the Centre, will replace the Chief Minister as the chief executive of the State.

- **The state** will fall under the direct control of the Union government, and the Governor will continue to be head the proceedings, representing the President of India – who is the Head of the State.
- **The imposition of the President's rule** requires the sanction of both the houses of Parliament. If approved, it can go on for a period of six months. However, the imposition cannot be extended for more than three years, and needs to be brought before the two houses every six months for approval.

Trans fatty acids (TFAs)

- **Significance:** The initiative, with technical support from the World Bank, WHO and the Food Safety and Standards Authority of India (FSSAI), is being launched as unhealthy diet is pushing up metabolic syndrome and premature deaths due to non-communicable diseases (NCDs) among Keralites.
- **Latest estimates** put the prevalence of metabolic syndrome (MS) in Kerala between 24-33%, indicating that one in three or four persons — predominantly women — have this condition.
- **Metabolic syndrome (MS)** is a cluster of metabolic abnormalities — high blood pressure, high blood sugar, abdominal obesity, abnormal cholesterol or triglyceride levels — that occur together, raising risk of heart disease, stroke and diabetes.
- **Trans fats:** Trans fatty acids (TFAs) or Trans fats are the most harmful type of fats which can have much more adverse effects on our body than any other dietary constituent. These fats are largely produced artificially but a small amount also occurs naturally. Thus in our diet, these may be present as Artificial TFAs and/ or Natural TFAs.
- **Artificial TFAs** are formed when hydrogen is made to react with the oil to produce fats resembling pure ghee/butter. In our diet the major sources of artificial TFAs are the partially hydrogenated vegetable oils (PHVO)/vanaspati/ margarine while the natural TFAs are present in meats and dairy products, though in small amounts.
- **Harmful effects:** TFAs pose a higher risk of heart disease than saturated fats. While saturated fats raise total cholesterol levels, TFAs not only raise total cholesterol levels but also reduce the good cholesterol (HDL), which helps to protect us against heart disease. Trans fats consumption increases the risk of developing heart disease and stroke.
- **It is also associated** with a higher risk of developing obesity, type 2 diabetes, heart disease, metabolic syndrome, insulin resistance, infertility, certain types of cancers and can also lead to compromised fetal development causing harm to the yet to be born baby.
- **Why they are increasingly being used?** TFA containing oils can be preserved longer, they give the food the desired shape and texture and can easily substitute 'Pure ghee'. These are comparatively far lower in cost and thus add to profit/saving.
- **Permissible limit:** WHO recommends that trans fat intake be limited to less than 1% of total energy intake and has called for the total elimination of TFAs in global food supply by 2023. FSSAI has proposed to limit TFA limit in foods to 2% and eliminate trans fats from foods by 2022.

Asia-Pacific Economic Cooperation (APEC)

- **Outcome of the summit:** It ended with no joint statement from the leaders – a first in Apec history – and with the fight for dominance in the Pacific region between Australia, the US and Japan on one side and China on the other, coming out into the open.
- **APEC:** The Asia-Pacific Economic Cooperation (APEC) is a regional economic forum established in 1989 to leverage the growing interdependence of the Asia-Pacific. APEC has 21 members.
- **Aim:** to create greater prosperity for the people of the region by promoting balanced, inclusive, sustainable, innovative and secure growth and by accelerating regional economic integration.
- **Functions:** APEC works to help all residents of the Asia-Pacific participate in the growing economy. APEC projects provide digital skills training for rural communities and help indigenous women export their products abroad.
- **Recognizing the impacts** of climate change, APEC members also implement initiatives to increase energy efficiency and promote sustainable management of forest and marine resources.

- **The forum adapts** to allow members to deal with important new challenges to the region's economic well-being. This includes ensuring disaster resilience, planning for pandemics, and addressing terrorism.
- **Members:** APEC's 21 member economies are Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America; Viet Nam.
- **APEC Members account** for approximately 40% of the world's population, approximately 54% of the world's gross domestic product and about 44% of world trade.

GROWTH-India telescope

- **About GROWTH-India Telescope:** The GROWTH-India telescope is part of a multi-country collaborative initiative – known as the Global Relay of Observatories Watching Transients Happen (GROWTH) – to observe transient events in the universe.
- **The fully robotic telescope** is designed to capture cosmic events occurring over relatively shorter periods of the cosmological timescale: years, days and even hours.
- **Universities and research institutes** from the US, the UK, Japan, India, Germany, Taiwan and Israel are part of the initiative. Their primary research objective is time-domain astronomy, which entails the study of explosive transients and variable sources (of light and other radiation) in the universe.
- **Its goals are threefold:** Search for explosions in the optical regime whenever LIGO group detects a Binary Neutron Star merger Study nearby young supernova explosions Study nearby asteroids.
- **Nova Observation:** Novae are explosive events involving violent eruptions on the surface of white dwarf stars, leading to temporary increase in brightness of the star. Unlike a supernova, the star does not go on to die but returns to its earlier state after the explosion.
- **The recurrent nova**, named M31N-2008, has been observed to erupt several times, the most recent eruption happening in November 2018.

Why CBI needs consent?

- **What is general consent?** Unlike the National Investigation Agency (NIA), which is governed by its own NIA Act and has jurisdiction across the country, the CBI is governed by the Delhi Special Police Establishment Act that makes consent of a state government mandatory for conducting investigation in that state.
- **There are two kinds of consent:** case-specific and general. Given that the CBI has jurisdiction only over central government departments and employees, it can investigate a case involving state government employees or a violent crime in a given state only after that state government gives its consent.
- **"General consent"** is normally given to help the CBI seamlessly conduct its investigation into cases of corruption against central government employees in the concerned state. Almost all states have given such consent. Otherwise, the CBI would require consent in every case.
- **What does withdrawal mean?** It means the CBI will not be able to register any fresh case involving a central government official or a private person stationed in these two states without getting case-specific consent. Withdrawal of consent simply means that CBI officers will lose all powers of a police officer as soon as they enter the state unless the state government has allowed them.
- **Under what provision has general consent been withdrawn?** GO (government order) number 176 issued by the Andhra Pradesh Home Department by Principal Secretary A R Anuradha on November 8 states: "In exercise of power conferred by Section 6 of the Delhi Special Police Establishment Act, 1946 (Central Act No 25 of 1946), the government hereby withdraws the general consent accorded in GO No 109 Home (SC.A) Department dated August 3, 2018 to all members of the Delhi Special Police Establishment to exercise the powers and jurisdiction under the said Act in the State of Andhra Pradesh."
- **Section 6 of the Act says,** "Nothing contained in Section 5 (which deals with jurisdiction of CBI) shall be deemed to enable any member of the Delhi Special Police Establishment to exercise powers and jurisdiction in any area in a State, not being a Union Territory or Railway, area, without the consent of the Government of that State."

- **Does that mean that the CBI can no longer probe any case in the two states?** No. The CBI would still have the power to investigate old cases registered when general consent existed. Also, cases registered anywhere else in the country, but involving people stationed in Andhra Pradesh and West Bengal, would allow CBI's jurisdiction to extend to these states.
- **There is ambiguity** on whether the agency can carry out a search in either of the two states in connection with an old case without the consent of the state government. However, there are legal remedies to that as well. The CBI can always get a search warrant from a local court in the state and conduct searches. In case the search requires a surprise element, there is CrPC Section 166, which allows a police officer of one jurisdiction to ask an officer of another to carry out searches on his behalf. And if the first officer feels that the searches by the latter may lead to loss of evidence, the section allows the first officer to conduct searches himself after giving a notice to the latter.
- **What happens in fresh cases?** Withdrawal of consent will only bar the CBI from registering a case within the jurisdiction of Andhra and Bengal. The CBI could still file cases in Delhi and continue to probe people inside the two states.
- **An October 11, 2018**, order of the Delhi High Court makes it clear that the agency can probe anyone in a state that has withdrawn "general consent" if the case is not registered in that state. The order was given with regard to a case of corruption in Chhattisgarh, which also gives consent on a case-to-case basis. The court ordered that the CBI could probe the case without prior consent of the Chhattisgarh government since it was registered in Delhi.

World Toilet Day:

- **Context: In 2013**, the United Nations General Assembly officially designated November 19 as World Toilet Day. World Toilet Day is coordinated by UN-Water in collaboration with governments and partners. Previously, World Toilet Day was established by the World Toilet Organization in 2001.
- **About World Toilet Day:** World Toilet Day is a day to raise awareness and inspire action to tackle the global sanitation crisis – a topic often neglected and shrouded in taboos.
- **SDG 6** aims to ensure that everyone has a safe toilet and that no-one practises open defecation by 2030. Failure to achieve this goal risks the entire 2030 Agenda for Sustainable Development. 2018 Theme: When Nature Calls.

India's First Elephant Hospital Opens In Mathura:

- **India's** first specialized hospital for elephants has been formally opened in Mathura.
- **The unique medical centre** offers wireless digital X-ray, laser treatment, dental X-ray, thermal imaging, ultrasonography, hydrotherapy and quarantine facilities.
- **Located close to the elephant** conservation and care centre, the hospital is designed to treat injured, sick or geriatric elephants and is equipped with a medical hoist for lifting elephants, as also an elephant restraining device with a dedicated indoor treatment enclosure for long duration medical procedures.

Punjab becomes 3rd state to ban hookah bars or lounges:

- **Punjab** has become the third state in the country after Maharashtra and Gujarat to ban hookah bars or lounges.
- **President Ram Nath Kovind** has given his assent to Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) (Punjab Amendment) Bill, 2018.
- **The objective of this law** is to check use of tobacco in various forms and prevent diseases caused by use of the tobacco products.



President of India in Vietnam; addresses Vietnam-India business forum, reviews ASI-supported restoration project in ancient temple complex

- **The President of India**, Shri Ram Nath Kovind, reached Hanoi today (November 19, 2018) as part of his two-nation state visit to Vietnam and Australia. Later in the afternoon, the President addressed the Vietnam-India Business Forum in the Vietnamese capital. Speaking at the Business Forum event, the President said India and Vietnam are old civilisational friends, and trade is a driving force of our contemporary partnership. In the past eight years, there has been an almost four-fold increase in bilateral trade, from US\$ 3.7 billion in 2010 to US\$ 12.8 billion in 2017. With both Vietnam and India on a path of high growth, this trend is expected to continue.
- **The President** said the Vietnam-India business relationship presents prospects for engagement in financial services, IT and the digital economy, hydrocarbons, defence, renewable energy, mining, healthcare, tourism and civil aviation, among other sectors. The President said Vietnam is a very important trading partner for India within ASEAN, and India is now among the 10 largest trading partners of Vietnam. He emphasised that Vietnam-India economic relations have made significant achievements, but a lot more is waiting to happen. He invited Indian and Vietnamese businesses to partner each other for enhanced trade as well as technology and investment collaboration.
- **Later in the evening**, the President addressed an impressive gathering of the Indian community and friends of India in Vietnam at a reception hosted by Shri P. Harish, Ambassador of India to Vietnam.
- **Addressing the gathering**, the President said the Buddhist Sangha is an important institution promoting friendship between India and Vietnam. He noted that Buddhist monks were as active in nurturing our relations in ancient times as they are today. The President said the Indian community in Vietnam plays a strong role in creating opportunities for the local economy and society. He appreciated the efforts of the Vietnam-India Friendship Association, the Vietnam Union of Friendship Association and the India Studies Departments of Vietnamese universities in working towards a greater understanding of India.
- **Yesterday afternoon (November 18, 2018)**, President Kovind began his state visit to Vietnam when he landed in Da Nang. Later in the evening on November 18, he met the local leadership of the Da Nang People's Committee and attended a banquet in his honour. This morning (November 19, 2018), the President visited the Museum of Cham Sculpture, which has an impressive collection of Cham civilisation sculptures and carvings, including many inspired by Hinduism and Buddhism.
- **President Kovind** also visited the My Son temple complex in Kwangnan province, where the oldest temples have been dated to the fourth century. A UNESCO World Heritage Site, the My Son temple complex is among Vietnam's most cherished cultural treasures. The ancient temples are being restored with support from the Archaeological Survey of India, and the President was briefed on the restoration project.

AICTE has entered into an MoU with BSNL

- **AICTE has entered into an MoU with BSNL** to facilitate the technical institutions/engineering colleges across the country, to respond to the need of providing state of art telecom equipment based operational skills to engineering graduates under the Employability Enhancement Training Program (EETP) of AICTE. This skill based human capacity building program aims to provide competency based employability enhancement skills and hands-on skill training through BSNL Training Centres/ Set Ups to the student community.
- **Expected Outcome** : After undergoing these trainings the students would be able to Confidently individually handle live Telecom switching, transmission and IP network equipment
- **Understand comprehensive integration** of all telecom equipment Design switching, transmission and IP networks for SME for wireline and wireless networks Become industry ready as they will have the working exposure to latest industry equipments
 1. BSNL Silver Certified Engineer: This course is for the students of fifth semester.
 2. BSNL Gold Certified Engineer: This course is for the students of sixth semester.
 3. BSNL Platinum Certified Engineer: This course is for the students of seventh semester.

The Tarang Sanchar Portal

- **Public Private Partnership (PPP)** The Tarang Sanchar Portal has been developed in Public Private Partnership (PPP) mode. Department of Telecommunications initiative with Industry.
- **Info on Electro Magnetic Fields (EMF)** This Portal envisages to disseminate the information to the public regarding Electro Magnetic Fields (EMF) signals and to allay the misconceptions and fear of health issues due to EMF emissions from mobile towers. Public, at large will be now able to check the current status of the mobile tower located anywhere in the country and the EMF signal compliance status of the same.
- **Public Feedback** This Portal also enables the public to go through the latest developments and corresponding information available in respect of EMF emissions from mobile towers and to submit their feedback and comments on the same.



Modernizing land records in India

- **The Digital India Land Records Modernisation Programme (DILRMP)** —the erstwhile National Land Records Modernisation Programme—seeks to improve the quality of land records in the country, make them more accessible, and move towards government-guaranteed titles.
- **A land title is a document** that helps determine land ownership. This will be achieved through complete computerization of the property registration process and digitization of all land records. The scheme completed a decade in operation in August this year.
- **The DILRMP is being implemented** across all states with differential progress. As of August, while two states (Karnataka and Odisha) and three Union territories have completed 100% computerization of land records, four states are yet to start the process. The remaining states have computerized between 80-90% of the records. Nineteen states/Union territories have started issuing digitally-signed record of rights (RoRs), a record that shows how rights on land are derived for the land owner, and records the property's transactions from time to time. These states have also started linking RoRs to cadastral maps (a record of the area, ownership and value of land). Out of these, three states (Goa, Odisha and Tripura) have almost completed this process.
- **However, progress on some other components** of the scheme has been slow. As of August, computerization of land records has been completed in 87% of the villages. However, mutation (transfer of ownership) records have been computerized in only 50% of the villages. Further, only about 21% of the villages have started real time updating of RoR and maps. This suggests that, while records have been digitized, they may not be up to date.
- **Maps form an important component** of land records as they provide data on property boundaries and details on the exact limits of ownership. However, only about 48% of the cadastral maps have been digitized so far. Spatial data has been verified in just 45% of the villages and survey and re-survey work, which helps update spatial records, has been carried out in only 9% of the villages.
- **While the scheme so far has looked** at the digitization of land records, it has not addressed issues around land ownership. It is well known that land records in India are unclear and do not guarantee ownership. Such unclear land titles are there because of a variety of reasons, some of which are discussed below.
- **First, in India, we have a system** of registered sale deeds and not land titles. The Transfer of Property Act, 1882, provides that the right to an immovable property (or land) can be transferred or sold only by a registered document. These documents are registered under the Registration Act, 1908. Therefore, the transaction gets registered, and not the land title. This implies that even bona fide property transactions may not always guarantee ownership, as earlier transactions could be challenged.
- **Second, land ownership is established** through multiple documents maintained by different departments, making it cumbersome to access them. For example, sale deeds are stored in the registration department, maps are stored in the survey department, and property tax receipts are with the revenue department. Further, these departments work in silos and do not update the data in a timely manner, which results in discrepancies. One has to go back to several years of documentation to find any ownership claims on a piece of property, which causes delays.
- **Third, the cost of registering property** is high and, hence, people avoid registering transactions. While registering a sale deed, the buyer has to pay a stamp duty along with the registration fee. In India, stamp duty rates across states vary between 4% and 10%, compared to 1% and 4% in other countries. Further, registration fee is an additional 0.5% to 2%, on an average.
- **Fourth, under the Registration Act, 1908**, registration of property is not mandatory for transactions such as acquisition of land by the government, property leased for less than one year, and heirship partitions. Thus, several property divisions are not recorded and, hence, do not correctly reflect the ownership of the property. This often leads to litigation related to rightful ownership.
- **Unclear land titles impede development** on several fronts. For example, in rural areas, small and marginal farmers, who may not hold formal land titles, are unable to access institutionalized credit. In urban areas, disputed land titles lead to lack of transparency in real estate transactions. Any infrastructure created on land that is not encumbrance-free can be potentially challenged in the future, making such investments risky.
- **Further, under the Smart Cities and AMRUT** (Atal Mission for Rejuvenation and Urban Transformation) missions, cities are trying to raise their own revenue through property taxes and land-based financing. This necessitates the importance of providing a system of clear land titles.
- **To address issues with unclear land titles**, a move towards conclusive titling has been proposed. In this system, the government provides guaranteed titles and compensation in case of any ownership disputes.
- **However, adopting such a system in India** will require several measures. Several changes in existing laws that govern registration and transfer of land will be required. A system of registered property titles will have to be developed as the primary evidence of ownership. All existing land records will have to be updated to ensure that they are free of any encumbrance. Information on land records, which is currently spread across multiple departments, will have to be consolidated. Although the DILRMP aims to move towards conclusive titling, it only addresses these issues partially.

'Private' efforts at legislation: How they are made, how often they succeed Chakshu Roy and Abhijit Banare, Indian Express, Nov 6, 2018

- **As the Ram Janmabhoomi-Babri Masjid** pot bubbled last week, nominated Member of Rajya Sabha Rakesh Sinha said he would bring a private member's Bill "on the Ram Temple". How are private member's Bills introduced and discussed? What chance does such a Bill have of becoming law?
- **Private members, their Bills** Any MP who is not a Minister is referred to as a private member. Parliament's key role is to debate and make laws. Both Ministers and private members contribute to the lawmaking process. Bills introduced by Ministers are referred to as government bills. They are backed by the government, and reflect its legislative agenda. Private member's bills are piloted by non-Minister MPs. Their purpose is to draw the government's attention to what individual MPs see as issues and gaps in the existing legal framework, which require legislative intervention.
- **Introduction in the House** The admissibility of a private member's Bill (like the one Rakesh Sinha intends to bring) is decided by the Rajya Sabha Chairman. (In the case of Lok Sabha, it is the Speaker; the procedure is roughly the same for both Houses.) The Member must give at least a month's notice before the Bill can be listed for introduction; the House secretariat examines it for compliance with constitutional provisions and rules on legislation before listing.
- **Up to 1997, private members** could introduce up to three Bills in a week. This led to a piling up of Bills that were introduced but never discussed; Chairman K R Narayanan, therefore, capped the number of private member's Bills to three per session.
- **While government Bills** can be introduced and discussed on any day, private member's Bills can be introduced and discussed only on Fridays. Private member's Bills have been introduced and discussed in Rajya Sabha on 20 days in the last three years.
- **Procedure for introduction** On the scheduled Friday, the private member moves a motion for introduction of the Bill, which is usually not opposed. Two recent exceptions to this convention were in 2004, when nominated MP Vidya Nivas Misra's Bill seeking to amend the Preamble of the Constitution was opposed; and in 2015, when Shashi Tharoor's Bill to decriminalise homosexuality was not introduced in Lok Sabha after the BJP's Nishikant Dubey forced a division, which led to the motion being defeated. (The Supreme Court struck down IPC Section 377 this September.)
- **Only a fraction of private member's bills** that are introduced, are taken up for discussion. Rajya Sabha draws a ballot to decide the sequence of discussion of Bills. If a Bill is successful in the ballot, it has to wait for the discussion to conclude on a Bill currently being debated by the House. For example, a Bill related to sittings of Parliament introduced by Naresh Gujral in March 2017 was taken up for discussion only in August 2018. The discussion will resume when private member business is taken up in the upcoming Winter Session, and other private member's bills will have to wait for the debate to conclude. Over the last three years, Rajya Sabha saw the introduction of 165 private member's Bills; discussion was concluded on only 18. A private member's Bill that is introduced but not discussed in Rajya Sabha, lapses when Member retires.
- **After discussion ends** Upon conclusion of the discussion, the Member piloting the Bill can either withdraw it on the request of the Minister concerned, or he may choose to press ahead with its passage. In the latter case, the Bill is put to vote and, if the private member gets the support of the House, it is passed. In 1977, Rajya Sabha passed a private member's Bill to amend the Aligarh Muslim University Act. The Bill then went to the sixth Lok Sabha, where it lapsed with the dissolution of the House in 1979. In 2015, Rajya Sabha passed The Rights of Transgender Persons Bill, 2014, a private member's Bill piloted by Tiruchi Siva of the DMK. The Bill is now pending before Lok Sabha.
- **The last time a private member's Bill** was passed by both Houses was in 1970. This was the Supreme Court (Enlargement of Criminal Appellate Jurisdiction) Bill, 1968. Fourteen private member's Bills — five of which were introduced in Rajya Sabha — have become law so far.

Flagship Programs also Contributing to Achieving the Sustainable Development Goals (SDGS)

- **Shri Puri** informed that to achieve the vision of an open-defecation-free India, we have focused on sustained behavioural changes through conventional as well as innovative means.
- **Under the Atal Mission** for Rejuvenation and Urban Transformation (AMRUT), over 2400 projects worth Rs. 74,000 crores that are targeted towards improved water supply, sewerage, and drainage have been approved under the State Annual Action Plans for the period 2015-2020.
- **He further informed** that "AMRUT Technology Challenge" has been launched which addresses the need for non-essential human entry for cleaning of sewers and septic tanks.
- **"These programs** are also contributing to achieving the Sustainable Development Goals (SDGs) set out by the United Nations, particularly the SDG 6 – 'Ensure access and sanitation for all by 2030' –through collective efforts and innovative approaches", Shri Puri noted.

- **The Government is providing** various platforms to display, promote and recognize innovations happening across the nation and the youth is coming forward with great ideas and entrepreneurship models in WASH and other areas, through the Atal Innovation Mission, Start-up India, and the 'Swachathon' – all organized to promote innovation and innovators, he said and added that while we continue in our endeavor to successfully implement new solutions at the pilot scale, our ultimate goal must be to spread these solutions to the entire country.
- **He appreciated** and acknowledged the significance of what the National Institute of Urban Affairs (NIUA) is trying to do with their project 'Innovation Hub for Urban WASH Solutions' and noted that this is the only way that innovative WASH solutions can have the desired transformational impact by improving the lives of our people.



Institution's Innovation Council (IIC)

- **Union HRD Minister** launches 'Institution's Innovation Council (IIC)' Program of MHRD's Innovation Cell through video conferencing
- **Union HRD Minister** Shri Prakash Javadekar through video conferencing launched the 'Institution's Innovation Council (IIC)' program under Innovation Cell of MHRD in New Delhi today. Ministry of Human Resource Development has established an "Innovation cell" at AICTE with a purpose to systematically foster the culture of Innovation in all Higher Education Institutions (HEIs) across the country.
- **Speaking on the occasion** the Minister said that it is a significant step in institutionalising innovation and developing a scientific temperament in the country. He informed that the purpose of formation of network of Institution's Innovation Councils (IICs) is to encourage, inspire and nurture young students by exposing them to new ideas and processes resulting in innovative activities in their formative years. He also informed that more than 1000 Higher Education Institutions (HEIs) have already formed IICs in their campuses and enrolled for the IIC network managed by MHRD's Innovation Cell to promote innovation through multitudinous modes leading to an innovation promotion eco-system in their campuses.
- **The Union Minister** said that Universities are the main research centers of developed countries and because of their research they are at the top in global innovation ranking. He said that now Indian universities are also setting up research centers through 'Institution's Innovation Council (IIC)' program and we are expecting good rank in global innovation ranking in next 2-3 years through this initiative.
- **The Minister** said that the educational advancement in higher education can only be achieved by encouraging best practices in innovation and advance research and Innovation Cell has undertaken many initiatives in this direction such as implementing programs like Atal Ranking of Institutions on Innovation Achievement (ARIIA), Smart India Hackathon (SIH)- 2019, etc. He also appreciated the efforts of the officials of MHRD and AICTE to bring out this program which will contribute to the holistic development of education in the country.

Kambala

- **Background:** Karnataka government had promulgated Prevention of Cruelty to Animals (Karnataka Amendment) Ordinance, 2017 on July 20 last year. The President gave his assent to the Prevention of Cruelty to Animals (Karnataka Amendment) Bill making Kambala a legal rural sport in Karnataka. The Bill seeks to exempt Kambala and bullock-cart racing from the ambit of the Prevention of Cruelty to Animals (PCA) Act, 1960.
- **About Kambala:** What is it? Kambala in its traditional form is non-competitive with buffalo pairs made to race one after another in paddy fields, which is considered a thanksgiving to the Gods for protecting the animals from diseases.
- **Why it has become controversial?** Over the years, it has however become an organised sport with animal rights activists claiming that the buffaloes run in the race due to fear of being beaten, which the organizers dismiss, saying no violence is involved and that several modifications had been made to ensure that it is an animal friendly event.

UNESCO Global Education Monitoring Report 2019

- **Highlights of the report:** Literacy levels in rural households of India dip with seasonal migration: In India, 10.7 million children aged 6 to 14 lived in rural households with a seasonal migrant in 2013. About 28% of youth aged 15 to 19 in these households were illiterate or had not completed primary school, compared to 18% of the cohort overall.

- **About 80% of seasonal migrant children** in seven cities lacked access to education near work sites, and 40% are likely to end up in work rather than education, experiencing abuse and exploitation.
- **Inter-State Migration:** Inter-State migration rates have doubled between 2001 and 2011. An estimated 9 million migrated between States annually from 2011 to 2016. The report also warns of the negative impact on education for children who are left behind as their parents migrate.
- **The worst hit- Construction labors:** The construction sector absorbs the majority of short-term migrants. A survey in Punjab state of 3,000 brick kiln workers in 2015-16 found that 60% were inter-State migrants. Between 65% and 80% of all children aged five to 14 living at the kilns worked there seven to nine hours per day. About 77% of kiln workers reported lack of access to early childhood or primary education for their children.
- **What has been done in this regard?** India has taken steps to address the issue. The Right to Education Act in 2009 made it mandatory for local authorities to admit migrant children. National-level guidelines were issued, allowing for flexible admission of children, providing transport and volunteers to support with mobile education.
- **The policies** were attempted to create seasonal hostels and aiming to improve coordination between sending and receiving districts and states. Some State governments have also taken steps for migrant children's education.
- **Pending Issues:** Most interventions are focused on keeping children in home communities instead of actively addressing the challenges faced by those who are already on the move.
- **There is growth of slums** and informal settlements where schools are often scarce due to migration as a challenge. The report shows there is only one urban planner for every 1, 00,000 people in India, while there are 38 for every 1, 00,000 in the United Kingdom.

Eco-sensitive zones

- **Eco-sensitive zones** NGT has given two weeks time to the Ministry to look into the issue and to proceed in the matter for declaration of such areas as eco sensitive zones.
- **Background:** The observations came while the green panel was hearing a plea that highlighted the increasing number of unnatural elephant deaths taking place in the state. The petition said, "Owing to the increased denudation and loss of their forest habitats, elephants have come increasingly into conflicts with humans and faced deliberate retaliatory killings and accidents at railway crossings, high tension power lines, power fences and trenches."
- **What are Eco-sensitive zones?** The Environment Protection Act, 1986 does not mention the word "Eco-sensitive Zones".
- **The section 3(2)(v) of the Act**, says that Central Government can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards
- **Besides the section 5 (1)** of this act says that central government can prohibit or restrict the location of industries and carrying on certain operations or processes on the basis of considerations like the biological diversity of an area, maximum allowable limits of concentration of pollutants for an area, environmentally compatible land use, and proximity to protected areas.
- **The above two clauses** have been effectively used by the government to declare Eco-Sensitive Zones or Ecologically Fragile Areas (EFA). The same criteria have been used by the government to declare No Development Zones.
- **Criteria:** The MoEF (Ministry of Environment & Forests) has approved a comprehensive set of guidelines laying down parameters and criteria for declaring ESAs. A committee constituted by MoEF put this together. The guidelines lay out the criteria based on which areas can be declared as ESAs. These include Species Based (Endemism, Rarity etc), Ecosystem Based (sacred groves, frontier forests etc) and Geomorphologic feature based (uninhabited islands, origins of rivers etc).

Treasury Bill

- **About 'NSE goBID':** The app would allow investors to invest in treasury bills (T-Bills) of 91 days, 182 days and 364 days and various government bonds from one year to almost 40 years.

- **The retail investors** would be able to make payment directly from their bank accounts using Unified Payments Interface (UPI) and Internet banking. While investment could be done almost every week after a one-time registration, the app would be available to all investors registered with NSE's trading members.
- **Significance:** The launch assumes significance as government securities are among the safer investment options available to retail investors as such securities are credit risk free instruments while providing portfolio diversification with longer investment durations.
- **What you need to know about Treasury bills?** T-bills are short term securities issued on behalf of the government by the RBI and are used in managing short term liquidity needs of the government. 91-day T-bills are auctioned every week on Wednesday and 182-day and 364-day T-bills are auctioned every alternate week on Wednesdays. Treasury bills are issued at a discount and are redeemed at par.

U.K. India Business Council's Ease of Doing Business report

- **Key observations from the report:** There has been a considerable year-on-year fall in the number of companies that viewed 'corruption' as a major barrier – from 34% in 2016 to 25% in 2017. It has halved since 2015, where it stood at 51%.
- **This decline shows a major improvement**, indicating that the current government's efforts to mitigate corruption appear to be delivering tangible and much-desired results.
- **Corruption is no longer** considered a 'top-three' barrier compared to those not currently active in India.
- **What made such steadfast progress?** The report noted that initiative such as Aadhaar, electronic submission of government documents, acceptance of electronic signatures, and the push to file taxes online. This all have reduced face-to-face interactions where corruption is most likely to take place.
- **The extent of digitalization**, however, varies markedly across sectors, as does corruption, with those engaging in infrastructure projects still reporting significant issues relating to corruption.
- **Existing issues:** Taxation issues and Price Points overtook 'corruption' as major barriers identified by 36% and 29% of respondents, respectively. The proportion of respondents identifying 'taxation issues' was 3% lower in 2018 than 2017.
- **The key issue** for those outside India is increasingly market demand for their products and services relative to government and bureaucracy-related barriers.

World's standard definition of kilogram now redefined

- **Why kill off the kilogram?** Currently, it is defined by the weight of a platinum-based ingot called "Le Grand K" which is locked away in a safe in Paris.
- **Le Grand K** has been at the forefront of the international system of measuring weights since 1889. Several close replicas were made and distributed around the globe. But the master kilogram and its copies were seen to change – ever so slightly – as they deteriorated.
- **In a world** where accurate measurement is now critical in many areas, such as in drug development, nanotechnology and precision engineering – those responsible for maintaining the international system had no option but to move beyond Le Grand K to a more robust definition.
- **How wrong is Le Grand K?** The fluctuation is about 50 parts in a billion, less than the weight of a single eyelash. But although it is tiny, the change can have important consequences.
- **How does the new system work?** Electromagnets generate a force. Scrap-yards use them on cranes to lift and move large metal objects, such as old cars. The pull of the electromagnet, the force it exerts, is directly related to the amount of electrical current going through its coils. There is, therefore, a direct relationship between electricity and weight.
- **So, in principle**, scientists can define a kilogram, or any other weight, in terms of the amount of electricity needed to counteract the weight (gravitational force acting on a mass).
- **Planck's constant:** There is a quantity that relates weight to electrical current, called Planck's constant – named after the German physicist Max Planck and denoted by the symbol h .

- **But h is an incredibly small number** and to measure it, the research scientist Dr Bryan Kibble built a super-accurate set of scales. The Kibble balance, as it has become known, has an electromagnet that pulls down on one side of the scales and a weight – say, a kilogram – on the other. The electrical current going through the electromagnet is increased until the two sides are perfectly balanced.
- **By measuring the current** running through the electromagnet to incredible precision, the researchers are able to calculate h to an accuracy of 0.000001%. This breakthrough has paved the way for Le Grand K to be deposed by “die kleine h”.
- **Facts for Prelims:** General Conference on Weights and Measures (CGPM) is the highest international body of the world for accurate and precise measurements and comprises of 60 countries including India and 42 Associate Members.

Facts for Prelims: My Son temple complex:

- **Context:** President Kovind has visited the My Son temple complex in Kwangnan province in Vietnam.
- **About My Son temple complex:** A UNESCO World Heritage Site, the My Son temple complex is among Vietnam's most cherished cultural treasures.

AirSewa 2.0:

- **AirSewa 2.0:** The government has launched the upgraded version of AirSewa 2.0 web portal and mobile app.
- **Major improvements** include features such as secure sign-up and log-in with social media, chatbot for travellers support, improved grievance management including social media grievances, real-time flight status and details flight schedule.
- **The upgrade** and improved version of AirSewa operates through an interactive web portal as well as through a mobile app for both android and iOS platforms and will offer passengers a convenient and hassle-free air travel experience.
- **The web portal** and application will help to capture air travellers' feedback for policy interventions.

CSE gets 2018 Indira Gandhi Prize:

- **CSE gets 2018 Indira Gandhi Prize:** Context: Centre for Science and Environment (CSE), the New Delhi (India)-based independent research and advocacy think tank, has been named the recipient of the prestigious Indira Gandhi Prize for Peace, Disarmament and Development for the year 2018.
- **About CSE:** Established in 1980 under the leadership of late Anil Aggarwal and presently headed by Sunita Narain CSE has been working for the last four decades to incorporate environmental sustainability into development policies.
- **It has worked** on extending awareness and education about environmental issues, on air and water pollution, waste water management and industrial pollution, food safety and energy, climate change and above all in influencing official policy and public actions for sustainable development.
- **About Indira Gandhi Prize for Peace, Disarmament and Development:** The award is accorded annually by the Trust to individuals or organisations in recognition of creative efforts toward promoting international peace, development and a new international economic order, ensuring that scientific discoveries are used for the larger good of humanity, and enlarging the scope of freedom.

• Witness protection scheme

- **Witness protection scheme Background:** In April this year, the Centre had informed the top court that it had framed a draft witness protection scheme and it was circulated among the states and Union Territories administration for comments. The court had asked the Centre to finalise the scheme after getting response from the states and Union Territories.
- In November last year, the court had asked the Centre as to why a draft scheme cannot be formulated for witness protection in the country when specific provisions in this regard were already there in the National Investigation Agency (NIA) Act.
- **Objectives of the Witness Protection Scheme-2018:** To enable a witness to give testimony in a judicial setting or to cooperate with law enforcement and investigations without fear of intimidation or reprisal. To ensure that the investigation, prosecution and trial of criminal offences is not prejudiced because witnesses are intimidated or frightened to give evidence without protection from violent or other criminal recrimination.
- To promote law enforcement by facilitating the protection of persons who are involved directly or indirectly in providing assistance to criminal law enforcement agencies and the overall administration of Justice.
- To give witnesses the confidence to come forward to assist law enforcement and Judicial Authorities with full assurance of safety. To identify a series of measures that may be adopted to safeguard witnesses and their family members from intimidation and threats against their lives, reputation and property.
- **Need for the scheme:** Victims and witnesses of serious crimes are particularly at risk when the perpetrator is powerful, influential, or rich and the victims or witnesses belong to a socially or economically marginalised community. Girls and women who report sexual violence are often even more vulnerable and face extreme pressure or direct threats from the accused.
- Also, witnesses need to have the confidence to come forward to assist law enforcement and prosecutorial authorities. They need to be assured that they will receive support and protection from intimidation and the harm that criminal groups may seek to inflict upon them in attempts to discourage or punish them from co-operating. Hence, legislative measures to emphasise prohibition against tampering of witnesses have become the imminent and inevitable need of the day.

International Tourism Mart

- **Key facts:** This is the 7th edition of the International Tourism Mart, an annual event organised in the North Eastern region with the objective of highlighting the tourism potential of the region in the domestic and international markets.
- It brings together the tourism business fraternity and entrepreneurs from the eight North Eastern States.
- The event has been planned and scheduled to facilitate interaction between buyers, sellers, media, Government agencies and other stakeholders.
- The International Tourism Marts are organised in the North Eastern States on rotation basis. The earlier editions of this mart have been held in Guwahati, Tawang, Shillong, Gangtok and Imphal.
- **Background:** The North East Region of India comprising the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, is endowed with diverse tourist attractions and products. The varied topography of the region, its flora and fauna, the ethnic communities with their rich heritage of ancient traditions and lifestyles, its festivals, arts and crafts, make it a holiday destination waiting to be explored.
- **Need and significance of the event:** The ITM will see wide participation of International buyers and media delegates from countries around the world and from different regions of the country. They will be engaging in business-to-business meetings with sellers from the North Eastern Region. This will enable the tourism product suppliers from the region to reach out to international and domestic buyers, with the objective of promoting tourism to the region.

UN migration pact

- **Australia's arguments:** Australia believes that its immigration policy already promotes safe, orderly and regular migration. Hence, adopting the pact would risk encouraging illegal entry to Australia and reverse the hard-won successes in combating the people-smuggling trade.
- **Background:** Australia's harsh immigration policy detains asylum-seekers who try to reach the country by boat on remote Pacific islands. While the policy has led to a decline in people-smuggling, hundreds of people are now being held in Papua New Guinea and Nauru.
- **About Global Compact on Migration:** United Nations for first time has finalized Global Compact for Safe, Orderly and Regular Migration to better manage international migration, address its challenges, strengthen migrant rights and contribute to sustainable development. The agreement will be formally adopted by world leaders in Morocco in December 2018.
- **Key facts:** The compact is the first intergovernmental agreement to cover wide-ranging dimensions of international migration in holistic and comprehensive manner, agreed upon by all the UN member states minus the United States.
- It sets out 23 objectives to deal issues ranging from factors that compel people to move, legal channels for migration, combating trafficking and smuggling, harnessing the economic benefits of migration and return of the migrants. It is not legally binding.
- **Need for a global compact:** Over 250 million migrants worldwide account for 3% of the world's entire population, but contribute 10% of the global gross domestic production (GDP). Migrants remittance is huge contributor to their home countries' development.
- **Way ahead:** The Global Compact for Migration (GCM) offers the international community the opportunity to improve workplace productivity and deliver decent work outcomes for migrant and national workers, as well as to shift current misperceptions of migration, by readjusting migration policies to effectively include all labour market aspects.
- **Facts for Prelims:** The GCM is meant to be consistent with target 10.7 of the 2030 Agenda for Sustainable Development – in which Member States committed to cooperate internationally to facilitate orderly, safe and responsible migration.

Ease of Doing Business Grand Challenge

- **About Ease of Doing Business Grand Challenge:** The objective of this challenge is to tap potential of young Indians, startups and other private enterprises to provide solutions to complex problems using current technology. It is in pursuance of Government's resolve to make India one of the easiest places to conduct business in the world.
- This challenge is aimed at attracting innovative ideas on artificial intelligence (AI), Internet of Things (IoT), big data analytics, blockchain and other cutting edge technology to reform government processes. The platform for this grand challenge will be on Start Up India portal.
- **Ease of Doing business in India:** In World Bank's Doing Business Report (DBR, 2019), India has recorded jump of 23 positions against its rank of 100 in 2017 to be placed at 77th rank among 190 countries. India has improved its rank by 53 positions in the last two years and 65 positions in the last four years (2014-18).
- **World Bank's Ease of Doing Business index** ranks 190 countries based on 10 parameters, including starting a business, construction permits, getting electricity, getting credit, paying taxes, trade across borders, enforcing contracts, and resolving insolvency.

City Gas Distribution (CGD) Projects

- The projects, recently awarded by the Petroleum and Natural Gas Regulatory Board (PNGRB) would cover 65 Geographical Areas (GAs) under the ninth round of bidding.
- **Significance:** Government of India has put thrust to promote the usage of environment friendly clean fuel i.e. natural gas as a fuel/feedstock across the country to move towards a gas based economy.

- Accordingly, development of CGD networks has been focused to increase the availability of cleaner cooking fuel (i.e. PNG) and transportation fuel (i.e. CNG) to the citizens of the country. The expansion of CGD network will also benefit to industrial and commercial units by ensuring the uninterrupted supply of natural gas.
- Why Natural Gas? Natural gas is a superior fuel as compared with coal and other liquid fuels being an environment friendly, safer and cheaper fuel. Natural Gas is supplied through pipelines just like one gets water from the tap. There is no need to store cylinders in the kitchen and thus saves space.
- Natural Gas (as CNG) is cheaper by 60% as compared with petrol and 45 % w.r.t. Diesel. Similarly, Natural Gas (as PNG) is cheaper by 40 % as compared with market price LPG and price of PNG almost matches with that of subsidised LPG (based on prices in Delhi).
- PNGRB: The Petroleum and Natural Gas Regulatory Board (PNGRB) was constituted under The Petroleum and Natural Gas Regulatory Board Act, 2006.
- The Act provide for the establishment of Petroleum and Natural Gas Regulatory Board to protect the interests of consumers and entities engaged in specified activities relating to petroleum, petroleum products and natural gas and to promote competitive markets and for matters connected therewith or incidental thereto.
- The board has also been mandated to regulate the refining, processing, storage, transportation, distribution, marketing and sale of petroleum, petroleum products and natural gas excluding production of crude oil and natural gas so as and to ensure uninterrupted and adequate supply of petroleum, petroleum products and natural gas in all parts of the country.

Russian Igla-S missile system:

- Context: Indian Army has picked Russia's Igla-S missile system as choice for its multibillion dollar contract for man-portable air defence systems (MANPADS).
- About IGLA-S missile system: It is latest model of Russian MANPADS (Man-portable air-defense system) technology. It offers superior performance over earlier supplied SA-18 missiles to India. It is designed for use against visible aerial targets at short range such as tactical aircraft, helicopters, unmanned aerial vehicle (UAVs), cruise missile, head-on or receding, in presence of natural (background) clutter and countermeasures.
- As per requirements of Indian Army, it will have maximum range of 6km, altitude of 3km along with all-weather capability. Igla-S missile system will replace the existing Igla in service which is in urgent need of replacement.

New species of Indian horned frogs from Himalayan regions:

- Context: Scientists have discovered four new species of Indian horned frogs from Himalayan regions of Northeast India.
- What are Horned frogs? Horned frogs get their name from fleshy horn-like projection on upper eyelids of some species
- Key facts: They were discovered in the forests of Meghalaya and Arunachal Pradesh. Scientists have named them as Himalayan horned frog (*Megophrys himalayana*), Garo white-lipped horned frog (*Megophrys oreocrypta*); Yellow spotted white-lipped horned frog (*Megophrys flavipunctata*) and Giant Himalayan horned frog (*Megophrys periosa*).
- These frogs vary in size — yellow spotted white-lipped horned frog measures about 5.7-7.5 cm and is smallest among four. Giant Himalayan horned frog measures about 7.1 to 11.2 cm, making it largest of 15 horned frog species found in Northeast India.

Vajra Prahar:

- **What is it?** 'Vajra Prahar' is a Indo-US Special Forces joint training exercise conducted alternately in India and the US.
- **Why in News?** The 2018 edition of this exercise has commenced at Mahajan Field Firing Range (MFFR), Bikaner in Rajasthan.
- **Aim and objectives of the exercise:** The aim of the exercise is to promote military relations between the two countries by enhancing interoperability and mutual exchange of tactics between Special Forces. The objectives of the joint training is to share the best practices between the two armies and to develop joint strategies by sharing expertise of conducting operations in a counter-insurgency and counter-terrorism environment, while capitalising on the rich repository of experiences of each other armies.



India gets UN Environment award for combating transboundary environmental crime

- **United Nation Environment has awarded Wildlife Crime Control Bureau (WCCB)**, Ministry of Environment, Forest and Climate Change, Government of India with Asia Environment Enforcement Awards, 2018 for excellent work done by the Bureau in combating transboundary environmental crime.
- **Congratulating the Bureau Union Environment Minister** said that the Asia Environmental Enforcement Award, recognizes the excellent work done by Government officials and teams from the bureau who are diligently involved in combating trans boundary environmental crime.
- **The Asia Environment Enforcement Awards** publicly recognize and celebrate excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia. The awards are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime in one of the following eligibility criteria areas: collaboration; impact; innovation; integrity and gender leadership.
- **WCCB** has been conferred this award in Innovation category. WCCB has adopted innovative enforcement techniques that have dramatically increased enforcement of transboundary environmental crimes in India. Notably it has developed an online Wildlife Crime Database Management System to get real time data in order to help analyze trends in crime and devise effective measures to prevent and detect wildlife crimes across India.
- **This system** has been successfully used to analyse trends, helping put in preventive measures as well as for successfully carrying out operations such as Operation SAVE KURMA, THUNDERBIRD, WILDNET, LESKNOW, BIRBIL, THUNDERSTORM, LESKNOW-II along with other enforcement agencies resulting in the arrest of 350 wildlife criminals and huge seizures of Tiger/Leopard Skin/bones and other trophies, Rhino Horn, Elephant Ivory, turtles/tortoises, Mongoose raw hairs as well as Mongoose hair brushes, protected birds, Marine products, live Pangolin as well as its scales, deer antlers etc. across all the states.
- **In order** to involve the public in the fight against wildlife crime, WCCB has also developed a scheme to enroll willing persons as WCCB Volunteers. The award was decided upon by a selection panel set up by the UN Environment and this is the second time in a row the awards are being given by UN Environment to India.

Blue Revolution aims at doubling the income of farmers. In the last four & half years, Rs 1915.33 crore has been released for its implementation

- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF)** will create employment opportunities for over 9.40 lakh fishermen and entrepreneurs in fishing and allied activities
- **Union Minister of Agriculture and Farmers' Welfare** Shri Radha Mohan Singh has said that the Blue Revolution mission aims at doubling the income of farmers and in the last four & half years, Rs 1915.33 crore has been released for the implementation of Blue Revolution schemes.
- **In his inaugural address** on Fifth World Fisheries Day in Patna today he said that under the Blue Revolution scheme, 29,128 hectares has been developed for aquaculture and fishermen are being benefitted. Besides, 7441 traditional boats have been modernized and converted into motorized boats. The government has approved Rs 7522 crore Fisheries and Aquaculture Infrastructure Development Fund (FIDF).
- **This fund** will create employment opportunities to over 9.40 lakhs fishers/ fishermen/ fisher folks and other entrepreneurs in fishing and allied activities and attract private investment in creation and management of fisheries infrastructure facilities.
- **He further added** that the FIDF would help in the creation of fisheries infrastructure facilities both in marine and inland fisheries sectors, which would boost fish production and help achieve target of Rs 15 million tonne by 2020 set under Blue revolution. Besides, the FIDF aims to achieve a sustainable growth of 8 % to 9 % in a move to augment fish production to the level of about 20 million tonnes by 2022-23.
- **The Minister** informed that for the development of fisheries sector in Bihar, the present government released Rs. 64.32 crore during 2014-15 to 2018-19 as compared to Rs. 4.95 crore given during 2009-10 to 2013-14. Apart from this, as part of Prime Minister special package to Bihar, the fisheries sector was sanctioned Rs 279.55 crore under which the first installment of Centre's share of Rs. 40.79 crore has been released.

- **World Fisheries Day** is being celebrated to commemorate the event of meeting of the working fishermen and women representing 'World Forum of Fish Harvesters & Fish Workers' from 18 countries in New Delhi on November 21, 1997. 'World Fisheries Forum (WFF)' was established to advocate a global mandate of sustainable fishing practices and policies.

Who are the Sentinelese?

- **Who are the Sentinelese?** The Sentinelese are a negrito tribe who live on the North Sentinel Island of the Andamans. The inhabitants are connected to the Jarawa on the basis of physical, as well as linguistic similarities. Their numbers are believed to be less than 150 and as low as 40.
- **Based on carbon dating** of kitchen middens by the Anthropological Survey of India, Sentinelese presence was confirmed in the islands to 2,000 years ago. Genome studies indicate that the Andaman tribes could have been on the islands even 30,000 years ago.
- **How are they protected?** The Govt. of India issued the Andaman and Nicobar Islands (Protection of Aboriginal Tribes) Regulation, 1956 to declare the traditional areas occupied by the tribes as reserves. It prohibited entry of all persons except those with authorisation. Photographing or filming the tribe members is also an offence. The rules were amended later to enhance penalties.
- **But restricted area permits** were relaxed for some islands recently. In a major step earlier this year, the Indian government excluded this island and 28 others in the Union Territory from the Restricted Area Permit or RAP regime till December 31, 2022. The lifting of RAP means foreigners can go to the island without permission from the government.
- **Why are they said to be vulnerable?** It is said they have made little to no advancement in the over 60,000 years and still live very primitive lives, surviving mainly on fish and coconuts.
- **They are very vulnerable** to germs since they have not had contact with the outside world. Even a common flu virus carried by a visitor could wipe out the entire tribe. Since the 1960s, there have been a handful of efforts to reach out to the tribe but all have largely failed. They have repeatedly, aggressively made it clear that they want to be isolated.
- **What is Restricted Area Permit (RAP) regime?** RAP regime was notified under the Foreigners (Restricted Areas) Order, 1963. Under it, foreign nationals are not normally allowed to visit protected or restricted area unless Government is satisfied that there are extra-ordinary reasons to justify their visit.
- **Every foreigner**, except citizen of Bhutan, who desires to enter and stay in protected or restricted area, is required to obtain special permit from competent authority having power to issue such permits to foreigner, seeking it.
- **Citizens of Afghanistan**, China and Pakistan and foreign nationals of Pakistani origin are exception and are not allowed to enter such areas.

'Institution's Innovation Council (IIC)' Program

- **About 'Institution's Innovation Council (IIC) program:** The purpose of formation of network of Institution's Innovation Councils (IICs) is to encourage, inspire and nurture young students by exposing them to new ideas and processes resulting in innovative activities in their formative years.
- **The program aims** to institutionalize innovation and develop a scientific temperament in the country. More than 1000 Higher Education Institutions (HEIs) have already formed IICs in their campuses and enrolled for the IIC network managed by MHRD's Innovation cell to promote innovation through multitudinous modes leading to an innovation promotion eco-system in their campuses.
- **Way ahead:** The educational advancement in higher education can only be achieved by encouraging best practices in innovation and advance research and Innovation Cell has undertaken many initiatives in this direction such as implementing programs like Atal Ranking of Institutions on Innovation Achievement (ARIIA), Smart India Hackathon (SIH)- 2019, etc.
- **Innovation cell:** Ministry of Human Resource Development has established an "Innovation cell" at AICTE with a purpose to systematically foster the culture of Innovation in all Higher Education Institutions (HEIs) across the country.

e-registration must for jobs in 18 countries

- **The non-ECR** category of passengers include Indians paying income tax and those with educational qualification above matriculation. As of now only ECR category passport holders were required to get emigration clearance from the office of the Protector of Emigrants to seek employment abroad.
- **Key facts:** The rule, which takes effect on January 1, is aimed at the welfare of Indians going abroad. It applies to jobs in 18 countries, including the six Gulf Cooperation Council nations, which have the largest number of expats. The objective of the directive is to protect workers with higher educational qualification from not getting into blue collar jobs.
- **Previously only ECR** stamped passport holders had to go through the mandatory e-migrate registration since 2015. All those seeking employment will have to register online via the website www.emigrate.gov.in. Those failing to register at least 24 hours prior to actual departure will be off-loaded at the airports.
- **Indians working abroad- relevant stats:** Statistics available with the Ministry of External Affairs showed that UAE is one of the five top destination countries for Indians taking up employment. Nearly 1.5 lakh Indians had taken up employment in that country last year. This was followed by Saudi Arabia (78,611); Kuwait (56,380); Oman (43,332) and Qatar (24,759).
- **The job roles** were that of mason (52,833); labour (49,490); carpenter (41,588); helper (23,6700; and electrician (17,703). Incidentally Uttar Pradesh has emerged as the top labour-sending State with 88,450 Indian emigrants registering with the e-migrate system. This was followed by Bihar (69,426); Tamil Nadu (38,341); West Bengal (36,599) and Rajasthan (32,184).
- **The other countries** where registration is required are Afghanistan, Indonesia, Iraq, Jordan, Lebanon, Libya, Malaysia, Sudan, South Sudan, Syria, Thailand and Yemen.

ICMR releases guidelines for antibiotics' judicious use

- **Need for AMSP:** Antimicrobial resistance (AMR) is a major public health challenge, and with very few new antibiotics in the pipeline, it is important to use the existing drugs judiciously. Since inappropriate use of antibiotics is rampant in India, there is an urgent need to improve antibiotic use in hospitals, which can be achieved through implementation of good AMS programmes.
- **The guidelines and their significance:** These guidelines provide guidance for setting up structure and processes of Antimicrobial Stewardship Programmes in healthcare institutions. It will help discuss essential elements of antimicrobial stewardship, diagnostic stewardship besides providing information on tools that can be used to measure progress.
- **What is Antimicrobial resistance and why is it on rise?** Antimicrobial resistance (AMR) is a major public health challenge, which is recognised as high priority area by the government. The increasing consumption of antibiotics is one of the key drivers of antimicrobial resistance seen in bugs.
- **Irrational prescription** of broad-spectrum antibiotics, poor regulations around sale of antibiotics, self-medication, lack of education and awareness regarding responsible use of antibiotics have been identified as some of the key factors driving antimicrobial resistance in our country.
- **The National Health Policy, 2017,** terms antimicrobial resistance as one of the key healthcare issues and prioritises development of guidelines regarding antibiotic use, limiting over-the-counter use of antibiotics and restricting the use of antibiotics as growth promoters in livestock.

Global Stocktake

- **The group,** through a joint statement, urged developed countries to take urgent actions to close the pre-2020 implementation gaps by 2023 which they said can be a useful input for the first Global Stocktake (GST) — which they said should be conducted in light of equity and the best available science.
- **What is Global Stocktake?** 'Global stocktake' refers to a proposed five-yearly review of the impact of countries' climate change actions.
- **Under the Paris Agreement,** every country must present a climate action plan in five-yearly cycles. It is supposed to be similar to the plan countries submitted in the run-up to the talks that concluded last week.

- **Under the Paris Agreement**, the first global stocktake will happen in 2023. It will assess whether the net result of the climate actions being taken was consistent with the goal of keeping the increase in global average temperature from pre-industrial times to within 2 degree Celsius. The stocktake will help the world determine whether it needs to do more — and how much more.
- **What it covers?** While every country is required to participate in the global stocktake, the exercise will not assess whether actions of any individual country are adequate or not. It will only make an assessment of the “collective” efforts of the world. That is because the climate actions are supposed to be “nationally determined”, and nations have problems over being told by others what they should do. The stocktake will not go into who should do how much — and will rather focus on what needs to be done.
- **In accordance** with the demands of developing countries, the stocktake will cover not only the results of actions to reduce greenhouse gas emissions but of actions being taken to adapt to the effects of climate change as well. It will also include an assessment of whether developed countries are offering adequate help to developing countries by providing money and technology, as mandated by the Paris Agreement.
- **About BASIC Nations:** BASIC countries are bloc (geopolitical alliance) of four large newly industrialized countries – Brazil, South Africa, India and China. It was formed by agreement in November 2009. They were committed to act jointly at Copenhagen climate summit 2009, including possible united walk-out if their common minimum position was not met by developed nations during climate talks.

International Space Station

- **On this day in 1998**, aerospace engineers from Russia and the United States celebrated the lift-off of the Russia-built, US-funded unit Zarya (“sunrise”) as it took off from Kazakhstan’s Baikonur Cosmodrome.
- **What is the International Space Station?** The International Space Station is a large spacecraft in orbit around Earth. It serves as a home where crews of astronauts and cosmonauts live. The space station is also a unique science laboratory. Several nations worked together to build and use the space station. The space station is made of parts that were assembled in space by astronauts. It orbits Earth at an average altitude of approximately 250 miles. It travels at 17,500 mph. This means it orbits Earth every 90 minutes. NASA is using the space station to learn more about living and working in space. These lessons will make it possible to send humans farther into space than ever before.
- **How Old is the Space Station?** The first piece of the International Space Station was launched in November 1998. A Russian rocket launched the Russian Zarya (zar EE uh) control module. About two weeks later, the space shuttle Endeavour met Zarya in orbit. The space shuttle was carrying the U.S. Unity node. The crew attached the Unity node to Zarya.
- **More pieces** were added over the next two years before the station was ready for people to live there. The first crew arrived on November 2, 2000. People have lived on the space station ever since. More pieces have been added over time. NASA and its partners from around the world completed construction of the space station in 2011.
- **How Big is the Space Station?** The space station has the volume of a five-bedroom house or two Boeing 747 jetliners. It is able to support a crew of six people, plus visitors. On Earth, the space station would weigh almost a million pounds. Measured from the edges of its solar arrays, the station covers the area of a football field including the end zones. It includes laboratory modules from the United States, Russia, Japan and Europe.
- **Why is the Space Station Important?** The space station has made it possible for people to have an ongoing presence in space. Human beings have been living in space every day since the first crew arrived. The space station’s laboratories allow crew members to do research that could not be done anywhere else. This scientific research benefits people on Earth.
- **Space research** is even used in everyday life. The results are products called “spinoffs.” Scientists also study what happens to the body when people live in microgravity for a long time. NASA and its partners have learned how to keep a spacecraft working well. All of these lessons will be important for future space exploration.
- **NASA currently** is working on a plan to explore other worlds. The space station is one of the first steps. NASA will use lessons learned on the space station to prepare for human missions that reach farther into space than ever before.
- **Key facts:** ISS is the ninth space station to be inhabited by crews, following the Soviet and later Russian Salyut, Almaz, and Mir stations as well as Skylab from the US.
- **The ISS programme** is a joint project among five participating space agencies: NASA, Roscosmos, JAXA, ESA, and CSA.
- **The ownership** and use of the space station is established by intergovernmental treaties and agreements. The station is divided into two sections, the Russian Orbital Segment (ROS) and the United States Orbital Segment (USOS), which is shared by many nations.



Indian Railways rationalises freight fares

- **Recently**, the Indian Railways announced rationalisation of freight fares. This rationalisation will result in an 8.75% increase in freight rates for major commodities such as coal, iron and steel, iron ore, and raw materials for steel plants.
- **The freight rates** were rationalised to ensure additional revenue generation across the network. An additional revenue of Rs 3,344 crore is expected from such rationalisation, which will be utilised to improve passenger amenities. In addition, the haulage charge of containers has been increased by 5% and the freight rates of other small goods have been increased by 8.75%.
- **Freight rates** have not been increased for goods such as food grains, flours, pulses, fertilisers, salt, and sugar, cement, petroleum, and diesel. In light of this, we discuss some issues around Railways' freight pricing.
- **Railways' sources of internal revenue** Railways earns its internal revenue primarily from passenger and freight traffic. In 2016-17 (latest actual figures available), freight and passenger traffic contributed to about 63% and 28% of the internal revenue, respectively. The remaining is earned from miscellaneous sources such as parcel service, coaching receipts, and platform tickets.
- **Freight traffic:** Railways majorly transports bulk freight, and the freight basket has mostly been limited to include raw materials for certain industries such as power plants, and iron and steel plants. It generates most of its freight revenue from the transportation of coal (43%), followed by cement (8%), food-grains (7%), and iron and steel (7%). In 2018-19, Railways expects to earn Rs 1,21,950 crore from its freight traffic.
- **Passenger traffic:** Passenger traffic is broadly divided into two categories: suburban and non-suburban traffic. Suburban trains are passenger trains that cover short distances of up to 150 km, and help move passengers within cities and suburbs. Majority of the passenger revenue (94% in 2017-18) comes from the non-suburban traffic (or the long-distance trains).
- **Within non-suburban traffic**, second class (includes sleeper class) contributes to 67% of the non-suburban revenue. AC class (includes AC 3-tier, AC Chair Car and AC sleeper) contributes to 32% of the non-suburban revenue. The remaining 1% comes from AC First Class (includes Executive class and First Class).
- **Railways' ability to generate its own revenue has been slowing** The growth rate of Railways' earnings from its core business of running freight and passenger trains has been declining. This is due to a decline in the growth of both freight and passenger traffic. Some of the reasons for such decline include:
 - **Freight traffic growth has been declining, and is limited to a few items** Growth of freight traffic has been declining over the last few years. It has declined from around 8% in the mid-2000s to a 4% negative growth in mid-2010s, before an estimated recovery to about 5% now.
 - **The National Transport Development Policy Committee (2014)** had noted various issues with freight transportation on railways. For example, Indian Railways does not have an institutional arrangement to attract and aggregate traffic of smaller parcel size. Further, freight services are run with a focus on efficiency instead of customer satisfaction. Consequently, it has not been able to capture high potential markets such as FMCGs, hazardous materials, or automobiles and containerised cargo. Most of such freight is transported by roads.
 - **The freight basket** is also limited to a few commodities, most of which are bulk in nature. For example, coal contributes to about 43% of freight revenue and 25% of the total internal revenue. Therefore, any shift in transport patterns of any of these bulk commodities could affect Railways' finances significantly.
 - **For example**, if new coal based power plants are set up at pit heads (source of coal), then the need for transporting coal through Railways would decrease. If India's coal usage decreases due to a shift to more non-renewable sources of energy, it will reduce the amount of coal being transported. Such situations could have a significant adverse impact on Railways' revenue.
- **Freight traffic cross-subsidises passenger traffic** In 2014-15, while Railways' freight business made a profit of about Rs 44,500 crore, its passenger business incurred a net loss of about Rs 33,000 crore.¹⁷ The total passenger revenue during this period was Rs 49,000 crore. This implies that losses in the passenger business are about 67% of its revenue. Therefore, in 2014-15, for every one rupee earned in its passenger business, Indian Railways ended up spending Rs 1.67.
- **These losses** occur across both suburban and non-suburban operations, and are primarily caused due to: (i) passenger fares being lower than the costs, and (ii) concessions to various categories of passengers. According to the NITI Aayog (2016), about 77% to 80% of these losses are contributed by non-suburban operations (long-distance trains). Concessions to various categories of passengers contribute to about 4% of these losses, and the remaining (73-76%) is due to fares being lower than the system costs.

- **The NITI Aayog** (2016) had noted that Railways ends up using profits from its freight business to provide for such losses in the passenger segment, and also to manage its overall financial situation. Such cross-subsidisation has resulted in high freight tariffs. The NTDP (2014) had noted that, in several countries, passenger fares are either higher or almost equal as freight rates. However, in India, the ratio of passenger fare to freight rate is about 0.3.
- **Impact of increasing freight rates** The recent freight rationalisation further increases the freight rates for certain key commodities by 8.75%, with an intention to improve passenger amenities. Higher freight tariffs could be counter-productive towards growth of traffic in the segment. The NTDP report had noted that due to such high tariffs, freight traffic has been moving to other modes of transport. Further, the higher cost of freight segment is eventually passed on to the common public in the form of increased costs of electricity, steel, etc. Various experts have recommended that Railways should consider ways to rationalise freight and passenger tariff distortions in a way to reduce such cross-subsidisation.

Sangai tourism festival

- **About the Sangai festival:** What is it? Sangai Festival is an annual cultural extravaganza in Manipur. The festival is labelled as the grandest festival of the State today and helps promote Manipur as a world class tourism destination. Every edition of the festival showcases the tourism potential of the state in the field of Arts & Culture, Handloom, Handicrafts, Indigenous Sports, Cuisine, Music and Adventure sports of the state etc.
- **Background:** The 'Festival' is named after the State animal, Sangai, the brow-antlered deer found only in Manipur. It started in the year 2010 and has grown over the years into a big platform for Manipur to showcase its rich tradition and culture to the world.
- **Focus areas:** The festival will reflect the State's proud cultural heritage and the love for art which is inherent amongst various tribes inhabiting the State of Manipur. The State's classical dance form, 'Ras Leela' is quite famous all over the world for its distinctiveness from any other dance forms in India. The Ras Leela will form an important part of the dance performances at the Manipur Sangai Festival besides the various other folk dance performances like the Kabui Naga dance, Bamboo dance, Maibi dance, Lai Haraoba dance, Khamba Thoibi dance etc. which will be showcased at the festival.
- **Indigenous sports** will also be a major highlight of the State's biggest tourism festival this year. Manipur's famous martial arts- Thang Ta (a combination Spear & Sword skills), Yubi-Lakpi (a game played with greased coconut like rugby), Mukna Kangjei (a game that combines hockey and wrestling), and Sagol Kangjei- Modern Polo (believed to have evolved in Manipur) will all form part of the festival.
- **Sangai Deer:** The sangai is an endemic and endangered subspecies of brow-antlered deer found only in Manipur, India. It is found in its natural habitat only at Keibul Lamjao National Park over the floating biomass locally called "phumdi" in the south eastern part of Loktak Lake. Its IUCN status: Endangered.

Kartarpur Sahib pilgrim corridor

- **Key facts:** The Kartarpur corridor will be implemented as an integrated development project with Government of India funding, to provide smooth and easy passage, with all the modern amenities.
- **Government of India** will put in place suitable facilities for smooth passage of pilgrims. Government of Pakistan will be urged to recognize the sentiments of the Sikh community and to develop a corridor with suitable facilities in their territory as well.
- **The shrine:** The gurdwara in Kartarpur stands on the bank of the Ravi, about 120 km northeast of Lahore. It was here that Guru Nanak assembled a Sikh community and lived for 18 years until his death in 1539. The shrine is visible from the Indian side, as Pakistani authorities generally trim the elephant grass that would otherwise obstruct the view. Indian Sikhs gather in large numbers for darshan from the Indian side, and binoculars are installed at Gurdwara Dera Baba Nanak.
- **Access to gurdwaras in Pakistan:** Sikh jathas from India travel to Pakistan on four occasions every year — for Baisakhi, the martyrdom day of Guru Arjan Dev, the death anniversary of Maharaja Ranjit Singh, and the birthday of Guru Nanak Dev. These Indian pilgrims are given access to all gurdwaras in Pakistan.
- **Complex issue:** The "corridor" would bring Pak infrastructure right up to the Indian border. Over the past year, gurdwaras in Pakistan have been used for a pro-Khalistan campaign. Earlier this year, a gurdwara displayed posters and distributed pamphlets for the so-called "Sikh Referendum 2020", and Pakistan denied permission to the Indian envoy and diplomats to visit it. Pakistan's intent also remains suspect, and Indian officials are wary of the corridor being misused by both state and non-state actors in that country.

SHe-Box

- **For prompt** disposal of complaints on SHe-Box, each case goes directly to the central/ state authority concerned having jurisdiction to take action in the matter. Cases on She-Box can be monitored by the complainants and Ministry WCD, reducing the time taken in case disposal.
- **About SHe-box:** What is it? It is an online complaint management system for registering complaints related to sexual harassment at workplace. It was launched by the Ministry of Women and Child Development. The complaint management system has been developed to ensure the effective implementation of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act (the SH Act), 2013.
- **How it works?** Once a complaint is submitted to the portal, it will be directly sent to the Internal Complaints Committee (ICC) of the concerned Ministry/Department/PSU/Autonomous Body etc. having jurisdiction to inquire into the complaint. Through this portal, WCD as well as complainant can monitor the progress of inquiry conducted by the ICC.
- **Significance of the portal:** This portal is an initiative to provide a platform to women working or visiting any office of Central Government (Central Ministries, Departments, Public Sector Undertakings, Autonomous Bodies and Institutions etc.) to file complaints related to sexual harassment at workplace under the SH Act. Those who had already filed a written complaint with the concerned Internal Complaint Committee (ICC) constituted under the SH Act are also eligible to file their complaint through this portal. It is also an effort to provide speedier remedy to women facing sexual harassment at workplace as envisaged under the SH Act.

Sub-categorization of Other Backward Classes

- **Terms of references of the Commission are as follows:** To examine the extent of inequitable distribution of benefits of reservation among the castes/ communities included in the broad category of OBCs, with reference to the OBCs included in the Central list.
- **To work out** the mechanism, criteria, norms and parameters, in a scientific approach, for sub-categorization within such OBCs.
- **To take up** the exercise of identifying the respective castes/communities/ sub-castes/ synonyms in the Central List of OBCs and classifying them into their respective sub-categories.
- **Is sub-categorisation permissible under the law?** The Supreme Court in its order in Indra Sawhney and others vs. Union of India observed that there is no Constitutional or legal bar to a State categorizing backward classes as backward or more backward and had further observed that if a State chooses to do it (sub-categorization), it is not impermissible in law.
- **How are OBC reservations offered at present?** At present, there is a single Central OBC list, with entries from each State. People belonging to all of these castes can seek reservation from within the single 27% OBC reservation pie for Central government jobs and Central educational institutions. Nine States, however, have already sub-categorised OBCs. These are Andhra Pradesh, Telangana, Puducherry, Karnataka, Haryana, Jharkhand, West Bengal, Bihar, Maharashtra and Tamil Nadu. OBC reservation became a reality after the implementation of the Mandal Commission report, which categorised many castes as constituting backward classes and deserving of quotas. New castes have been added to the list over the years.
- **Need for subcategorization:** Sub categorization of the OBCs will ensure that the more backward among the OBC communities can also access the benefits of reservation for educational institutions and government jobs.
- **At present,** many feel that the more advanced OBC castes corner the lion's share of the benefits and have become influential. Not only will such a move offer more opportunities to the most backward castes among the OBCs but also give the government and the ruling party an opportunity to carve out a new political constituency.

Allied and Healthcare Professions Bill, 2018

- **Highlights of the Bill:** It provides for the Establishment of a Central and corresponding State Allied and Healthcare Councils; 15 major professional categories including 53 professions in Allied and Healthcare streams.
- **The Bill** provides for Structure, Constitution, Composition and Functions of the Central Council and State Councils, g. Framing policies and standards, Regulation of professional conduct, Creation and maintenance of live Registers, provisions for common entry and exit examinations, etc.

- **The Central Council** will comprise 47 members, of which 14 members shall be ex-officio representing diverse and related roles and functions and remaining 33 shall be non-ex-officio members who mainly represent the 15 professional categories.
- **The State Councils** are also envisioned to mirror the Central Council, comprising 7 ex-officio and 21 non-ex-officio members and Chairperson to be elected from amongst the non-ex-officio members. Professional Advisory Bodies under Central and State Councils will examine issues independently and provide recommendations relating to specific recognised categories.
- **The Bill** will also have an overriding effect on any other existing law for any of the covered professions.
- **The State Council** will undertake recognition of allied and healthcare institutions. Offences and Penalties clause have been included in the Bill to check malpractices.
- **The Bill** also empowers the Central and State Governments to make rules. Central Govt. also has the power to issue directions to the Council, to make regulations and to add or amend the schedule.
- **Major Impact, including employment generation potential:** Bring all existing allied and healthcare professionals on board during the first few years from the date of establishment of the Council. Opportunity to create qualified, highly skilled and competent jobs in healthcare by enabling professionalism of the allied and healthcare workforce.
- **High quality**, multi-disciplinary care in line with the vision of Ayushman Bharat, moving away from a 'doctor led' model to a 'care accessible and team based' model.
- **Opportunity** to cater to the global demand (shortage) of healthcare workforce which is projected to be about 15 million by the year 2030, as per the WHO Global Workforce, 2030 report.
- **Number of beneficiaries:** It is estimated that the Allied and Healthcare Professions Bill, 2018 will directly benefit around 8-9 Lakh existing Allied and Healthcare related professionals in the country and several other graduating professionals joining workforce annually and contributing to the health system. However, since this Bill is directed to strengthen the healthcare delivery system at large, it may be said that the entire population of the country and the health sector as a whole will be benefited by this Bill.
- **Need for this legislation:** Allied and Healthcare Professionals (A&HPs) constitute an important element of the health human resource network, and the skilled and efficient Allied and Healthcare Professionals (A&HPs) can reduce the cost of care and dramatically improve the accessibility to quality driven healthcare services.
- **Though such professionals** have existed in the Indian healthcare system for many decades, a considerable gap in the allied and healthcare space is because of a lack of a comprehensive regulatory framework and absence of standards for education and training of A&HPs. The Bill thus seeks to establish a robust regulatory framework which will play the role of a standard-setter and regulator for Allied and Healthcare professions.

“Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)” scheme

- **Background:** The Ministry of Earth Sciences has a mandate to carry out research and development activities to develop and improve capability to forecast weather, climate and natural hazard related phenomena. Towards this direction, MoES has taken several initiatives to formulate specific schemes like weather and climate modelling, monsoon-research, climate change science & climate services etc.
- **These schemes** involve multi-institutes wherein each unit has a designated role for accomplishing the aforesaid tasks. As a result, all these schemes with specific objectives and budget are implemented in an integrated manner and are put together under the umbrella scheme “ACROSS”.
- **ACROSS Scheme:** ACROSS scheme pertains to the atmospheric science programs of the Ministry of Earth Sciences (MoES). It addresses different aspects of weather and climate services, which includes warnings for cyclone, storm surges, heat waves, thunderstorms etc. Each of these aspects is incorporated as nine sub-schemes under the umbrella scheme “ACROSS” and is implemented in an integrated.
- **The ACROSS** scheme consists of nine sub-programmes which are multi disciplinary and multi institutional in nature and will be implemented in an integrated manner.
- **As the objective** of the ACROSS scheme is to provide a reliable weather and climate forecast for betterment of society, the scheme will aim at improving skill of weather and climate forecast through sustained observations, intensive R & D.
- **Benefits of the Scheme:** The scheme will provide improved weather, climate and ocean forecast and services, thereby ensuring transfer of commensurate benefits to the various services.
- **It will also** provide a sizable number of scientific and technical staff along with requisite administrative support, thereby generating employment.

- **To ensure last-mile** connectivity of the weather based services to the end -user, a large number of agencies like the Krishi Vigyana Kendras of ICAR, Universities and local municipalities are roped in thus generating employment opportunities to many people.

World Fisheries Day

- **Fisheries in India** Fisheries is an important sector in India that provides employment to millions of people apart from contributing to the food security of the country. India has over 8,000 km of coastline, and an Exclusive Economic Zone (EEZ) of over 2 million sq km, and extensive freshwater resources.
- **Thus**, fisheries play a vital role in the economy of the country with the practice contributing about 1.07 per cent to the GDP (Gross Domestic Product). Fisheries in India makes up to 5.3 per cent to agriculture and allied activities.
- **Inland fisheries:** Inland fisheries is also a vital part of fisheries in India. India's freshwater resources consist of: Rivers and canals (197,024 km). Reservoirs (3.15 million hectares). Ponds and tanks (235 million hectares). Oxbow lakes and derelict waters (1.3 million hectares). Brackishwaters (1.24 million hectares) and estuaries (0.29 million hectares).
- **The inland capture** fish production has increased from 192,000 tonnes in 1950 to 781,846 tonnes in 2007.

Atal Innovation Mission

- **Benefits:** The MoU will facilitate promotion of science & technology, strong foundation to the collaborative work through exchange of students, teachers, researchers and scientists between India and Russia.
- **Major Impact:** The MOU will provide a mechanism in taking part in establishing relationships with-schools, universities, cultural institutions, science & technology and specialized education institutions, high-tech companies, startups and innovation centers in both countries. The activities are expected to promote creation of new scientific knowledge, generation of intellectual property, innovations and products development in both countries.
- **About AIM: The Atal Innovation Mission (AIM)** is the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.
- **AIM is mandated** to create an umbrella structure to oversee innovation ecosystem of the country and revolutionizing the innovation eco-system – touching upon the entire innovation life cycle through various programs.

India gets UN Environment award

- **WCCB has been conferred this award in Innovation category.** Why WCCB has been chosen? WCCB has adopted innovative enforcement techniques that have dramatically increased enforcement of transboundary environmental crimes in India.
- **Notably** it has developed an online Wildlife Crime Database Management System to get real time data in order to help analyze trends in crime and devise effective measures to prevent and detect wildlife crimes across India. In order to involve the public in the fight against wildlife crime, WCCB has also developed a scheme to enroll willing persons as WCCB Volunteers.
- **About Asia Environmental Enforcement Award:** The Asia Environment Enforcement Awards publicly recognize and celebrate excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia.
- **The awards** are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime in one of the following eligibility criteria areas: collaboration; impact; innovation; integrity and gender leadership.

- **Wildlife Crime Control Bureau:** Wildlife Crime Control Bureau is a statutory multi-disciplinary body established by the Government of India under the MoEFCC, to combat organized wildlife crime in the country.
- **Under Section 38 (Z) of the Wild Life (Protection) Act, 1972, it is mandated:** To collect and collate intelligence related to organized wildlife crime activities. To disseminate the same to State and other enforcement agencies for immediate action so as to apprehend the criminals. To establish a centralized wildlife crime data bank.
- **Co-ordinate actions** by various agencies in connection with the enforcement of the provisions of the Act. Assist foreign authorities and international organization concerned to facilitate co-ordination and universal action for wildlife crime control.
- **It also assists and advises** the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

Mahatma Gandhi statue unveiled in Sydney:

- **Context:** President Ram Nath Kovind has unveiled a statue of Mahatma Gandhi at the Jubilee Park in the town of Parramatta, Sydney. The unveiling of the statue is part of the celebrations of the 150th anniversary of the Father of the Nation, which is being observed in different parts of the world.

Women Empowerment Resolution Campaign:

- **Uttar Pradesh Government** has launched Women Empowerment Resolution Campaign to develop leadership capacities in women and make them vocal for their rights. The purpose of this campaign is to ensure the empowerment of women through different programs in the state.
- **Under it**, the women employees of the state government will go to their house to know about schemes introduced by Center and the state government for women. Issues like education, self-employment, health, sanitation and nutrition will be included under this campaign.

India gets UN Environment award for combating transboundary environmental crime. (Ministry of Environment, Forest and Climate Change)

- **United Nation Environment** has awarded Wildlife Crime Control Bureau (WCCB), Ministry of Environment, Forest and Climate Change, Government of India with Asia Environment Enforcement Awards, 2018 for excellence work done by the Bureau in combating transboundary environmental crime.
- **The award** was decided by a selection panel constituted by the UN Environment. This is the second time in a row the awards are being given by UN Environment to India.

Asia Environment Enforcement Award:

- **It publicly recognizes** and celebrates excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia.

- **It is given to outstanding individuals** and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime in one of the following criteria: Collaboration Impact Innovation Integrity and Gender leadership However, WCCB has been conferred this award in "Innovation" category.
- **WCCB has developed** an online Wildlife Crime Database Management System to get real time data in order to help analyze trends in crime and devise effective measures to prevent and detect wildlife crimes across India.
- **This system** has helped to analyze trends, and for carrying out operations like Operation SAVE KURMA, THUNDERBIRD, WILDNET, LESKNOW, BIRBIL, THUNDERSTORM, LESKNOW-II along with other enforcement agencies resulting in the arrest of 350 wildlife criminals and huge seizures of animal bones.
- **WCCB Volunteers:** To involve the public in the fight against wildlife crime, WCCB has developed a scheme to enroll willing persons as WCCB Volunteers.

Why does UN Environment give these awards?

- **Transboundary environmental crime is a serious and growing problem.** Illegal trade in wildlife is the fourth largest illegal trade globally (after drugs, counterfeiting and human trafficking). It undermines food security, harms economies, devastates livelihoods, fuels terrorism, and comprises ecosystems on which humans depend.
- **Asia remains** one of the world's largest dumping grounds for illegally traded chemicals and waste.
- **Public officials** and institutions/teams working on environmental enforcement issues are on the front-line of efforts to combat transboundary environmental crime. The 2018 Awards will recognize and celebrate their critical role in doing so.

Blue Revolution aims at doubling the income of farmers. In the last four & half years, Rs. 1915.33 crore has been released for its implementation. (Ministry of Agriculture & Farmers Welfare)

- **Union Minister of Agriculture and Farmers' Welfare** at his inaugural address on Fifth World Fisheries Day, said that under the Blue Revolution scheme, 29,128 hectares has been developed for aquaculture and fishermen are being benefitted. And 7441 traditional boats have been modernized and converted into motorized boats.
- **The Blue Revolution** mission aims at doubling the income of farmers and in the last four & half years, Rs. 1915.33 crore has been released for the implementation of Blue Revolution Schemes.

The government has approved Rs. 7522 crore Fisheries and Aquaculture Infrastructure Development Fund (FIDF).

- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF):** It creates employment opportunities to over 9.40 lakhs fishers/fishermen/ fisher folks and other entrepreneurs in fishing and allied activities. It attracts private investment in creation and management of fisheries infrastructure facilities.
- **It helps** in the creation of fisheries infrastructure facilities both in marine and inland fisheries sectors, which would boast fish production and help achieve target of Rs. 15 million tonne by 2020 under Blue revolution.
- **It aims** to achieve a sustainable growth of 8% to 9% in a move to augment fish production to the level of about 20 million tonnes by 2022-23.

World Fisheries Day:

- **It is celebrated** to commemorate the event of meeting of the working fishermen and women representing 'World Forum of Fish Harvesters & Fish Workers' from 18 countries in New Delhi on November 21, 1997.
- **World Fisheries Forum (WFF):** It was established to advocate a global mandate of sustainable fishing practices and policies.
- **World Forum of Fish Harvesters & Fish Workers (WFF):** It is an international organization that brings together small scale fisher organization for the establishment and upholding of fundamental human rights, social justice and culture of artisanal/small scale fish harvesters and fish workers, affirming the sea as source of all life and committing themselves to sustain fisheries and aquatic resources for the present and future generations to protect their livelihoods.

MWCD links Sexual Harassment Complaints Portal 'She-Box' to central/state ministries & districts for speedy disposal of cases. (Ministry of Women and Child Development)

- **The Ministry of Women and Child Development** has linked She-Box, the online portal to report complaints of Sexual Harassment at Workplace, to all the Central Ministries, Departments and 653 districts across 33 States/Union Territories.
- **The portal can be accessed at the following link: <http://shebox.nic.in/>** She-Box portal: An effort to provide speedy remedy to women facing sexual harassment at workplace. Once a complaint is submitted, it will be directly sent to the section of the employer concerned.
- **Here, both the WCD and the complainant** can monitor the progress of the inquiry. Those who have already filed a written complaint with the concerned Internal Complaint Committee (ICC) or Local Complaint Committee (LCC) constituted under the Sexual Harassment Act are also eligible to file their complaint through this portal.
- **Handbook and Training Module on the Sexual Harassment Act:** The Ministry has published a Handbook and Training Module to provide information about the provisions of the Act in easy to use practical manner.
- **The private organizations** are encouraged to customize the Training Module as per their extant service rules and disciplinary procedures prescribed therein.
- **Background:** This is a proactive step taken in the wake of the worldwide campaign #MeToo, where women have related their experience of facing sexual harassment and abuse at workplace.

Cabinet approves Allied and Healthcare Council of India and corresponding State Allied and Healthcare Councils. (Ministry of Health and Family Welfare)

- **The Union Cabinet** has approved the establishment of an Allied and Healthcare Council of India and corresponding State Allied and Healthcare Councils which will play the role of standard-setters and facilitators for professions of Allied and Healthcare.
- **Features of the Central and State Allied and Healthcare Councils:** It includes 15 major professional categories including 53 professions in Allied and Healthcare streams. The Professional Advisory Bodies under Central and State Councils will examine issues in detail and provide recommendations relating to specific recognized categories.
- **The Allied and Healthcare Professionals (A&HPs)** constitute an important element of the health human resource network. And it can reduce the cost of care and dramatically improve the accessibility to quality driven healthcare services.
- **Additional Benefits of the Allied and Healthcare Council:** It will bring all existing allied and healthcare professionals on board within a few years from the date of establishment of the Council. It provides an opportunity to create qualified, highly skilled and competent manpower in healthcare and enable professionalism of the allied and healthcare workforce.
- **It paves the way** for high quality multi-disciplinary care in line with the vision of "Ayushman Bharat". Ayushman Bharat: It is an attempt to move from sectoral and segmented approach of health service delivery to a comprehensive need-based health care service.

- **It aims to undertake** path breaking interventions to holistically address health (covering prevention, promotion and ambulatory care), at primary, secondary and tertiary level.
- **Background:** Globally, Allied and Healthcare Professionals attend undergraduate degree programme to begin with and may attain up to PhD level qualification in their respective streams. However, in India, the institutions which provide such courses, lack standardization.
- **Many countries possess** a statutory licensing or regulatory body to license and certify the qualifications and competence of such professionals, particularly those involved in direct patient care (like physiotherapist, nutritionist, etc.) or those whose occupation impact patient care directly (like lab technologists, dosimetrists, etc.).
- **Though such professionals** have existed in Indian healthcare system for decades, a certain gap in the allied and healthcare space is there due to lack of a comprehensive regulatory framework and absence of standards for education and training of A&HPs.



Government of India to observe the remembrance of 100 years of the historical Jallianwala Bagh massacre

- **A number of commemorative** as well as constructive activities will be taken up during the remembrance period.
- **Coin and Postage Stamps:** The commemorative coin and postage stamps will be released on 13th April 2019 (the day the incident took place 100 years ago).
- **Ministry of Culture** will organize cultural activities like kavi sammelan, plays, exhibition, seminars, etc. across the country.
- **A Committee** is constituted to ensure timely implementation to Renovate, upgrade and beautify the Jallianwala Bagh Memorial, and Develop Virtual Reality Theme Based show at the Memorial.
- **Development of Virtual Reality Theme Based show:** The Ministry of Tourism earmarked an amount of Rs. 8 crore under Swadesh Darshan Scheme for development of Virtual Reality Theme Based show at the Memorial. The Ministry of Culture will provide additional funds, if needed.
- **Background:** It is also known as the Amritsar Massacre (dated April 13, 1919) at Jallianwala Bagh, Amritsar, Punjab. On 13th April 1919, thousands of people were gathered at Jallianwala Bagh. This day marks the beginning of New Year for the Sikhs, also celebrated as Baisakhi festival all over Punjab.
- **Colonel Reginald Dyer** had announced curfew and a ban on all processions that even prohibited a group of 4 or more people to meet publicly. However, General Dyer sensed the number of people present there and the secret meeting that was about to take place. Thus, he arrived with armed troops and ordered to open fire.
- **The troops** were ordered to start shooting; this heinous act of violence resulted in extreme mass killing. To keep in mind this significance of this place, a trust was founded in 1920 to build a memorial site at Jallianwala Bagh. American architect, Benjamin Polk, built the memorial site which was inaugurated by the then President of India, Rajendra Prasad on 13 April 1961.

Pradhan Mantri Matru Vandana Yojana

- **CAS (Common Application Software) System:** CDFI is a non-profit organisation. It had conceptualised, designed and implemented the PMMVY-CAS (Common Application Software) System through which disbursements were made.
- **About PMMVY:** Pradhan Mantri Matru Vandana Yojana (PMMVY) is a maternity benefit rechristened from erstwhile Indira Gandhi Matritva Sahyog Yojana (IGMSY). The IGMSY was launched in 2010.
- **The scheme** is a conditional cash transfer scheme for pregnant and lactating women of 19 years of age or above for first live birth. It provides a partial wage compensation to women for wage-loss during childbirth and childcare and to provide conditions for safe delivery and good nutrition and feeding practices.
- **Exceptions:** The maternity benefits under Pradhan Mantri Matru Vandana Yojana (PMMVY) are available to all Pregnant Women & Lactating Mothers (PW&LM) except those in regular employment with the Central Government or State Government or Public Sector Undertaking or those who are in receipt of similar benefits under any law for the time being in force. Funding: The scheme is a Centrally Sponsored Scheme under which cost sharing ratio between the Centre and the States & UTs with Legislature is 60:40 while for North-Eastern States & three Himalayan States; it is 90:10. It is 100% Central assistance for Union Territories without Legislature.
- **Need for special attention:** Under-nutrition continues to adversely affect majority of women in India. In India, every third woman is undernourished and every second woman is anaemic. An undernourished mother almost inevitably gives birth to a low birth weight baby. When poor nutrition starts in-utero, it extends throughout the life cycle since the changes are largely irreversible.

- **Owing to economic** and social distress many women continue to work to earn a living for their family right up to the last days of their pregnancy. Furthermore, they resume working soon after childbirth, even though their bodies might not permit it, thus preventing their bodies from fully recovering on one hand, and also impeding their ability to exclusively breastfeed their young infant in the first six months.

Quadricycles

- **Quadricycle** – a vehicle of the size of a 3-wheeler but with 4 tyres and fully covered like a car. It has an engine like that of a 3-wheeler.
- **Ministry of Road Transport & Highways** notified the insertion of 'Quadricycle' as a 'non transport' vehicle under the Motor Vehicles Act 1988.
- **Quadricycles** were only allowed for transport usage under the Act, but now has been made usable for non-transport also (Personal use).
- **Intention behind this move:** The main aim is to give another mobility option, especially to the middle class who want to upgrade from two-wheelers. Besides, a person cannot carry family members in a three-wheeler, therefore, quadricycles are being allowed in the private category. The move will help them to upgrade to four-wheelers and move around with family.
- **Advantage:** It is cheap and safe mode of transport for last mile connectivity.
- **Exceptions:** Quadricycles will not be allowed for transporting cargo or luggage.
- **Impact on the auto- industry:** Quadricycles will pose a serious challenge to entry level cars. With the centre giving a go-ahead on the sale of quadricycles for personal use, top auto makers will have to revamp their strategy on entry-level cars, given quadricycles are expected to be far cheaper.

Bajaj Auto Ltd's Qute is the first locally produced quadricycle.

- **Analysis- what is left out?** While the government is trying to improve the safety standards of vehicles for Indian roads, quadricycles may not even meet the basic safety norms. Quadricycles should have been restricted only for commercial purposes since they don't meet the emission and safety norms of passenger cars. The regulators have been lenient and have diluted the norms for vehicles in this segment.
- **Background:** Earlier this year, the Indian Government had approved of the Quadricycle as a vehicle category. Similar to all other vehicles sold in India even the Quadricycle vehicles will have to undergo a rigorous crash test and will have to meet the Bharat New Vehicle Safety Assessment Program (BNVSAP) safety norms and also the BS-VI emission norms.
- **The government** has also approved full electric or hybrid models of Quadricycle vehicles but even those models cannot skip the stringent crash test norms.

Open Transit Data platform

- **About the Open Transit Data Platform:** Through this the government aims to provide real-time data which can be used by third party app developers and researchers. This includes geo-coordinates of all bus stops, route maps, timetables as well as the real time GPS feeds of bus locations which will be updated every 10 seconds.
- **The portal** was designed and developed by IIT Delhi on behalf of the Delhi government. The government believes that application developer and researchers would be able to use the data for bringing out transport solutions.
- **Significance:** It is a major step to promote collaboration and co-creation of innovative and inclusive transport solutions for the people of Delhi. This initiative will provide a lot of useful information at the fingertips of citizens and encourage more and more people to switch to public transport, thereby impacting pollution.

Prompt corrective action (PCA) framework

- **Background:** The RBI began to place state-run banks under the PCA framework for the first time in September 2016, when their NPAs soared beyond the regulatory tolerance levels.
- **Negative effects:** Banks under the PCA have lost market share to private sector banks in corporate loans and unsecured personal loans, and it will be a Herculean task for the affected banks to claw this back. The PCA framework puts restrictions on weaker banks on many aspects, including fresh lending and expansion, and salary hikes, among others.
- **The 11 banks under the PCA are:** Allahabad Bank, United Bank of India, Corporation Bank, IDBI Bank, UCO Bank, Bank of India, Central Bank of India, Indian Overseas Bank, Oriental Bank of Commerce, Dena Bank and Bank of Maharashtra. These banks together control over 20 per cent of the credit market.
- **What is PCA?** PCA norms allow the regulator to place certain restrictions such as halting branch expansion and stopping dividend payment. It can even cap a bank's lending limit to one entity or sector. Other corrective action that can be imposed on banks include special audit, restructuring operations and activation of recovery plan. Banks' promoters can be asked to bring in new management, too. The RBI can also supersede the bank's board, under PCA.
- **When is PCA invoked?** The PCA is invoked when certain risk thresholds are breached. There are three risk thresholds which are based on certain levels of asset quality, profitability, capital and the like. The third such threshold, which is maximum tolerance limit, sets net NPA at over 12% and negative return on assets for four consecutive years.
- **What are the types of restrictions?** There are two type of restrictions, mandatory and discretionary. Restrictions on dividend, branch expansion, directors compensation, are mandatory while discretionary restrictions could include curbs on lending and deposit. In the cases of two banks where PCA was invoked after the revised guidelines were issued — IDBI Bank and UCO Bank — only mandatory restrictions were imposed. Both the banks breached risk threshold 2.
- **What will a bank do if PCA is triggered?** Banks are not allowed to re new or access costly deposits or take steps to increase their fee-based income. Banks will also have to launch a special drive to reduce the stock of NPAs and contain generation of fresh NPAs. They will also not be allowed to enter into new lines of business. RBI will also impose restrictions on the bank on borrowings from interbank market.
- **Impact:** Small and medium enterprises will have to bear the brunt due to this move by RBI. Since the PCA framework restricts the amount of loans banks can extend, this will definitely put pressure on credit being made available to companies especially the MSMEs.
- **Large companies** have access to the corporate bond market so they may not be impacted immediately. It has been predicted that if more state-owned banks are brought under PCA, it will impact the credit availability for the MSME segment.

NBFC Mudra loans grew faster than banks in FY18

- **Impressively,** NBFCs not only met their Mudra target of ₹9,050 crore for FY18, but their sanctions for the year were a five-fold jump from the previous year.
- **About the Pradhan Mantri MUDRA Yojana (PMMY) scheme:** The PMMY Scheme was launched in April, 2015. The scheme's objective is to refinance collateral-free loans given by the lenders to small borrowers.
- **The scheme,** which has a corpus of Rs 20,000 crore, can lend between Rs 50,000 and Rs 10 lakh to small entrepreneurs. Banks and microfinance institutions (MFIs) can draw refinance under the MUDRA Scheme after becoming member-lending institutions of MUDRA. Mudra Loans are available for non-agricultural activities upto Rs. 10 lakh and activities allied to agriculture such as Dairy, Poultry, Bee Keeping etc, are also covered.
- **Mudra's unique features** include a Mudra Card which permits access to Working Capital through ATMs and Card Machines.
- **There are three types of loans under PMMY:** Shishu (up to Rs.50,000). Kishore (from Rs.50,001 to Rs.5 lakh). Tarun (from Rs.500,001 to Rs.10,00,000).
- **Objectives of the scheme:** Fund the unfunded: Those who have a business plan to generate income from a non-farm activity like manufacturing, processing, trading or service sector but don't have enough capital to invest can take loans up to Rs 10 lakh.
- **Micro finance institutions (MFI) monitoring and regulation:** With the help of MUDRA bank, the network of microfinance institutions will be monitored. New registration will also be done.

- **Promote financial inclusion:** With the aim to reach Last mile credit delivery to micro businesses taking help of technology solutions, it further adds to the vision of financial inclusion.
- **Reduce jobless economic growth:** Providing micro enterprises with credit facility will help generate employment sources and an overall increase in GDP.
- **Integration of Informal economy into Formal sector:** It will help India also grow its tax base as incomes from the informal sector are non-taxed.

Microbiome research

- **What is “Human Microbiome”?** The human body carries diverse communities of microorganisms, which are mainly bacterial. These are referred to as “human microbiome”.
- **Their role:** These organisms play a key role in many aspects of host physiology, ranging from metabolism of otherwise complex indigestible carbohydrates and fats to producing essential vitamins, maintaining immune systems and acting as a first line of defense against pathogens.
- **Significance of research on the human microbiome:** Research on the human microbiome has thrown light on various aspects — how different parts of the human body are occupied by characteristic microbial communities, and how various factors contribute in shaping the composition of the microbiome, including the genetics, dietary habits, age, geographic location and ethnicity. These studies laid a strong foundation to decipher the microbiome’s implications on health and a wide range of diseases.
- **India’s project:** India has proposed a project that would study and map the human microbiome across the country. The Rs 150-crore project will get approval soon. The project will include collection of saliva, stool and skin swabs of 20,000 Indians across various ethnic groups from different geographical regions. India provides for a wide range of research with more than 4,500 ethnic groups and presence of two global biodiversity hotspots (Himalayan range and Western Ghats).
- **Need:** Scientists at NCSS have conducted a meta-analysis on gut microbiota of healthy Indian individuals and compared it with that of individuals from other parts of the world. It shows that the Indian population harbours a distinct gut microbial community, which, scientists say, calls for an in-depth investigation of the Indian microbiome.
- **India has a large number** of tribal populations largely unaffected by “modern” diet and lifestyle. The prevalence of lifestyle-related disorders such as obesity and diabetes has been known to be significantly lower compared to the non-tribal (urbanised) populations across the globe. Hence, scientists say, a study on the tribal population would help improve knowledge of evolution of the mutualism between gut microbiota and the host.

Transgenic rice with reduced arsenic accumulation

- **How was it achieved?** Researchers have cloned Arsenic methyltransferase (WaarsM) gene from a soil fungus, *Westerdykellaaurantiaca*, and inserted the same into the rice genome with the help of *Agrobacterium tumefaciens*, a soil bacterium which has natural ability to alter the plant’s genetic makeup.
- **The newly developed transgenic rice** along with normal rice was then treated with arsenic. Comparison of transgenic and non-transgenic rice showed that transgenic plants accumulated less arsenic in root as well as shoot as compared to non-transgenic lines.
- **Researchers** found that the resulting transgenic plant acquired the potential for methylating inorganic arsenic to a variety of harmless organic species, including volatile arsenicals. This could be potential strategy for developing transgenic rice capable of low arsenic accumulation not only in grain but also in straw and feed which are used for livestock.
- **Need and significance:** As large number of people are affected by arsenic toxicity, it is imperative to develop rice with lesser arsenic content and high yield. In this background, biotechnological methods such as modulating the expression of Arsenic metabolism-related genes in rice will be a fruitful and practical approach to decrease arsenic accumulation.



INDIA'S TELECOM SECTOR

- **India's telecommunication network** is the second largest in the world by number of telephone users (both fixed and mobile phone) with 1.053 billion subscribers as on 31 August 2016. It has one of the lowest call tariffs in the world enabled by mega telecom operators and hyper-competition among them. India has the world's second-largest Internet user-base. As on 31 March 2016, there were 342.65 million internet subscribers in the country. Indian telecom industry underwent a high pace of market liberalisation and growth since the 1990s and now has become the world's most competitive and one of the fastest growing telecom markets.
- **The Industry has grown over twenty times** in just ten years, from under 37 million subscribers in the year 2001 to over 846 million subscribers in the year 2011.
- **Telecommunication** has supported the socioeconomic development of India and has played a significant role to narrow down the rural-urban digital divide to some extent.
- **The rapid strides** in the telecom sector have been facilitated by liberal policies of the Government that provides easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices. (Source: Wikipedia)
- **The exponential growth** witnessed by the telecom sector in the past decade has led to the development of the telecom equipment manufacturing and other supporting industries. With the advent of next-generation technologies and 3G and Broadband Wireless Access Services rolled out by operators, the demand for telecom equipment has increased. In an attempt to capitalize on this opportunity, the government and policymakers are focusing on developing the domestic manufacturing industry. The Indian equipment manufacturing sector has come a long way in the past few years. From being an import-centric industry, it is slowly but steadily moving towards becoming a global telecom equipment manufacturing hub.
- **The government is offering** various sops to industry to boost domestic manufacturing in the field of electronics.
- **According to a report** by leading research firm Market Research Store, the Indian telecommunication services market will likely grow by 10.3 per cent year-on-year to reach US\$ 103.9 billion by 2020.

National Test House [NTH],

- **The National Test House [NTH]**, formerly known as Government Test House was established long way back in 1912 in Calcutta by the then Railway Board to cater to the needs of the Indian Railways by import substitution. During 1916-1918 the Indian Industrial Commission recommended for an Indian Stores Department and the same was formed which absorbed NTH for regular testing of the general stores required by the Government Departments including Defense Department for a long period. In 1934 the Industrial Intelligence and Research Bureau later re-designated as Industrial Research Bureau, the genesis of modern CSIR, was formed by the Government of India and was housed and nurtured in NTH for conducting researches on problems directly connected with the indigenous development of raw materials.
- **Thus NTH** has travelled a long way and has established its importance in the panorama of the Indian industry. Since independence the responsibilities of NTH have increased manifold. It has been actively involved in all aspects of technology connected with industry, commerce, trade, import substitution, export promotion and standardization. NTH has been an active partner in standardization and formulation of National Standards and has the proud privilege of assisting Indian Standards Institution presently known as Bureau of Indian Standards since its very inception in 1947. NTH is also actively involved in rendering assistance to NABL in accreditation of Testing and Calibration Laboratories in the country.
- **To serve** the long felt necessities of the Indian industry spreading over this vast subcontinent, it was envisaged to open Regional Test Houses in various parts of the country. The NTH has now six regional Laboratories located in the Eastern, Western, Southern, Northern, North West and North East of the country.

Telecom Equipment and Services Export Promotion Council (TEPC)

- **Telecom Equipment and Services Export Promotion Council (TEPC)** has been set up by the Government of India to promote and develop export of Telecom Equipment and Services.
- **TEPC as a Council** plays a critical role in furtherance of Telecom export from India and assist Indian member companies in easy facilitation of their respective exports. The Council caters to the complete Telecom Ecosystem including Telecom Hardware Manufacturing, Telecom Service Provision, Telecom Software, and Consultancy. It thus represents the strength of Equipment Manufacturers, System Integrators, Service Providers and other stakeholders in the telecom domain.
- **TEPC recognizes** the strengths of building a design-led manufacturing ecosystem for telecom products and the Government is committed to further support the creation of domestic products and enable manufacturing with high domestic value-addition. India is poised for another digital revolution given the massive thrust on "Make in India" initiative & launch of "Digital India" campaign, which creates a large opportunity for innovative products and services.



'HAUSLA-2018' inaugurated in the Capital, today More than 600 Children from CCIs across the country are taking part in the National Festival for Children

- **The National Festival for Children of Child Care Institutions (CCIs)-** "Hausla 2018" of the Ministry of Women and Child Development (MWCD) was inaugurated by the Secretary, Shri Rakesh Srivastava, today in New Delhi. The inter-Child Care Institution festival is witnessing participation of more than 600 Children drawn from CCIs from 18 states in the various events like painting competition, athletics meet, football, chess competition and speech writing as part of the Festival.
- **Speaking at the 4 dayEvent,** from 26 to 29th November 2018, Secretary MWCD said that the idea behind the entire event is to provide a national platform for the children from CCIs across India to showcase their talent, to make them realise the hidden talent they possess and to help take it forward in their life. He said that this event would instil confidence in them to achieve greater heights in life. He also resolved to make the event like Hausla even stronger. He also said that the event shall inspire children of Child Care Institutions so that they can reach the National Stage for expressing their capabilities. The theme for the event is "Child Safety".
- **Children** will be participating in various events like Debate, painting competition, athletics meet, football, chess competition and Safe Neighborhood Day. CIF and NIPCCD will be assisting the Ministry in organizing the events.
- **The details of the proposed events are as follows:** Painting Competition on 26th November 2018: The creative talent in children is infinite and amazing, so much so that even the entire universe may seem like a small canvas to them. A creative activity like painting also helps in the development of the brain of a child. Expressing themselves through painting allows children to take part in an activity that is fun and fulfilling. It encourages them to look at situations with an open & creative mind. With this background in consideration, a painting competition is being organized by the Ministry of Women and Child Development on 26th November, 2018 for children from all the Child Care Institutions across the country at NIPCCD. The paintings will be judged by a panel of three judges.
- **Debate Competition** on 26th November, 2018: In today's competitive space where excellence is a cliché, it is wise to make children aware as well as ready for the outer world. Perhaps, there are ways in which children compete and succeed. But individual expression has become very limited. Today's children are largely engrossed in technology, leaving behind the real interaction. This is why it is necessary to encourage children into participating in activities like debates which shall have a long-term impression on a child's self-expression. In this regard, a debate competition is being organized by the Ministry of Women and Child Development on 26th November, 2018 at NIPCCD. The children shall be judged by a panel of three judges.
- **3. Athletics Meet, Chess Competition and Football Matches** on 28-29 November 2018: Through play, children explore, invent and create. They also develop social skills, learn to express their emotions, and gain confidence about their own capabilities. The Ministry is organizing athletics meet (100 meters race, 200 m race, 100 x 4 meter relay race, long jump, high jump), chess competition and football matches for boys and girls from CCIs. The events will be organized at JawaharLal Nehru Stadium, New Delhi.
- **To encourage children, prominent sportsperson might also be invited on 28th November 2018 (morning) to inaugurate sports meet along with Secretary, WCD.** 4. Safe Neighborhood Project Day on 27th November 2018: It is not just the home environment that influences a child; the neighborhood in which he/she lives does too. A close-knit neighborhood can provide a sense of belonging, safety, and support. Feeling safe in the neighborhood is important for mental health and overall well-being and is linked to lower rates of mental illness, greater social interaction, and neighborhood trust. This activity is aimed to empower and inspire children to voice their opinions on what they perceive as Safety in a Neighborhood. The children will make models, do role-play, theatre, skit, sing, dance etc. on the subject. The children shall be judged by a panel of judges from MWCD.
- **The Concluding Ceremony** on 29th November 2018: The four-day long celebration will culminate through the concluding ceremony which will be organized on 29th November (evening) at Siri Fort Auditorium, HauzKhas, New Delhi. The event will include a cultural programme by the children of CCIs, presentation of Best State Team Award based on performance during Hausla 2018 and Prize distribution to all winners of each individual event by Hon'ble Minister, WCD.

"Paisa – Portal for Affordable Credit & Interest Subvention Access", Launched Under Day-NULM

- **All 35 States / UTS & All Scheduled Commercial Banks, RRBS/Cooperative Banks Likely to be on Board Paisa Portal by Year End**

- **A centralized electronic platform for processing interest subvention on bank loans to beneficiaries under Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM)** named “PAiSA – Portal for Affordable Credit and Interest Subvention Access”, was launched here today. The web platform has been designed and developed by Allahabad Bank which is the Nodal bank. Launching the portal, Sh Durga Shankar Mishra, Secretary, Ministry of Housing and Urban Affairs said, “PAiSA is yet another effort by the government to connect directly with the beneficiaries, ensuring that there is greater transparency and efficiency in delivery of services. DBT of subvention on monthly basis under DAY-NULM will give the necessary financial support to small entrepreneurs in a timely manner”.
- **The portal was launched during the course of a day long National Workshop on Municipal Finance and Urban Planning** organised by the Ministry of Housing and Urban Affairs and provided a platform to identify key areas of concern regarding municipal finance and urban planning, and exploring the options available to resolve them by inviting senior officials / experts to shed light on best practices. More than 300 delegates comprising officers from the States, Urban Local Bodies, Town Planning Offices across the country and Banks participated in the workshop.
- **All 35 states** / UTs & all scheduled commercial banks, RRBs and Cooperative Banks are expected to be on board the PAiSA portal the year end.

National Medicinal Plants Board (NMPB)

- **India has 15 Agroclimatic zones** and 17000-18000 species of flowering plants of which 6000-7000 are estimated to have medicinal usage in folk and documented systems of medicine, like Ayurveda, Siddha, Unani and Homoeopathy. About 960 species of medicinal plants are estimated to be in trade of which 178 species have annual consumption levels in excess of 100 metric tones. The National Medicinal Plants Board (NMPB) set-up in November 2000 by the Government of India has the primary mandate of coordinating all matters relating to medicinal plants and support policies and programmes for growth of trade, export, conservation and cultivation. The Board is located in the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy (AYUSH) of the Ministry of Health & Family Welfare.
- **The NMPB Portal** is an attempt to collect under one umbrella the entire knowledge base on plants and herbs after appropriate verification and empirical validation of all available therapeutic knowledge of the flora in India. This is being done by the collaborative efforts of some of the leading Indian Institutions and private and public stake holders. NMPB has over several open houses events studies and meeting with diverse groups of persons and organisations has been able to create this repository which is an ongoing exercise adding new information both scientific, and commercial.
- **In addition, integration** and reorientation of some existing databases to bring them under the umbrella of the common portal for easy one point access to this repository of knowledge. This Portal envisages the dissemination of knowledge in creating sustainable cultivation, collection, packaging and distribution methods to ensure that active ingredients are retained at their optimum yields. At the same time ensuring that communities involved in the cultivation, procurement and Intellectual Property Rights (IPR) get their true value in return.

International Day for the Elimination of Violence against Women (IDEVAW)

- **Aim:** To raise awareness about violence against women and girls, end violence against women. It also seeks to show that prevention is possible against violence of women.
- **Theme and its significance:** “Orange the World: #HearMeToo”. It aims to reinforce UNITE Campaign’s commitment to create world free from violence for all women and girls and reaching out to most marginalized people including migrants, refugees, indigenous peoples, minorities and populations affected by natural disasters and conflicts.
- **Background:** International Day for the Elimination of Violence against Women was instituted by United Nations General Assembly (UNGA) in December 1999. This day is commemorated in memory of Mirabal sisters who were three political activists from Dominican Republic. They were brutally assassinated during the Rafael Trujillo dictatorship (1930-1961) in 1960.
- **Why we must eliminate violence against women?** Violence against women and girls (VAWG) is one of the most widespread, persistent and devastating human rights violations in our world today, remains largely unreported due to the impunity, silence, stigma and shame surrounding it.
- **In general terms,** it manifests itself in physical, sexual and psychological forms, encompassing: Intimate partner violence (battering, psychological abuse, marital rape, femicide). Sexual violence and harassment (rape, forced sexual acts, unwanted sexual advances, child sexual abuse, forced marriage, street harassment, stalking, cyber- harassment). Human trafficking (slavery, sexual exploitation). Female genital mutilation. Child marriage.
- **Violence against women- definition:** The Declaration on the Elimination of Violence Against Women issued by the UN General Assembly in 1993, defines violence against women as “any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life.”

- **Alarming Figures:** 1 in 3 women and girls experience physical or sexual violence in their lifetime, most frequently by an intimate partner. Only 52% of women married or in a union freely make their own decisions about sexual relations, contraceptive use and health care. Worldwide, almost 750 million women and girls alive today were married before their 18th birthday; while 200 million women and girls have undergone female genital mutilation (FGM).
- **1 in 2 women killed worldwide** were killed by their partners or family in 2012; while only 1 out of 20 men were killed under similar circumstances. 71% of all human trafficking victims worldwide are women and girls, and 3 out of 4 of these women and girls are sexually exploited. Violence against women is as serious a cause of death and incapacity among women of reproductive age as cancer, and a greater cause of ill health than traffic accidents and malaria combined.

Titli cyclone is 'rarest of rare'

- **Why?** More than 200 years of cyclone track history in the Odisha coast reveals that the Titli cyclone is the rarest of rare in terms of its characteristics such as recurvature after landfall and retaining its destructive potential after landfall and recurvature away from the coastal areas for more than two days.
- **Background:** Earlier, India Meteorological Department had called the formation of Titli as a 'rarest of rare' occurrence. The severe cyclone had changed its path after landfall.
- **What can we learn from this?** The Odisha State Disaster Management Authority (OSDMA) faced challenges in anticipating and managing Titli's impact due to lack of impact-based actionable early warning information and prior experience not only in India but also elsewhere. The OSDMA, by learning the lessons from Titli cyclone, could evolve measures to minimise impacts in both coastal and non-coastal regions more effectively in future.
- **The RIMES** has recommended that a detailed risk assessment has to be carried out for Odisha to understand the risks in the light of the Titli devastation.
- **About RIMES:** RIMES, is an inter-governmental body registered under the United Nations. It is being owned and managed by 45 collaborating countries in Asia Pacific and Africa Region. The programme unit of the agency is located in Thailand. At present, India is chairing RIMES.
- **RIMES evolved** from the efforts of countries in Africa and Asia, in the aftermath of the 2004 Indian Ocean tsunami, to establish a regional early warning system within a multi-hazard framework for the generation and communication of early warning information, and capacity building for preparedness and response to trans-boundary hazards.

Constitution Day of India

- **What is Constitution day?** Constitution day which is also known as the Samvidhan Divas is celebrated every year on November 26 to mark the day on which the Constitution of India was adopted. While the adoption of the Constitution took place on November 26, 1949, it came into effect on January 26, 1950.
- **The draft of the constitution** was prepared by the drafting committee under BR Ambedkar's aegis. According to the government notification, the Constitution Day was also a tribute to Ambedkar.
- **Earlier, this day was commemorated as National Law Day**, after a resolution by the Supreme Court Bar Association, a lawyers' body, in 1979.
- **Celebrations this year:** With the collective efforts of the Buddhist Association for the blind and the Saavi Foundation and Swagat Thorat, for the first time the constitution will be made available in Braille. As part of the joint project, the constitution will be made available in five parts in Braille for the benefit of visually challenged individuals.

ZSI report on Andaman & Nicobar Islands fauna

- **Key highlights of the report:** The documentation proves that the islands, comprising only 0.25% of India's geographical area, are home to more than 10% of the country's fauna species. It has 11,009 species.

- **Endemic species:** The Narcondam hornbill, its habitat restricted to a lone island; the Nicobar megapode, a bird that builds nests on the ground; the Nicobar treeshrew, a small mole-like mammal; the Long-tailed Nicobar macaque, and the Andaman day gecko, are among the 1,067 endemic faunal species found only on the Andaman and Nicobar Islands and nowhere else.
- **Among birds, endemism is quite high**, with 36 among 344 species of birds found only on the islands. Many of these bird species are placed in the IUCN Red List of threatened species under the Wildlife Protection Act (WPA).
- **Endemic reptiles:** Eight species of amphibians and 23 species of reptiles are endemic to the islands, and thus are at high risk of being threatened.
- **Marine faunal diversity:** Includes coral reefs and its associated fauna. In all, 555 species of scleractinian corals (hard or stony corals) are found in the island ecosystem, all which are placed under Schedule I of the WPA. Similarly, all species of gorgonian (sea fans) and calcareous sponge are listed under different schedules of the WPA.
- **Concerns:** The publication cautions that tourism, illegal construction and mining are posing a threat to the islands' biodiversity, which is already vulnerable to volatile climatic factors. Some of the species in A&N Islands are restricted to a very small area and thus more vulnerable to any anthropogenic threat. Any stress can have a long-lasting impact on the islands' biodiversity, devastating the population size of any endemic fauna, followed by extinction within a limited span of time.
- **Vulnerable species:** Of the ten species of marine fauna found on the islands, the dugong/sea cow, and the Indo-Pacific humpback dolphin, are both classified as Vulnerable under the IUCN (International Union for Conservation of Nature) Red List of Threatened Species. Among the 46 terrestrial mammalian species found, three species have been categorised as Critically Endangered — Andaman shrew (*Crocidura andamanensis*), Jenkin's shrew (*C. jenkinsi*) and Nicobar shrew (*C. nicobarica*). Five species are listed as Endangered, nine species as Vulnerable, and one species as Near Threatened, according to the IUCN.
- **Background:** The total area of the A&N Islands, which comprises of 572 islands, islets and rocky outcrops, is about 8,249 sq. km. The population of the islands, which includes six particularly vulnerable tribal groups (PVTGs) — Great Andamanese, Onge, Jarawa, Sentinelese, Nicobarese and Shompens — is not more than 4 lakh.
- **What's made the location more vulnerable?** In a recent development, the Government of India relaxed the Restricted Area Permit (RAP) norms for some foreign nationalities notified under the Foreigners (Restricted Areas) Order, 1963, to visit 29 of its inhabited islands, till December 31, 2022. This has triggered further concerns of increased anthropogenic pressures over the islands' ecosystem. Some of the islands removed from the RAP list have no habitation except PVTG like Sentinelese in case of North Sentinel Island.
- **The development** paradigm that is being pushed for this place at the macro level, such as tourism, construction and development of military, are not taking in account three factors — ecological fragility of the area (the endemism), geological volatility (earthquakes and tsunamis), and the impact they will have on local communities.

SSB to patrol Dudhwa tiger reserve

- **How will it be done?** It has been agreed that joint long route patrolling comprising SSB, Special Tiger Protection Force (STPF) and Dudhwa Tiger Reserve (DTR) field staff would be held at regular intervals.
- **Stress** will be laid on intelligence and information sharing among various security agencies about activities of wildlife and forest criminals. A mechanism to establish SSB border outpost level communication and information sharing will be developed to strengthen the safety of Dudhwa.
- **Dudhwa Tiger Reserve:** It is protected area in Uttar Pradesh that stretches mainly across the Lakhimpur Kheri and Bahraich districts. It comprises Dudhwa National Park, Kishanpur Wildlife Sanctuary and Katarniaghat Wildlife Sanctuary. It shares north-eastern boundary with Nepal, which is defined to large extent by Mohana River.
- **The area is vast Terai alluvial floodplain** traversed by numerous rivers and streams flowing in south-easterly direction. Faunal diversity: Apart from tigers, it is also home to swamp deer, sambar deer, barking deer, spotted deer, hog deer, Indian rhinoceros, sloth bear, ratel, jackal, civets, jungle cat, fishing cat, etc.
- **Sashastra Seema Bal (SSB):** It is Central Armed Police Force (CAPF) entrusted with guarding country's border with Nepal and Bhutan. It was established in 1963 and functions under administrative control of Ministry of Home Affairs (MHA). Its headquarters are in New Delhi.
- **It has specialist** jurisdictions for national border patrol, security, and integrity.

Scientists mull stratospheric barrier to curb global warming

- **This geo-engineering** technique known as stratospheric aerosol injection (SAI) could limit rising temperatures that are causing climate change.
- **What are Stratospheric Sulphur Aerosols?** Stratospheric sulfur aerosols are sulfur-rich particles which exist in the stratosphere region of the Earth's atmosphere. The layer of the atmosphere in which they exist is known as the Junge layer, or simply the stratospheric aerosol layer.
- **These particles** consist of a mixture of sulfuric acid and water. They are created naturally, such as by photochemical decomposition of sulfur-containing gases, e.g. carbonyl sulfide.
- **Sulfur aerosols** are common in the troposphere as a result of pollution with sulfur dioxide from burning coal, and from natural processes. Volcanoes are a major source of particles in the stratosphere as the force of the volcanic eruption propels sulfur-containing gases into the stratosphere.
- **What is Stratospheric Aerosol Injection (SAI)?** Under SAI delivery of precursor sulfide gases such as sulfuric acid, hydrogen sulfide (H₂S) or sulfur dioxide (SO₂) are sprayed by artillery, aircraft and balloons.
- **It would involve the use of huge hoses**, cannons or specially designed aircraft to spray large quantities of sulphate particles into the upper layer of the atmosphere to act as a reflective barrier against sunlight.
- **Total costs** estimated to launch a hypothetical SAI effort 15 years from now would be \$3.5 billion and average annual operating costs would be about \$2.25 billion a year over 15 years.
- **Discounting other methods** of deployment because of cost and feasibility, the research assumes a special aircraft can be designed to fly at an altitude of about 20 km and carry a load of 25 tonnes.
- **Significance:** This proposed method could counter most climatic changes, take effect rapidly, have very low direct implementation costs, and be reversible in its direct climatic effects.
- **Benefits of the SAI:** Mimics a natural process. It is technologically feasible. The method is economically feasible and efficient.
- **Possible side effects:** Tropospheric Ozone depletion. Whitening of the sky. Tropopause warming and the humidification of the stratosphere. Involves Health effects. Stratospheric temperature rise and circulation change.

Impact Based Forecasting Approach

- **The technique** is designed to forecast the expected impact as a result of expected weather. Hazard and vulnerability are taken into consideration in this forecast approach.
- **Need:** The heavy downpour had led to floods in Kerala and was result of climate change. State Government had blamed IMD for lapses in its part for wrong rain forecast. IMD had forecasted estimated 98.5 mm rain in the state between 9 and 15 August, 2018 but Kerala received was 352.2 mm of rainfall resulting in severe flooding.
- **Significance:** Pre-event scenario will help state governments authorities to minutely monitor impact of rainfall and take real-time decisions. It will help to avoid disastrous situation similar to Kerala floods. It can generate scenario to help take decisions to release water or not from reservoirs after heavy downpour. It will be helpful for every state authority to take decision. This system can be run in pre-event scenario.
- **India Meteorological Department (IMD):** It is national meteorological service of the country and chief government agency dealing in everything related to meteorology, seismology and associated subjects. It was formed in 1875. It functions under Ministry of Earth Sciences. It is headquartered in New Delhi.
- **Mandate:** Undertake meteorological observations and provide current information and forecasting information for most favourable operation of weather-dependent activities such as irrigation, agriculture, aviation, shipping etc. Offer warning against severe weather phenomenon such as tropical cyclones, norwesters, dust storms, heat waves, cold waves, heavy rains, heavy snow, etc.
- **Provide met-related** statistics needed for agriculture, industries, water resources management, oil exploration, and any other strategically important activities for the country.
- **Engage in research in meteorology and allied subjects.** Detect and locate earthquakes and evaluate of seismicity in various parts of the country for developmental projects.

Admiral Sunil Lanba, Chief of the Naval Staff to Visit Russia (From 26 to 29 November 2018)

- **To consolidate bilateral defence relations** with Russia, and To explore new avenues for defence cooperation.
- **Background:** The Indian Navy and the Russian Federation Navy cooperates on many aspects like operational interactions, training, hydrography cooperation and exchange of Subject Matter Experts in various fields through the medium of Navy-to-Navy staff Talks.
- **They both** have conducted bilateral Maritime Exercise 'INDRA NAVY', since 2003, followed by INDRA Tri-Services Exercise since 2017 (Next edition of INDRA NAVY Exercise is scheduled at Viskhatpatnam in December 2018).

Government Brought Most Public Authorities Under RTI Act

- **Department of Personnel and Training (DOP&T):** It is the nodal department for the Right to Information and Central Information Commission. So far it has successfully covered nearly 2000 public authorities under the RTI Act.
- **Background:** Right to Information Act 2005 mandates timely response to citizen requests for government information.
- **It is an initiative** taken by Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions to provide a RTI Portal Gateway to the citizens for quick search of information on the details of first Appellate Authorities, PIO, etc.
- **It replaces the erstwhile Freedom of information Act, 2002.** Under the provisions of the Act, any citizen of India may request information from a "public authority" (a body of Government or "instrumentality of State") which is required to reply expeditiously or within thirty days. The Act also requires every public authority to computerise their records for wide dissemination.
- **The Act is applicable to whole of India except Jammu and Kashmir.** Objective of the RTI Act: To empower the citizens, promote transparency and accountability in the working of the Government, contain corruption, and make our democracy work for the people in real sense. It is a big step towards making the citizens informed about the activities of the Government.

New species of shark identified in Indian Ocean:

- **A new species** of a deep sea shark- the Pygmy false catshark, has been found in the northern Indian Ocean, the first such discovery in India since 2011 when the Mangalore houndshark was identified.
- **The Pygmy false catshark** is currently known only from deep waters (200-1000m depth) and has a length of about 65cm. It is dark brown without any prominent patterns.
- **The new species** was found off the southwestern coast of India and north of Sri Lanka.
- **Its scientific name is Planonassus indicus** – from 'planus' meaning flat and 'nassus' meaning nose.
- **The new species** was first observed was on April 26, 2008, when it was caught in fishing nets in Kochi, Kerala.

70-feet tall statue of Lord Buddha unveiled at Rajgir in Nalanda district:

- **Bihar Chief Minister Nitish Kumar** has unveiled 70-foot tall statue of Lord Buddha at Rajgir in Nalanda district of state. It is second tallest statue of Buddha in the country.
- **Key Facts:** The statue has been installed above 16 metre radius pedestal in middle of lake Ghora Katora. Ghora Katora is natural lake surrounded by five hills. It has been made from 45,000 cubic foot pink sand stone.

Odisha now has a lexicon for rare tribal languages:

- **The Odisha government has come out with lexicons of 21 tribal languages.** The bilingual tribal dictionaries will be used in multilingual education (MLE) initiated by the State government at the elementary level in tribal-dominated districts.
- **The bilingual tribal** dictionaries for MLE and trilingual tribal language proficiency modules in all the 21 tribal languages have been formulated by the Special Development Council. Both will help in enhancing proficiency in tribal languages.
- **Background:** Odisha has a unique place on the tribal map of India for having the maximum number of Scheduled Tribe communities. The State is home to 62 different tribal communities, including 13 particularly vulnerable tribal groups. These tribes speak 21 languages and 74 dialects. Of the 21 tribal languages, seven have their own scripts. However, Odia is used as the medium of communication in the dictionaries.



Insolvency and Bankruptcy Board of India

- **The Insolvency and Bankruptcy Board** of India was established on 1st October, 2016 under the Insolvency and Bankruptcy Code, 2016 (Code). It is a key pillar of the ecosystem responsible for implementation of the Code that consolidates and amends the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of the value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders. It is a unique regulator: regulates a profession as well as processes. It has regulatory oversight over the Insolvency Professionals, Insolvency Professional Agencies, Insolvency Professional Entities and Information Utilities. It writes and enforces rules for processes, namely, corporate insolvency resolution, corporate liquidation, individual insolvency resolution and individual bankruptcy under the Code. It has recently been tasked to promote the development of, and regulate, the working and practices of, insolvency professionals, insolvency professional agencies and information utilities and other institutions, in furtherance of the purposes of the Code. It has also been designated as the 'Authority' under the Companies (Registered Valuers and Valuation Rules), 2017 for regulation and development of the profession of valuers in the country.

POWERS AND FUNCTIONS OF THE BOARD

- (a) Register insolvency professional agencies, insolvency professionals and information utilities and renew, withdraw, suspend or cancel such
- (aa) promote the development of, and regulate, the working and practices of, insolvency professionals, insolvency professional agencies and in
- (b) Specify the minimum eligibility requirements for registration of insolvency professional agencies, insolvency professionals and informatio
- (c) Levy fee or other charges for carrying out the purposes of this Code, including fee for registration and renewal of insolvency professiona
- (d) Specify by regulations standards for the functioning of insolvency professional agencies, insolvency professionals and information utiliti
- (e) Lay down by regulations the minimum curriculum for the examination of the insolvency professionals for their enrolment as members of the i
- (f) Carry out inspections and investigations on insolvency professional agencies, insolvency professionals and information utilities and pass
- (g) Monitor the performance of insolvency professional agencies, insolvency professionals and information utilities and pass any directions as
- (h) Call for any information and records from the insolvency professional agencies, insolvency professionals and information utilities.
- (i) Publish such information, data, research studies and other information as may be specified by regulations.
- (j) Specify by regulations the manner of collecting and storing data by the information utilities and for providing access to such data.
- (k) Collect and maintain records relating to insolvency and bankruptcy cases and disseminate information relating to such cases.
- (l) Constitute such committees as may be required including in particular the committees laid down in section 197.
- (m) Promote transparency and best practices in its governance.
- (n) Maintain websites and such other universally accessible repositories of electronic information as may be necessary.
- (o) Enter into memorandum of understanding with any other statutory authorities
- (p) Issue necessary guidelines to the insolvency professional agencies, insolvency professionals and information utilities.
- (q) Specify mechanism for redressal of grievances against insolvency professionals, insolvency professional agencies and information utilities
- (r) Conduct periodic study, research and audit the functioning and performance of to the insolvency professional agencies, insolvency professi
- (s) Specify mechanisms for issuing regulations, including the conduct of public consultation processes before notification of any regulations.
- (t) Make regulations and guidelines on matters relating to insolvency and bankruptcy as may be required under this Code, including mechanism f
- (u) Perform such other functions as may be prescribed.
- (2) The Board may make model bye-laws to be to adopted by insolvency professional agencies which may provide for-
- (a) The minimum standards of professional competence of the members of insolvency professional agencies.
- (b) The standards for professional and ethical conduct of the members of insolvency professional agencies.
- (c) Requirements for enrolment of persons as members of insolvency professional agencies which shall be non-discriminatory. Explanation.-For t
- (d) The manner of granting membership.
- (e) Setting up of a governing board for internal governance and management of insolvency professional agency in accordance with the regulation
- (f) The information required to be submitted by members including the form and the time for submitting such information.
- (g) The specific classes of persons to whom services shall be provided at concessional rates or for no remuneration by members.
- (h) The grounds on which penalties may be levied upon the members of insolvency professional agencies and the manner thereof.
- (i) A fair and transparent mechanism for redressal of grievances against the members of insolvency professional agencies.
- (j) The grounds under which the insolvency professionals may be expelled from the membership of insolvency professional agencies.
- (k) The quantum of fee and the manner of collecting fee for inducting persons as its members.
- (l) The procedure for enrolment of persons as members of insolvency professional agency.
- (m) The manner of conducting examination for enrolment of insolvency professionals.
- (n) The manner of monitoring and reviewing the working of insolvency professional who are members.
- (o) The duties and other activities to be performed by members.
- (p) The manner of conducting disciplinary proceedings against its members and imposing penalties.
- (q) The manner of utilising the amount received as penalty imposed against any insolvency professional.
- 3) Notwithstanding anything contained in any other law for the time being in force, while exercising the powers under this Code, the Board sha

- (a) The discovery and production of books of account and other documents, at such place and such time as may be specified by the Board.
- (b) Summoning and enforcing the attendance of persons and examining them on oath.
- (c) Inspection of any books, registers and other documents of any person at any place.
- (d) Issuing of commissions for the examination of witnesses or documents

National CSR Data Portal

- **The National Corporate Social Responsibility Data Portal** is an initiative by Ministry of Corporate Affairs, Government of India to establish a platform to disseminate Corporate Social Responsibility related data and information filed by the companies registered with it.
- **The Corporate Social Responsibility** concept in India is governed by Section 135 of the Companies Act, 2013 and Rules made thereunder wherein the criteria has been provided for assessing the CSR eligibility of a company, Implementation and Reporting of their CSR Policies. India having the most elaborated CSR mechanism and implementation strategy has started its journey to set a benchmark in attaining sustainability goals and stakeholder activism in nation building.

What is INGRAM (consumerhelpline.gov.in)?

- **This website** has been launched by the Department of Consumer Affairs to create awareness, advise and redress consumer grievances and act as a central registry for lodging consumer complaints. Though all efforts will be made to address these complaints, all complaints may not be fully or satisfactorily resolved.
- **Contents of links to sites** outside this web portal, are not the responsibility of the Department. All rights are reserved.
- **No part of this web portal**, can be reproduced / copied without the prior approval of the Department of Consumer Affairs. This portal is an alternate dispute redressal mechanism. In case, the consumer is not satisfied, he/she can approach the appropriate Consumer Commission/Fora.
- **The Department of Consumer Affairs** has launched this portal as an integrated Grievance Redress Mechanism (INGRAM) for bringing all Stakeholders such as Consumers, Central and State Government Agencies, Private Companies, Regulators, Ombudsmen and call centres etc. onto a single platform. The portal will also help in creating awareness among consumers to protect their rights and inform them of their responsibilities. Consumers can register online their grievances through this portal.

Raksha Mantri Launches 'Mission Raksha Gyan Shakti'

- **Raksha Mantri Smt Nirmala Sitharaman** has formally launched 'Mission Raksha Gyan Shakti', here today. The event showcased salient inventions and innovations achieved by Defence Research and Development Organisation (DRDO), Defence Public Sector Undertakings (DPSUs) and Ordnance Factories (OFs) which have resulted in successful filing of Intellectual Property Right (IPR) applications.
- **Smt Sitharaman** also felicitated some of the scientists, who invented and innovated useful products for the nation. A panel discussion was held with participation of Chairman and Managing Directors of all DPSUs to formulate a strategy for the future in this regard.
- **While addressing the audience, Raksha Mantri** lauded the efforts of Department of Defence Production and Directorate General Quality Assurance (DGQA) for focused efforts in spreading awareness about IPR, thus promoting a culture of innovation and creation of Intellectual Property.

- **Smt Sitharaman** highlighted that while India has always been a knowledge hub since ancient times, however, due to lack of awareness on modern legal framework for protection of IP rights, our knowledge and creativity have often not been utilised to its full potential. Delivering the keynote address, Secretary Defence Production Dr Ajay Kumar highlighted the need to migrate from the culture of seeking Transfer of Technology (ToT) from foreign sources to generating Intellectual Property in India, to achieve the goal of self-reliance in Defence sector.
- **The IPR has emerged** as a key ingredient of an ecosystem which stimulates innovation and ingenuity. An IP Facilitation Cell was established in April this year which has worked tirelessly to achieve ambitious targets of training 10,000 personnel of OFB and DPSUs on IPR and to facilitate filing of at least 1,000 new IPR applications.



NATIONAL CULTURE FUND

- **India has many strands to its cultural heritage**, which require to survive, grow and evolve as living cultures.
- **Factors such as the pace of socio-economic** and environmental changes and the advent of new technologies are posing unprecedented threats to the continuity of these cultural heritages. Increasing awareness of these threats have brought about demands from communities not only to preserve and renew their languages, traditions and culture, but also to reinvigorate their cultural identity and creativity.
- **In view of the increasing concern** of the community to preserve and promote our heritage and to enable them to participate and contribute to its promotion, it was considered necessary to set up an organization which would facilitate and support institutions and individuals in this endeavour.
- **The National Culture Fund (NCF)** was established as a funding mechanism distinct from the existing sources and patterns of funding for the arts and culture in India. It will enable institutions and individuals to support arts and culture directly as partners with its government.
- **The National Culture Fund (NCF)** was created as a Trust in November 1996. The Govt. of India vide their orders in Aug.-Sep.98 notified that the donations to the national Culture Fund will be eligible for tax benefit under section 10 (23C) (iv) and 80 G(2) of the Income Tax Act.
- **NATIONAL CULTURE FUND** Set up by the Government of India, Ministry of Ministry of Human Resource Development, Department of Culture under the Charitable Endowments Act, 1890
- **OBJECTIVES** The NCF endeavours to: Preserve and promote our precious tangible and Intangible heritage in partnership with the community.
- **The NCF is managed and administered by a council** to decide the policies and an Executive Committee – to actualize those policies. The Council is chaired by the Union Minister of Tourism & Culture and has a maximum strength of 24 including both the Chairman and Member Secretary, A team of 19 members represent various fields including corporate sector, private foundations and not-for-profit voluntary organizations. The purpose for this structure is to increase non-government representation in the decision making process.

Article 370

- **What was the plea all about?** The petition sought a declaration that Article 370 of the Constitution had lapsed with the dissolution of constituent assembly of Jammu and Kashmir on January 26, 1957 and it cannot be treated as mandatory for exercise of powers of the President.
- **The plea** has also sought that the Constitution of Jammu and Kashmir be declared as "arbitrary, unconstitutional and void", claiming that it was against the supremacy of the Indian Constitution and contrary to the dictum of "One Nation, One Constitution, One National Anthem and One National Flag". It has sought declaring as arbitrary some provisions of the Jammu and Kashmir Constitution, which deals with permanent residency and flag of the valley among other issues, for being violative of the Preamble and the Indian Constitution.
- **The petition** has said that continuance of two parallel constitutions, one for the Centre and other for the state of Jammu and Kashmir, "reeks of a weird dichotomy" as most of the provisions of the Indian Constitution has already been extended to the state.
- **It has alleged** that due to vote bank politics, successive governments did nothing to repeal Article 370 and Constitution of Jammu and Kashmir was adopted much after the Indian Constitution came into force. It also added that the instrument of accession of October 26, 1947 does not talk about separate Constitution or constituent assembly for the state.
- **What is Article 370?** Article 370 of the Indian Constitution is a 'temporary provision' which grants special autonomous status to Jammu & Kashmir. Under Part XXI of the Constitution of India, which deals with "Temporary, Transitional and Special provisions", the state of Jammu & Kashmir has been accorded special status under Article 370. All the provisions of the Constitution which are applicable to other states are not applicable to J&K.

- **Important provisions under the article:** According to this article, except for defence, foreign affairs, finance and communications, Parliament needs the state government's concurrence for applying all other laws. Thus the state's residents live under a separate set of laws, including those related to citizenship, ownership of property, and fundamental rights, as compared to other Indians.
- **Indian citizens from other states cannot purchase land or property in Jammu & Kashmir.** Under Article 370, the Centre has no power to declare financial emergency under Article 360 in the state. It can declare emergency in the state only in case of war or external aggression. The Union government can therefore not declare emergency on grounds of internal disturbance or imminent danger unless it is made at the request or with the concurrence of the state government.
- **Under Article 370, the Indian Parliament cannot increase or reduce the borders of the state.** The Jurisdiction of the Parliament of India in relation to Jammu and Kashmir is confined to the matters enumerated in the Union List, and also the concurrent list. There is no State list for the State of Jammu and Kashmir.
- **At the same time,** while in relation to the other States, the residuary power of legislation belongs to Parliament, in the case of Jammu and Kashmir, the residuary powers belong to the Legislature of the State, except certain matters to which Parliament has exclusive powers such as preventing the activities relating to cession or secession, or disrupting the sovereignty or integrity of India.
- **The power to make laws** related to preventive detention in Jammu and Kashmir belong to the Legislature of J & K and not the Indian Parliament. Thus, no preventive detention law made in India extends to Jammu & Kashmir. Part IV (Directive Principles of the State Policy) and Part IVA (Fundamental Duties) of the Constitution are not applicable to J&K.

Minimum Wages Act for domestic workers

- **Demands:** The petition asked the Supreme Court to lay down guidelines to protect the workers' rights. The petition sought the recognition of domestic work under the Minimum Wages Act, 1948. Their work hours should be reduced to eight a day and they should be given a mandatory weekly off as a basic right under Article 21.
- **Need for guidelines:** Indian homes have witnessed a 120% increase in domestic workers in the decade post liberalisation. While the figure was 7,40,000 in 1991, it has increased to 16.6 lakh in 2001.
- **However,** latent classism and lack of education make domestic workers prone to violence and abuse at the hands of their employers and placement agencies. Worsening their vulnerabilities are the absence of proper documentation, which also increases their reliance on employers to access social security benefits.
- **As employment** is largely through word of mouth or personal referrals, employment contracts are rarely negotiated, leaving the terms of employment to the whims of the employer. Other issues include- Major incidences of violence (physical and sexual) by employers and the lack of redressal machinery for workers in this rapidly developing domestic services industry.
- **Who is a domestic worker?** A domestic worker is a person who is involved in domestic work like cleaning, washing, cooking etc. He/she plays an important role in the wellbeing of the family but are often neglected and abused by the members of family and the society.
- **Way ahead:** If the domestic workers are taken as assets & human resource, their standard of living will increase if minimum wage is fixed. It is also important to create awareness about the significant role played by the domestic workers in the wellbeing of the members of family and society as a whole, thereby imparting behavioural change.
- **Background- International Labour Organisation's Convention 189 on Decent Work for Domestic Workers:** The ILO convention 189 on domestic workers mainly aims to provide domestic worker a decent working condition with daily and weekly (at least 24 h) rest hours, entitlement to minimum wage, to choose the place where they live and spend their leave and protective measures against violence etc.
- **Why India has not ratified the convention?** Daily household work is not considered as an economic activity in Indian society.
- **Lack of education,** awareness and domestic worker unions among domestic workers which are mainly women centric. Labour legislation comes under state government. The national laws and practices are not fully into conformity with the provisions of the Convention.
- **One of the clauses** of convention mentions "written contracts". Chances of misuse as many domestic workers are illiterate. Fear of misuse of unionisation: one of the clauses says "freedom of association and the effective recognition of the right to collective bargaining".

Prevention of Corruption Act

- **Background:** The amendments were: The introduction of S. 17 A (1) by which prior permission for investigation of corruption offences was required from the government. The removal of S. 13 (1) (d) (ii) (criminal misconduct) from the Act. It had earlier made it an offence for a public servant to abuse his position to give pecuniary or other advantage to a third party.
- **Highlights of the Prevention of Corruption (Amendment) Bill, 2018:** Punishment for bribe-taking enhanced: Minimum punishment of 3 yrs, extendable up to 7 yrs with fine; from the earlier 6 months, with extension up to 3 yrs. 'Undue Advantage' expanded: The earlier limited definition of "undue advantage" expanded to now include "anything other than legal remuneration".
- **Gifts criminalised:** Gifts received for established undue advantage/mala-fide motive are now considered an act of corruption.
- **Collusive bribe-givers criminalised:** For the first time, the giving of bribe has now been made a direct offence on par with taking of bribe. At the same time, protection has been built-in against coercive bribery, as long as the victim comes forward within 7 days.
- **Corporate bribery criminalised:** Superiors to be held if employee/agent has bribed with their approval, for advancement of the organisation's interests.
- **Immediate forfeiture:** Law enforcement empowered for immediate attachment & forfeiture of illegal property of a public servant, invoking provisions of the Prevention of Money Laundering Act (PMLA).
- **Timely trial mandated:** To conclude the investigation and trial within 2 yrs, extendable up to 4 yrs.

Regional Comprehensive Economic Partnership (RCEP)

- **Outcomes of the Singapore Ministerial Meeting:** India had scored big diplomatic points at the Singapore meeting by getting the countries gathered to omit the phrase 'significant conclusions' from the leaders' statements. Some major economies such as China and Japan felt that the phrasing should be that "substantial conclusions" had been achieved. India strongly opposed this.
- **Why India opposed?** India discovered that in some countries' trade parlance, 'substantial conclusions' is a legal terminology. Adopting the term would have implied that discussions on market access were over, and that those countries would have to disclose the discussions to their Parliaments, and to their public. This has serious implications because only five out of 16 chapters had been concluded, and after the meeting in Singapore only seven had been concluded. None of the 7 chapters settled had to do with market access, discussions on which would have been seriously jeopardised.
- **After India pointed this out,** several other countries such as Philippines, Indonesia, Malaysia, Vietnam, and Australia also took up the issue and supported India's position on the matter.
- **What you need to know about RCEP?** RCEP is proposed between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam) and the six states with which ASEAN has existing FTAs (Australia, China, India, Japan, South Korea and New Zealand).
- **RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.** Aim: RCEP aims to boost goods trade by eliminating most tariff and non-tariff barriers — a move that is expected to provide the region's consumers greater choice of quality products at affordable rates. It also seeks to liberalise investment norms and do away with services trade restrictions.
- **Why has it assumed so much significance in recent times?** When inked, it would become the world's biggest free trade pact. This is because the 16 nations account for a total GDP of about \$50 trillion and house close to 3.5 billion people. India (GDP-PPP worth \$9.5 trillion and population of 1.3 billion) and China (GDP-PPP of \$23.2 trillion and population of 1.4 billion) together comprise the RCEP's biggest component in terms of market size.
- **Why is India concerned?** Greater access to Chinese goods may have impact on the Indian manufacturing sector. India has got massive trade deficit with China. Under these circumstances, India proposed differential market access strategy for China.
- **There are demands by other RCEP countries** for lowering customs duties on a number of products and greater access to the market than India has been willing to provide.
- **Why India should not miss RCEP?** If India is out of the RCEP, it would make its exports price uncompetitive with other RCEP members' exports in each RCEP market, and the ensuing export-losses contributing to foreign exchange shortages and the subsequent extent of depreciation of the rupee can only be left to imagination. Some of the sectors that have been identified as potential sources of India's export growth impulses under RCEP to the tune of approximately \$200 billion.
- **There are more compelling trade and economic reasons for RCEP to become India-led in future,** than otherwise. India would get greater market access in other countries not only in terms of goods, but in services and investments also.

UN Central Emergency Response Fund

- **The U.N. Central Emergency Response Fund (CERF)** will support projects to provide nutritional support to children under five years old, pregnant women and lactating mothers at risk, and emergency health care for the vulnerable.
- **Need:** Venezuela has been in an economic depression for at least half a decade, adding to hyperinflation and mass food shortages. Millions of citizens have left Venezuela to find more opportunity in other Latin American countries.
- **About the UN Central Emergency Response Fund:** It is a humanitarian fund established by the United Nations General Assembly on December 15, 2005 and launched in March 2006.
- **With CERF's objectives** to 1) promote early action and response to reduce loss of life; 2) enhance response to time-critical requirements; and 3) strengthen core elements of humanitarian response in underfunded crises, CERF seeks to enable more timely and reliable humanitarian assistance to those affected by natural disasters and armed conflicts.
- **The fund is replenished** annually through contributions from governments, the private sector, foundations and individuals.
- **Allocations: The CERF grant element is divided into two windows:** Rapid Responses (approximately two thirds of the grant element) The Rapid Response window provides funds intended to mitigate the unevenness and delays of the voluntary contribution system by providing seed money for life-saving, humanitarian activities in the initial days and weeks of a sudden onset crisis or a deterioration in an ongoing situation. The maximum amount applied to a crisis in a given year typically does not exceed \$30 million, although higher allocations can be made in exceptional circumstances.
- **Underfunded Emergencies** (approximately one third of the grant element). The Underfunded Emergencies window supports countries that are significantly challenged by "forgotten" emergencies.
- **What is the Venezuela crisis?** Hyperinflation is the biggest problem faced by Venezuela. The inflation rate there is expected to reach a stunning one million per cent this year, putting it on par with the crises of Zimbabwe in the 2000s and Germany in the 1920s, according to the International Monetary Fund. The government claims that the country is the victim of an "economic war" and that the major issues are due to opposition "plots" and American sanctions.
- **What caused this increase?** The plummeting oil prices since 2014 is one of the main reasons why Venezuela's currency has weakened sharply. The country, which has rich oil reserves largely depended on it for its revenue. But when the oil price dropped drastically in 2014, Venezuela which received 96 per cent of its revenue from the oil exports, suffered a shortage of foreign currency. This made import of basic essentials like food and medicines difficult.

RBI can transfer Rs 1 lakh crore of excess reserves to govt: Report

- **The report notes that the central bank** can transfer Rs 1 trillion to the government if the transfer is limited to passing excess contingency reserve and can go up to Rs 3 trillion if the total capital is included.
- **How does a central bank like the Reserve Bank of India (RBI) make profits?** The RBI is a "full service" central bank — not only is it mandated to keep inflation or prices in check, it is also supposed to manage the borrowings of the Government of India and of state governments; supervise or regulate banks and non-banking finance companies; and manage the currency and payment systems. While carrying out these functions or operations, it makes profits.
- **Typically, the central bank's** income comes from the returns it earns on its foreign currency assets — which could be in the form of bonds and treasury bills of other central banks or top-rated securities, and deposits with other central banks.
- **It also earns interest** on its holdings of local rupee-denominated government bonds or securities, and while lending to banks for very short tenures, such as overnight. It claims a management commission on handling the borrowings of state governments and the central government.
- **Its expenditure is mainly** on the printing of currency notes and on staff, besides the commission it gives to banks for undertaking transactions on behalf of the government across the country, and to primary dealers, including banks, for underwriting some of these borrowings.
- **What is the nature of the arrangement between the government and RBI on the transfer of surplus or profits?** Although RBI was promoted as a private shareholders' bank in 1935 with a paid up capital of Rs 5 crore, the government nationalised it in January 1949, making the sovereign its "owner". What the central bank does, therefore, is transfer the "surplus" — that is, the excess of income over expenditure — to the government, in accordance with Section 47 (Allocation of Surplus Profits) of the Reserve Bank of India Act, 1934.

- **Does the RBI pay tax on these earnings or profits?** No. Its statute provides exemption from paying income-tax or any other tax, including wealth tax.
- **How does the government build this surplus into its Budget early in the year?** Well before the annual Budget is unveiled, senior RBI and government officials discuss the likely amount which could be transferred. Typically, the government pitches for a higher share of the surplus while the central bank sometimes prefers to set aside funds for contingencies. Based on these talks, and calculations such as likely income and earnings, an indicative figure is given to the government, which it puts under the head 'non-tax revenue' in the receipts budget.
- **Is there an explicit policy on the distribution of surplus?** No. But a Technical Committee of the RBI Board headed by Y H Malegam, which reviewed the adequacy of reserves and a surplus distribution policy, recommended, in 2013, a higher transfer to the government.
- **Earlier, the RBI transferred part of the surplus to the Contingency Fund, to meet unexpected and unforeseen contingencies, and to the Asset Development Fund, to meet internal capital expenditure and investments in its subsidiaries in keeping with the recommendation of a committee to build contingency reserves of 12% of its balance sheet. But after the Malegam committee made its recommendation, in 2013-14, the RBI's transfer of surplus to the government as a percentage of gross income (less expenditure) shot up to 99.99% from 53.40% in 2012-13.**

NASA's InSight spacecraft lands on red planet after six-month journey

- **It was NASA's ninth attempt** to land at Mars since the 1976 Viking probes. All but one of the previous U.S. touchdowns was successful. NASA last landed on Mars in 2012 with the Curiosity rover.
- **About InSight Mission:** InSight is part of NASA's Discovery Program, managed by the agency's Marshall Space Flight Center in Huntsville, Alabama.
- **It will be the first mission** to peer deep beneath the Martian surface, studying the planet's interior by measuring its heat output and listening for marsquakes, which are seismic events similar to earthquakes on Earth. It will use the seismic waves generated by marsquakes to develop a map of the planet's deep interior.
- **Significance of the mission:** The findings of Mars' formation will help better understand how other rocky planets, including Earth, were and are created. But InSight is more than a Mars mission – it is a terrestrial planet explorer that would address one of the most fundamental issues of planetary and solar system science – understanding the processes that shaped the rocky planets of the inner solar system (including Earth) more than four billion years ago.
- **InSight would delve deep** beneath the surface of Mars, detecting the fingerprints of the processes of terrestrial planet formation, as well as measuring the planet's "vital signs": its "pulse" (seismology), "temperature" (heat flow probe), and "reflexes" (precision tracking).
- **InSight seeks to answer** one of science's most fundamental questions: How did the terrestrial planets form?
- **Why Mars?** Previous missions to Mars have investigated the surface history of the Red Planet by examining features like canyons, volcanoes, rocks and soil. However, signatures of the planet's formation can only be found by sensing and studying its "vital signs" far below the surface.
- **In comparison to the other terrestrial planets,** Mars is neither too big nor too small. This means that it preserves the record of its formation and can give us insight into how the terrestrial planets formed. It is the perfect laboratory from which to study the formation and evolution of rocky planets. Scientists know that Mars has low levels of geological activity. But a lander like InSight can also reveal just how active Mars really is.

"Paisa – Portal for Affordable Credit & Interest Subvention Access", Launched under Day-NULM

- **It is designed and developed by Allahabad Bank (Nodal bank).**
- **Benefits of PAISA:** Another effort by the government to connect directly with the beneficiaries for ensuring greater transparency and efficiency in delivery of services. DBT of subvention on monthly basis under DAY-NULM will give the necessary financial support to small entrepreneurs in a timely manner. All 35 States/UTs & all scheduled commercial banks, RRBs and Cooperative Banks are expected to be on board the PAISA portal the year end.

'HAUSLA-2018' was inaugurated in the Capital

- **The Ministry of Women and Child Development** has launched the National Festival for Children of Child Care Institutions (CCIs) – Hausla 2018.
- **The inter-Child Care** Institution festival draws children from 18 States for the various events like painting competition, athletics meet, football, chess competition and speech writing as part of the Festival.
- **Reason behind Hausla:** To provide a national platform for the children from CCIs across India to showcase their talent. To make them realize the hidden talent they possess To help take it forward in their life. Theme of the Event – “Child Safety”

Protocol amending India-China DTAA

- **The Government of Republic of India** and the Government of the People's Republic of China have amended the Double Taxation Avoidance Agreement (DTAA) by signing a Protocol.
- **Purpose of the amendment of DTAA:** For the avoidance of double taxation. For the prevention of fiscal evasion with respect to taxes on income.
- **Additional changes by signing the Protocol:** It updates the existing provisions for exchange of information to the latest international standards. It incorporates changes required to implement treaty related minimum standards under the Action reports of Base Erosion & Profit Shifting (BEPS) Project, where India participated on an equal footing.
- **Legal Provision:** Under Section 90 of the Income-tax Act, 1961, India can enter into an agreement with a foreign country or specified territory for the avoidance of double taxation of income, for the exchange of information for the prevention of evasion.
- **Double Taxation Avoidance Agreement (DTAA):** It is referred as Tax Treaty, a bilateral economic agreement between two nations that aims to avoid or eliminate double taxation of the same income in two countries. A DTAA applies in cases where a tax-payer resides in one country and earns income in another.
- **DTAAs can either be comprehensive** to cover all sources of income or be limited to certain areas such as taxing of income from shipping, air transport, inheritance, etc. India has DTAAs with more than eighty countries.

Government of India and Asian Development Bank (ADB) sign \$200 Million Loan to improve State Highways in Bihar.

- **The Asian Development Bank (ADB)** and the Government of India signed a \$200 million loan to finance widening and upgrading of about 230 Kilometers State Highways in Bihar to all-weather standards with road safety features.
- **Advantages of improved roads under the Project:** It will contribute to savings in vehicle operating cost and travel time. It will reduce vehicle emissions, and It will improve road safety.
- **Asian Development Bank (ADB):** The Asian Development Bank was conceived in the early 1960s as a financial institution that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world. It assists its members, and partners, by providing loans, technical assistance, grants, and equity investments to promote social and economic development.
- **ADB is composed of 67 members, 48 of which are from the Asia and Pacific region.** Established on 19 December 1966 Headquartered — Manila, Philippines Official United Nations Observer
- **Voting rights** It is modelled closely on the World Bank, and has a similar weighted voting system where votes are distributed in proportion with members' capital subscriptions. United States > Japan > China > India > Australia

Char Dham pilgrimage

- **What's the issue?** The proposed four-lane expressway to Gangotri, Yamunotri, Kedarnath and Bardinath in the hill state has been among the flagship projects of the Ministry of Road Transport and Highways.
- **But the idea of the 900-kilometre** road network in the sensitive mountains of Uttarakhand drew scepticism from environmental activists who fear the highways and the tourists they would bring in will be at the cost of the ecological balance.
- **About Chardham project:** The project involves developing and widening 900-km of national highways connecting the holy Hindu pilgrimage sites of; Badrinath, Kedarnath, Gangotri, and Yamunotri at an estimated cost of Rs.12,000 crores.
- **The highway will be called Char Dham Mahamarg(Char Dham Highway)** and the highway construction project will be called as Char Dham Mahamarg Vikas Pariyojana (Char Dham Highway Development Project).
- **The roads will be widened** from 12m to 24m and the project will involve construction of tunnels, bypasses, bridges, subways and viaducts.

Central Water Commission

- **Why disband CWC?** According to the experts, the panel has too much on its plate and it needs to go for better regulatory framework. It is a body which is doing multiple jobs—collecting data, making policies, giving technical and financial approvals to various projects, monitoring and what not. It is not capable of doing all this.
- **Long- and short-term measures to save Ganga (Experts views):** For restoring the e-flows, all proposed projects in the Ganga River Basin should be cancelled. The construction of all projects in the headstreams of the river should also be cancelled.
- **Among medium-term measures,** old dams should be decommissioned. The inland waterways and riverfront development projects should be withdrawn as they are harming the Ganga.
- **An autonomous institute** for the Ganga should be established rather than a one controlled only by the government.
- **On policy front,** a national river policy and a separate national urban water policy to govern the urban use of water resources should be put in place. No use of machinery to extract sand and other boulders from the riverbed should be proposed. To improve the base flows, improve upon crop pattern and better irrigation methods.
- **Other suggestions include-** reducing groundwater extraction from the Ganga, promoting rainwater harvesting, ensuring better functioning of existing sewage treatment plants in the Ganga basin (to ensure clean river), comprehensive Ganga law on the lines of the draft given by late G D Agarwal, establishing protected zones in origin stretches of all major rivers and tributaries (for biodiversity conservation), teaching ecology in all science and engineering curricula across the country and studying of climate change impacts on the Ganga, among many others.
- **About CWC: Central Water Commission** is a premier Technical Organization of India in the field of Water Resources and is presently functioning as an attached office of the Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India.
- **Functions: The Commission** is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development. It also undertakes the investigations, construction and execution of any such schemes as required.

CRISPR Technology

- **If proven,** it would be the first instance of human offspring having been produced with specific desired attributes, using newly-developed tools of gene "editing".

- **What are Genes and what is gene-editing?** Genes contain the bio-information that defines any individual. Physical attributes like height, skin or hair colour, more subtle features and even behavioural traits can be attributed to information encoded in the genetic material.
- **An ability to alter** this information gives scientists the power to control some of these features. Gene "editing" — sometimes expressed in related, but not always equivalent, terms like genetic modification, genetic manipulation or genetic engineering — is not new.
- **What is CRISPR-Cas9?** The clustered, regularly interspaced, short palindromic repeats, or CRISPR/CRISPR-associated protein 9 (Cas9) (CRISPR-Cas9) system has revolutionised genetic manipulations and made gene editing simpler, faster and easily accessible to most laboratories.
- **CRISPR technology** is basically a gene-editing technology that can be used for the purpose of altering genetic expression or changing the genome of an organism.
- **The technology** can be used for targeting specific stretches of an entire genetic code or editing the DNA at particular locations. CRISPR technology is a simple yet powerful tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops. However, its promise also raises ethical concerns.
- **How it works?** CRISPR-Cas9 technology behaves like a cut-and-paste mechanism on DNA strands that contain genetic information.
- **The specific location** of the genetic codes that need to be changed, or "edited", is identified on the DNA strand, and then, using the Cas9 protein, which acts like a pair of scissors, that location is cut off from the strand. A DNA strand, when broken, has a natural tendency to repair itself. Scientists intervene during this auto-repair process, supplying the desired sequence of genetic codes that binds itself with the broken DNA strand.
- **Concerns:** Tampering with the genetic code in human beings is more contentious. Leading scientists in the field have for long been calling for a "global pause" on clinical applications of the technology in human beings, until internationally accepted protocols are developed.
- **Issues:** Study by Stanford University, U.S., found that the CRISPR-Cas9 system introduces unexpected off-target (outside of the intended editing sites) effects in mice. The fear that the CRISPR system is being prematurely rushed for clinical use lingers. Three recent reports have exacerbated this fear even further.
- **Studies highlighted** that CRISPR-Cas9-edited cells might trigger cancer. May increase the risk of mutations elsewhere in the genome in those cells. Although, CRISPR-Cas9 technology has been successfully used to cure several diseases however, it remains many things are not clear like how we should determine which disease or traits are appropriate for gene editing. Ethical concerns: In addition, there are concerns with manipulating human embryos for own interest.
- **Way ahead:** This CRISPR technology is indeed a path-breaking technology, to alter genes in order to tackle a number of conventional and unconventional problems, especially in the health sector. However, experiments and tests to validate its use must be subjected to appropriate scrutiny by the regulators, and their use must be controlled to prevent commercial misuse.

Measures to tackle crisis in stressed thermal power projects

- **Background:** The Committee has assessed the landscape of these stranded assets and identified the various reasons that have contributed to the current scenario. The report has also suggested measures to resolve the challenges. These power plants were first identified by the Ministry of Power as stressed assets in March 2017.
- **Multiple reasons behind the crisis:** The HLEC identified several critical reasons that have contributed to the crisis, which has been festering for more than two years now. While the Twelfth Five Year Plan had envisaged a capacity addition requirement of 88 GW, 99 GW capacity was added during the corresponding period — this led to a glut of supply, causing plants to perform below their rated capacities.
- **Apart from this**, the debt burden of the distribution utilities and the financial stress on banks/financial institutions as well as promoters and bidders.
- **It is important to note that** a significant chunk of the problem has been caused by the erratic coal supply and the uncertainty of coal supplies due to scrapping of mine auctions by the Supreme Court. Clearly, institutional challenges related to the government have contributed to the problem.
- **In the case of the Ultra Mega Power Projects (UMPP)**, for which bidding took place, several players quoted very aggressively, a decision they have since come to regret. Several other promoters did not even secure coal linkages before commencing with the project. Cost and time overruns also took place with some.
- **Few Suggested solutions:** Coal supply is an inter-ministerial issue, whereby the ministries for coal and railways have been requested to work out mechanisms to address short-term issues of supply, alongside the sale of coal at notified prices without entering bidding in case of short term power purchase agreements.
- **Further**, linking coal supply to power plant efficiency is a good way to incentivise better, newer and more efficient assets. Closing down of old, inefficient thermal power units make for good economics and good environmental sense.

- **Several measures** related to power markets to address the financial risks have been strongly recommended by the HLEC. These include getting NTPC or any other agency to act as an aggregator for power purchases, which can subsequently be sold to distribution utilities.
- **Further, suggestion** on payment security mechanism—all PPAs have a support for a letter of credit (LoC) for one month's purchase equivalent to guarantee it. It would rather be prudent to increase the value of the LoC instead of seeking a separate mechanism, and ensure that it can trigger automatically against a payment default or delay.
- **Way ahead:** In conclusion, the HLEC has shown that ways can be found to sort out the mess within the thermal power sector for coal fired power plants. However, the sole focus on coal has meant that gas-based power plants will have to wait for their turn under the sun.

Water Deficit next year in India

- **Water Security Indicator Model (WSIM):** The findings are based on ISciences Water Security Indicator Model (WSIM). The model analyses global water anomalies using observed temperature and precipitation.
- **Highlights of the report:** The forecast predicts severe to exceptional surplus water for regions including Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh and Mizoram. Moderate to severe deficits were forecast for Bihar.
- **From February through April,** deficits in India are expected to moderate overall and some regions in the country's eastern third will normalise. However, intense deficits will persist throughout Gujarat and Madhya Pradesh and along the Tungabhadra River through Karnataka.
- **The forecast for the final months** — May through July (2019) — indicates primarily moderate deficits in India and pockets throughout the region. Some surpluses are expected in Jammu and Kashmir, northern Pakistan, along the Gandaki River in central Nepal, and pockets of Tamil Nadu.
- **The 12-month forecast through July 2019** indicates exceptional (greater than 40 years) water deficits in Maharashtra, Telangana, Andhra Pradesh, Karnataka, and Madhya Pradesh.
- **Though this September's extreme heat** was unrelated to El Niño — which usually introduces warm dry conditions — El Niño is being blamed for low rainfall during the June-to-September monsoon season. The monsoon rain deficits have caused drought-like conditions in almost a third of Indian districts, and added stress for the farmers.
- **The report also notes that India's coffee** production is expected to fall to its lowest in five years due to flood damage to plantations in southern states such as Kerala and Karnataka. India exports about three quarters of the coffee it produces, and flood damage has been reported in all key producing areas of the country. The future forecast will help visualise the impact and intensity at a large scale.

Inclusive Wealth Report 2018

- **The Inclusive Wealth Report (IWR)** is a biennial effort led by the UN Environment to evaluate the capacities and performance of the nations around the world to measure sustainability of economy and wellbeing of their people.
- **What is Inclusive Wealth Index?** The inclusive wealth index is a tool assessing a nation's ability to look after its wealth in a way that is sustainable and safeguards its future generations. While GDP measures the size of a country's economy, inclusive wealth index focuses on stocks of manufactured, human and natural capital.
- **The Index provides important** insights into long-term economic growth and human well-being. The Index measures the wealth of nations through a comprehensive analysis of a country's productive base and the country's wealth in terms of progress, well-being and long-term sustainability.
- **Highlights of the report:** The Inclusive wealth (IW) in 135 countries was higher in 2014 compared to the level in 1990 and the global growth rate of IW was 44% over the indicated period, which implies an average growth rate of 1.8% per year. However, during the same period the global GDP growth per year was 3.4%, which is close to twofold of the annual growth rate of growth in IW.
- **The biennial report** finds The Republic of Korea, Singapore and Malta as the nations that have had the most economic growth. The report also revealed that carbon damage is relatively larger in high-income countries.

- **Performance of India:** India too sails in the same boat, the Ministry of Statistics and Programme Implementation had said last month in a report on environment accounts. It had revealed that India's economic growth took a toll on its natural assets like forests, food and clean air. It had added that when the average growth rate of gross state domestic product (GSDP) during 2005-15 for almost all the states was around 7-8%, 11 states registered a decline in their natural capital.
- **Way ahead:** The report comes after the recent Intergovernmental Panel on Climate Change (IPCC) report said that the world has just 12 years left to limit global warming to 1.5°C. The health of an economy is drawn from the health of the environment. Therefore, to make the right choices that will keep us on a sustainable path, we have to be able to properly measure our progress. The report will equip policy-makers with the right numbers, so that they can make the right decisions to deliver results for generations to come. These reports remind the world about how important sustainable use of natural resources is.
- **About UN Environment:** The United Nations Environment Programme (UN Environment) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment. Its mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.
- **The World Meteorological Organization** and UN Environment established the Intergovernmental Panel on Climate Change (IPCC) in 1988. UN Environment is also one of several Implementing Agencies for the Global Environment Facility (GEF) and the Multilateral Fund for the Implementation of the Montreal Protocol, and it is also a member of the United Nations Development Group.

Awareness in space. HysIS

- **About HysIS and its significance:** The primary goal of HysIS is to study the Earth's surface in visible, near-infrared and shortwave infrared regions of the electromagnetic spectrum.
- **HysIS will be ISRO's** first full-scale working satellite with this capability. While the technology has been around, not many space agencies have working satellites with hyperspectral imaging cameras as yet.
- **A hyperspectral imaging camera** in space can provide well-defined images that can help to identify objects on Earth far more clearly than regular optical or remote sensing cameras.
- **The technology** will be an added advantage of watching over India from space for a variety of purposes such as defence, agriculture, land use, minerals and so on.

Raksha Mantri Launches 'Mission Raksha Gyan Shakti'

- **Raksha Mantri Smt Nirmala Sitharaman** has formally launched 'Mission Raksha Gyan Shakti'.
- **The event showcased** salient inventions and innovations achieved by Defence Research and Development Organisation (DRDO), Defence Public Sector Undertakings (DPSUs), and Ordnance Factories (OFs) which have resulted in successful filing of Intellectual Property Rights (IPR) applications.
- **The Directorate General** of Quality Assurance (DGQA) has been entrusted with the responsibility of coordinating and implementing the programme.
- **Objective: As part of the ongoing initiatives** to enhance self-reliance in defence, the Mission Raksha Gyan Shakti aims to provide a boost to the IPR culture in indigenous defence industry.
- **Other Highlights:** IPR emerged as a key ingredient of an ecosystem which stimulates innovation and ingenuity. It was highlighted the need to migrate from the culture of seeking Transfer of Technology (ToT) from foreign sources to generating Intellectual Property in India, to achieve the goal of self-reliance in Defence sector.
- **IP Facilitation Cell:** It was established in April this year. To achieve ambitious targets of training 10,000 personnel of Ordnance Factories (OFs) and Defence Public Sector Undertakings (DPSUs) on IPR. To facilitate filing of at least 1,000 new IPR applications.
- **What are Intellectual Property Rights?** According to the World Trade Organization (WTO), IPRs are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time.

MoS (Home) Shri Kiren Rijiju inaugurates 14th Formation Day of National Disaster Management Authority (NDMA)

- **MoS (Home) Shri Kiren Rijiju** inaugurates 14th Formation Day of National Disaster Management Authority (NDMA)
- **Theme of the Year: “Early Warning for Disasters”** Early warning is a major element of disaster risk reduction and can minimize the loss of lives and economic impacts. Timely early warning is key to a structured and efficient response. Measures to be taken:
- **Early warning systems** need to involve the communities at risk. Generate public awareness. Effectively disseminate warnings, and Ensure there is a constant state of preparedness. Background:
- **On 23 December 2005**, the Government of India enacted the Disaster Management Act, which led to the creation of National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to spearhead and implement a holistic and integrated approach to Disaster Management in India. Parent department: Ministry of Home Affairs

Hog deer:

- **Context:** Indian scientists have discovered in India an endangered sub-species of hog deer (*Axis porcinus annamiticus*), earlier believed to be confined to the eastern part of central Thailand.
- **Key facts:** Researchers reported the presence of a small population of hog deer in Keibul Lamjao National Park (KLNP), Manipur. The population genetically resembles *A. p. annamiticus*. The study indicates that the western limit of hog deer is Manipur, not central Thailand as believed.
- **Significance:** Since hog deer is losing habitat in other countries, the genetically distinct and evolutionarily significant population found in KLNP— considered a biodiversity hotspot on the India-Myanmar border—is significant for conservation.
- **The hog deer or Pada** is an endangered species in the IUCN Red List and is protected under Schedule I of the Indian Wild Life (Protection) Act, 1972. The species has lost ground in most of its distribution range. A small and isolated population of under 250 was reported from Cambodia. However, it was widely distributed throughout the Southeast Asian countries at the beginning of the 20th century.
- **Two sub-species** of hog deer have been reported from its range. The western race is distributed from Pakistan and the terai grasslands (along the Himalayan foothills, from Punjab to Arunachal Pradesh), while the eastern race of hog deer is found in Thailand, Indo-China, Laos, Cambodia, and Vietnam.



M/o Tribal Affairs felicitates Ms. Mary Kom, 6th time women's world boxing champion at Aadi Mahotsav, Dilli Haat

- **A fortnight long 'Aadi Mahotsav' concludes today** Ministry of Tribal Affairs and TRIFED felicitated Ms. Mary Kom, 6th time Women's World Boxing Champion and the Brand Ambassador for the TRIBES India's Panchatantra range of products handcrafted by tribal master-craftsmen from across the country at the closing ceremony of "Aadi Mahotsav" at Dilli Haat today.
- **Aadi Mahotsav** was organized by M/o Tribal Affairs and TRIFED from 16th to 30th November, 2018.
- **The facilitation ceremony** was presided over by Shri Jual Oram, Union Minister for Tribal Affairs in the august presence of the Minister of State for Tribal Affairs, Shri Jaswantsinh Sumanbhai Babor and more than 1000 tribal artisans from more than 20 States, showcasing various art, crafts and cuisines.
- **The tribal craftsmen** and women showcased exquisite handcraft and handloom items including Baag, Maheswari, Chaderi, Banarasi, Sambalpuri Sarees and much more, to the delight of people of Delhi. This had proved a boom for tribal artisans, who have done brisk business of Rs.16 Crores during the 15 days long event, which includes orders from various Organisations including TRIFED.
- **Felicitating her**, Shri Jual Oram said that Ms. Mary Kom is the pride of India who has recently won her 6th Women's World Boxing Championship gold, breaking all previous records of Gold Medals won by any women boxer anywhere in the world. It is a matter of great pride for Ministry Tribal Affairs and TRIFED/TRIBES India to honour this sporting Icon.
- **Ms. Mary Kom** is also the Brand Ambassador for the TRIBES India's Panchatantra range of products handcrafted by tribal master-craftsmen from across the Country. "Punch" Tantra range is magnificent collection and inspired by Ms. Mary Kom and her heroics.

Heat Wave

- **Why is India vulnerable?** From 2014-2017, the average length of heatwaves in India ranged from 3-4 days compared to the global average of 0.8-1.8 days, and Indians were exposed to almost 60 million heatwave exposure events in 2016, a jump of about 40 million from 2012.
- **A recent report** has placed India amongst the countries who most experience high social and economic costs from climate change. Overall, across sectors India lost almost 75,000 million hours of labour in 2017, from about 43,000 million hours in 2000.
- **The agriculture sector** was more vulnerable compared to the industrial and service sectors because workers there were more likely to be exposed to heat.
- **The India Meteorological Department** had reported that from 1901 to 2007, there was an increase of more than 0.5°C in mean temperature, with considerable geographic variation, and climate forecasts by research groups project a 2.2-5.5°C rise in temperatures in northern, central and western India by the end of the 21st century.
- **Important recommendations (Lancet Study):** Identify "heat hot-spots" through appropriate tracking of meteorological data. Promote "timely development and implementation of local Heat Action Plans with strategic inter-agency co-ordination and a response which targets the most vulnerable groups."
- **Review existing** occupational health standards, labour laws and sectoral regulations for worker safety in relation to climatic conditions.
- **What is a Heat Wave?** Heat wave is considered if maximum temperature of a station reaches at least 40°C or more for Plains, 37°C or more for coastal stations and at least 30°C or more for Hilly regions.
- **Following criteria are used to declare heat wave:** Based on Departure from Normal: Heat Wave: Departure from normal is 4.5°C to 6.4°C. Severe Heat Wave: Departure from normal is >6.4°C.

- **Based on Actual Maximum Temperature (for plains only):** Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$ Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$ To declare heat wave, the above criteria should be met at least in 2 stations in a Meteorological sub-division for at least two consecutive days and it will be declared on the second day.
- **Concerns:** Higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to climate change. India too is feeling the impact of climate change in terms of increased instances of heat waves which are more intense in nature with each passing year, and have a devastating impact on human health.
- **Health Impacts of Heat Waves:** The health impacts of Heat Waves typically involve dehydration, heat cramps, heat exhaustion and/or heat stroke. Children, the elderly and those with pre-existing morbidities are particularly vulnerable.

Fly ash

- **Significance and concerns associated with fly ash:** The issue is significant because of the high contribution of fly ash to air and water pollution and its impact on crops being grown in villages around these plants.
- **Fly ash** is a major source of PM 2.5 (fine, respirable pollution particles) in summer. It becomes air borne, and gets transported to a radius of 10 to 20 kms. It can settle on water and other surfaces. Fly ash contains heavy metals from coal, a large amount of PM 2.5 and black carbon (BC). Proper disposal of fly ash is still not happening in many places.
- **What can be done?** Fly ash, the end product of combustion during the process of power generation in the coal based thermal power plants, is a proven resource material for many applications of construction industries and currently is being utilized in manufacturing of Portland Cement, bricks/blocks/tiles manufacturing, road embankment construction and low lying area development, etc.
- **At present**, 63% of the fly ash is being utilised and target is for 100% utilisation of the fly ash. There is need for education and awareness generation.
- **Road contractors** and construction engineers need to know the benefits of using fly ash in construction. Measures need to be taken to reduce the cost of construction of roads using fly ash by way of tax structure, subsidies and transportation services.
- **Besides**, there is a need to prevent the ash from coming to the power plant by washing the coal at its place of origin. The government should also come out with a policy to encourage fly ash use in cement plant.

Azov sea and Russia-Ukraine sea clash

- **About the conflict in the Sea of Azov:** Ukraine and Russia accuse each other of violating international maritime law. They refer to the 1982 UN Convention on the Law of the Sea, which both states joined in the 1990s.
- **Ukraine insists** on freedom of movement in the Kerch Strait and the Sea of Azov in accordance with this agreement, while the Russian side is trying to draw territorial borders. The countries also have a bilateral agreement on the free use of the Kerch Strait and the Sea of Azov, an accord that Russia has never called into question.
- **Why the Kerch Strait is important?** The Kerch Strait is the only connection between the Black Sea and the Sea of Azov, and the only way to reach two important Ukrainian ports, Mariupol and Berdiansk. Russia has controlled the strait since annexing Crimea in 2014, which has made traffic significantly more difficult for Ukrainian ships.
- **About Sea of Azov:** It is a sea in Eastern Europe. To the south it is linked by the narrow (about 4 km or 2.5 mi) Strait of Kerch to the Black Sea, and it is sometimes regarded as a northern extension of the Black Sea.
- **The sea** is bounded in the north and in the west by Ukraine, in the east by Russia. The Don and Kuban are the major rivers that flow into it. The Sea of Azov is the shallowest sea in the world, with the depth varying between 0.9 and 14 metres.

Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

- **Security challenges** and their management in border areas; linkages of organized crime with terrorism.
- **Security restrictions in border areas revised Key Highlights:** Under the new rules, restrictions have been lifted for works like construction, repair and maintenance of village ponds, construction and maintenance of government buildings like schools and hospitals. It has allowed developmental work of small nature to be carried out by the central or state governments' statutory bodies for faster development in the border areas.
- **Significance:** The need for new guidelines was felt, as the earlier restrictions were restrictive in nature towards developmental activities near border areas and were not fully facilitating in developmental works of small nature in the border areas.
- **The construction** works in the border areas were getting affected due to provisions listed in the Defence Ministry's existing guidelines. Hence, the state governments put forward requests to the centre to consider revision of the guidelines.

Conservation related issues.

- **Biggest coral reseedling project launches on Great Barrier Reef What's the plan?** The plan is to grow coral larvae from the harvested eggs and return these to areas of the reef which have been badly damaged by climate-related coral bleaching.
- **Significance:** This is the first time that the entire process of large scale larval rearing and settlement will be undertaken directly on reefs on the Great Barrier Reef.
- **Concerns:** Coral along large swathes of the 2,300-kilometre (1,400-mile) reef have been killed by rising sea temperatures linked to climate change, leaving behind skeletal remains in a process known as coral bleaching.
- **The northern** reaches of the reef suffered an unprecedented two successive years of severe bleaching in 2016 and 2017, raising fears it may have suffered irreparable damage.
- **What is Coral Bleaching?** Bleaching occurs when abnormal environmental conditions, such as warmer sea temperatures, cause corals to expel tiny photosynthetic algae, draining them of their colour. Corals can recover if the water temperature drops and the algae are able to recolonise them.
- **About the Great barrier reef:** The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres over an area of approximately 344,400 square kilometres. The reef is located in the Coral Sea, off the coast of Queensland, Australia.
- **The Great Barrier Reef** can be seen from outer space and is the world's biggest single structure made by living organisms. This reef structure is composed of and built by billions of tiny organisms, known as coral polyps. It was selected as a World Heritage Site in 1981.

Sustainable Blue Economy Conference in Nairobi , Kenya

- **The first Sustainable Blue Economy Conference** was held in Nairobi, capital of Kenya. It was organized by Kenya and co-hosted by Japan and Canada.
- **"India endorses** the growth of the Blue Economy in a sustainable, inclusive and people centered manner through the framework of the Indian Ocean Rim Association (IORA)".
- **Major Highlights: Sagarmala Programme** – It has identified 600 plus projects entailing a huge investment of \$120 billion (nearly Rs. 8 lakh crore) by 2020. It saves India \$6 billion per annum in logistics costs besides creating 10 million new jobs and boosting port capacity by 800 Million Metric Tonne per Annum (MMTPA) to an overall 3500 MMTPA.
- **Coastal Economic Zones (CEZs)** – It is developed with a proposed investment of \$150 Million per location. It will become a microcosm of the blue economy, with the growth of industries and townships that depend on the sea and contribute to global trade through sea connectivity.

- **It also focuses** on the development of coastal communities and people through skill gap analysis, skill development centers to train coastal communities in the sustainable use of ocean resources, modern fishing techniques and coastal tourism.
- **Several green** initiatives were taken in the coastal regions like 31 MW of captive solar power generation at various ports, installation of oil spill response facilities, and Study to identify ways to re-use waste water at ports.
- **Important Role of Private Sector** – The Federation of Indian Chambers of Commerce and Industry (FICCI) took lead in 2016-2017 by establishing a taskforce to develop a business model on India's engagement in the blue economy sector.
- **Background:** The Sustainable Blue Economy Conference is the first global conference on the sustainable blue economy.
- **It builds** on the momentum of the UN's 2030 Agenda for Sustainable Development, the 2015 Climate Change Conference in Paris and the UN Ocean Conference 2017 "Call to Action".
- **The world** has rallied around the enormous pressures facing our oceans and waters, from plastic pollution to the impacts of climate change. At the same time, there is international recognition that we need to develop our waters in an inclusive and sustainable manner for the benefit of all.

Emergency Response Support System (ERSS) for Himachal Pradesh.

- **The Union Home Minister** Shri Rajnath Singh launched Emergency Response Support System (ERSS) for Himachal Pradesh.
- **Himachal Pradesh** is the first state to launch pan-India single emergency number '112' under ERSS.
- **It will connect to Police, Fire, Health** and other helplines through an Emergency Response Centre in the State.
- **A "SHOUT" Feature:** To ensure safety of women, a SHOUT feature has been introduced in 112 India mobile app to seek immediate assistance from registered volunteers in the vicinity apart from the immediate assistance from Emergency Response Centre. This feature is exclusively available for women. Central Government has allocated Rs 321.69 crore under Nirbhaya Fund for implementation of ERSS project across the country.
- **What is Nirbhaya Fund?** In order to eradicate violence against women and girls, Central Government has set up Nirbhaya Fund. It is administered by the Department of Economic Affairs, Ministry of Finance. It can be utilized for projects for women safety and security.
- **Ministry of Women and Child Development** is the nodal authority for appraising/recommending the proposals/schemes to be funded under Nirbhaya fund.

Legion d'Honneur (Legion of Honour):

- **Why in News?** Global software major Wipro Chairman Azim Premji has been conferred with the highest French civilian award 'Chevalier de la Legion d'Honneur' (Knight of the Legion of Honour) in Bengaluru, in recognition of his contribution to the Indian IT industry and philanthropy.
- **What is it?** The Legion of Honour, instituted in 1802 by Napoleon Bonaparte, is the highest civilian award given by the French Republic for outstanding service to France, regardless of the nationality of the recipients. The President of France is the Grand Master of the Order of the Legion of Honour.

Atomic Energy Regulatory Board (AERB):

- **Why in News?** Union Government has appointed renowned scientist Nageshwara Rao Guntur as Chairperson of Atomic Energy Regulatory Board (AERB).

- **About AERB:** It was established in November 1983 to carry out certain regulatory and safety functions in the fields of nuclear and radiation safety on a countrywide basis.
- **It was constituted by President of India** by exercising powers conferred by Section 27 of Atomic Energy Act, 1962 to carry out certain regulatory and safety functions under the Act.
- **The regulatory authority of AERB** is derived from rules and notifications promulgated under Atomic Energy Act, 1962 and Environmental (Protection) Act, 1986.
- **Its mission** is to ensure that use of ionising radiation and nuclear energy in India does not cause undue risk to health and environment.

Country's first owl festival in Pune:

- **The Indian Owl Festival**, the country's first owl fest, is being held at Pingori village in Purandar taluka of Pune.
- **The two-day festival**, organised by Ela Foundation, an NGO working towards nature education and conservation, will give information on owl conservation. It is a first-of-its-kind festival in the country that is being organised with the intention of creating awareness about owl as a bird and debunking numerous superstitions associated with it.
- **Indian Owl is protected under the Wildlife (Protection) Act of India.** Threat: Of the 262 species of owls that are found in the world, 75 feature in the red data book — meaning they are threatened. Major causes behind this are superstitions and habitat loss — both are man-made. They are "highly prized and in demand for black magic purposes".



Index of Eight Core Industries (Base: 2011-12=100) October, 2018

- **The summary of the Index of Eight Core Industries** (base: 2011-12) is given at the Annexure.
- **The Eight Core Industries** comprise 40.27 per cent of the weight of items included in the Index of Industrial Production (IIP). The combined Index of Eight Core Industries stood at 134.8 in October, 2018, which was 4.8 per cent higher as compared to the index of October, 2017. Its cumulative growth during April to October, 2018-19 was 5.4 per cent.
- **Coal** Coal production (weight: 10.33 per cent) increased by 10.6 per cent in October, 2018 over October, 2017. Its cumulative index increased by 9.8 per cent during April to October, 2018-19 over corresponding period of the previous year.
- **Crude Oil** Crude Oil production (weight: 8.98 per cent) declined by 5.0 per cent in October, 2018 over October, 2017. Its cumulative index declined by 3.6 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Natural Gas** The Natural Gas production (weight: 6.88 per cent) declined by 0.9 per cent in October, 2018 over October, 2017. Its cumulative index declined by 0.8 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Refinery Products** Petroleum Refinery production (weight: 28.04 per cent) increased by 1.3 per cent in October, 2018 over October, 2017. Its cumulative index increased by 5.8 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Fertilizers** Fertilizers production (weight: 2.63 per cent) declined by 11.5 per cent in October, 2018 over October, 2017. Its cumulative index declined by 0.3 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Steel** Steel production (weight: 17.92 per cent) increased by 2.2 per cent in October, 2018 over October, 2017. Its cumulative index increased by 3.3 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Cement** Cement production (weight: 5.37 per cent) increased by 18.4 per cent in October, 2018 over October, 2017. Its cumulative index increased by 15.0 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Electricity** Electricity generation (weight: 19.85 per cent) increased by 11.4 per cent in October, 2018 over October, 2017. Its cumulative index increased by 6.9 per cent during April to October, 2018-19 over the corresponding period of previous year.
- **Note 1:** Data for August, 2018, September, 2018 and October, 2018 are provisional.
- **Note 2:** Since April, 2014, Electricity generation data from Renewable sources are also included.

Anthropological Survey of India

- **Anthropological Survey of India** is the only research organisation to pursue anthropological research in a Governmental setup. The Anthropological Survey of India's genesis was from the Zoological and Anthropological section of the Indian Museum, which became the Zoological Survey of India in 1916. In 1945, Anthropology section of the Zoological Survey was carved out to become the Anthropological Survey of India (An.S.I) with Dr B.S.Guha as the founding Director, in 1946.
- **The head office** was shifted from Banaras to Calcutta in 1948. Much prior to the establishment of the An.S.I, almost since the beginning of the last century, the unparalleled diversity of the people of this ancient land has come to the notice for a study of every cognoscenti interested in the Indian people, their culture, social institutions and above all their ethnic affinities.

- **Efforts** were made to understand the people in a scientific way, not only for the furtherance of scientific knowledge but also for its application towards the country's needs and for its national wellbeing. The An.S.I rose to every occasion to contribute its might, through its mandate of pursuing research in socio-cultural and biological aspects of the Peoples of India in a holistic perspective, with an emphasis on the matters of contemporary relevance and national significance.
- **Principle Objectives** To study the tribes and other communities that form the population of India both from the biological and cultural point of view To study and preserve the human skeletal remains, both from modern and Archaeological.
- **To collect samples** of arts and crafts of the tribes of India. To function as a training center for advanced students in anthropology and for administration. To publish the results of the researches.

UNESCO's List of Intangible Cultural Heritage

- **What to study?** Static Part: About UNESCO List of Intangible Cultural Heritage, Indian entries in the list, about Reggae.
- **Dynamic and Current:** Significance of the list and the need for conservation. Context: UNESCO, the United Nations Educational, Scientific and Cultural Organization, has added reggae to its list of cultural institutions worthy of protection and preservation.
- **Background:** Each year, UNESCO adds to its Representative List of the Intangible Cultural Heritage of Humanity, and Jamaica submitted reggae for consideration earlier this year. The genre now joins a list of over 300 cultural traditions, including numerous musical ones such as Dominican merengue, Slovakian bagpipe music and Vietnamese xuan singing.
- **About Reggae:** It is Jamaican music originating from marginalized groups, mainly in Western Kingston. It was started out as voice of marginalized. But now it is played and embraced by wide cross-section of society, including various genders, ethnic and religious groups.
- **About UNESCO's List of Intangible Cultural Heritage:** This coveted list is made up of those intangible heritage elements that help demonstrate diversity of cultural heritage and raise awareness about its importance.
- **The list** was established in 2008 when Convention for Safeguarding of the Intangible Cultural Heritage came into effect. It has two parts viz. Representative List of Intangible Cultural Heritage of Humanity and List of Intangible Cultural Heritage in Need of urgent safeguarding.
- **From India** the Intangible Cultural Heritages added into this list include: Tradition of Vedic chanting Ramlila, the traditional performance of the Ramayana Kutiyattam, Sanskrit theatre Ramman, religious festival and ritual theatre of the Garhwal Himalayas.
- **Mudiyettu**, ritual theatre and dance drama of Kerala Kalbelia folk songs and dances of Rajasthan Chhau dance Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir.
- **Sankirtana**, ritual singing, drumming and dancing of Manipur Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab Yoga Nawrouz Kumbh Mela

UN predicts El Niño likely to form by February

- **Background:** An El Niño – a warming of ocean surface temperatures in the eastern and central Pacific that typically happens every few years – last occurred in 2015-2016 and caused weather-related crop damage, fires and flash floods.
- **What is ENSO?** ENSO is nothing but El Nino Southern Oscillation. As the name suggests, it is an irregular periodic variation of wind and sea surface temperature that occurs over the tropical eastern Pacific Ocean. ENSO affects the tropics and the subtropics. The warming phase of ENSO is called El Nino, while the cooling phase is known as La Nina.
- **What is El Nino?** El Nino is a climatic cycle characterised by high air pressure in the Western Pacific and low air pressure in the eastern. In normal conditions, strong trade winds travel from east to west across the tropical Pacific, pushing the warm surface waters towards the western Pacific. The surface temperature could witness an increase of 8 degrees Celsius in Asian waters. At the same time, cooler waters rise up towards the surface in the eastern Pacific on the coasts of Ecuador, Peru, and Chile. This process called upwelling aids in the development of a rich ecosystem.

- **What causes El Nino?** El Nino sets in when there is anomaly in the pattern. The westward-blowing trade winds weaken along the Equator and due to changes in air pressure, the surface water moves eastwards to the coast of northern South America. The central and eastern Pacific regions warm up for over six months and result in an El Nino condition. The temperature of the water could rise up to 10 degrees Fahrenheit above normal. Warmer surface waters increase precipitation and bring above-normal rainfall in South America, and droughts to Indonesia and Australia.
- **What are El Nino's effects?** El Nino affects global weather. It favours eastern Pacific hurricanes and tropical storms. Record and unusual rainfall in Peru, Chile and Ecuador are linked to the climate pattern.
- **El Nino** reduces upwelling of cold water, decreasing the uplift of nutrients from the bottom of the ocean. This affects marine life and sea birds. The fishing industry is also affected.
- **Drought caused by El Nino** can be widespread, affecting southern Africa, India, Southeast Asia, Australia, and the Pacific Islands. Countries dependent on agriculture are affected. Australia and Southeast Asia get hotter.
- **A recent WHO** report on the health consequences of El Nino forecasts a rise in vector-borne diseases, including those spread by mosquitoes, in Central and South America. Cycles of malaria in India are also linked to El Nino. The rise in sea surface temperature may be intensified by global warming. From the current study, we learn that El Nino can exacerbate global warming and hence the process could become a vicious circle.
- **What is La Nina?** La Nina is a climate pattern that describes the cooling of surface ocean waters along the tropical west coast of South America. It is considered to have the opposite effect of El Nino. It brings greater than normal rainfall in Southeast Asia and Australia, and causes drier-than-normal conditions in South America and the Gulf Coast of the United States. La Nina events sometimes follow El Nino events.
- **How long does it last?** An El Nino or La Nina episode lasts nine to 12 months. Some may prolong for years. Its average frequency is every 2 to 7 years. El Nino is more frequent than La Nina.

Private member's Bill

- **Who is a Private Member?** Any MP who is not a Minister is referred to as a private member.
- **What are Government Bills?** Bills introduced by Ministers are referred to as government bills. They are backed by the government, and reflect its legislative agenda. Private member's bills purpose is to draw the government's attention to what individual MPs see as issues and gaps in the existing legal framework, which require legislative intervention.
- **Introduction in the House:** The admissibility of a private member's Bill is decided by the Rajya Sabha Chairman. In the case of Lok Sabha, it is the Speaker; the procedure is roughly the same for both Houses.
- **The Member** must give at least a month's notice before the Bill can be listed for introduction; the House secretariat examines it for compliance with constitutional provisions and rules on legislation before listing.
- **Up to 1997**, private members could introduce up to three Bills in a week. This led to a piling up of Bills that were introduced but never discussed; Chairman K R Narayanan, therefore, capped the number of private member's Bills to three per session.
- **While government Bills** can be introduced and discussed on any day, private member's Bills can be introduced and discussed only on Fridays. Fourteen private member's Bills — five of which were introduced in Rajya Sabha — have become law so far.

Gender wage gap highest in India

- **Highlights of the report:** The gender wage gap has remained unchanged at 20% from 2016 to 2017. In advanced economies (G20), real wage growth declined from 0.9 per cent in 2016 to 0.4 per cent in 2017, meaning near stagnation. By contrast, in emerging economies and developing G20 countries, real wage growth dipped marginally from 4.9 per cent in 2016 and 4.3 per cent in 2017.
- **Inequality** is higher in monthly wages, with a gap of 22 per cent. Overall, real wages grew just 1.8 per cent globally (136 countries) in 2017. In most countries, women and men differ significantly in respect of working time – specifically, that part-time work is more prevalent among women than among men.
- **Way Forward:** The report advocated that emphasis needs to be placed on ensuring equal pay for women and men.

G20 Summit 2018 begins in Argentina

- **G20 Summit 2018:** It will be the 13th meeting of Group of Twenty (G20) and the first G20 summit to be hosted in South America.
- **About G20:** Formed in 1999, the G20 is an international forum of the governments and central bank governors from 20 major economies.
- **Collectively,** the G20 economies account for around 85 percent of the Gross World Product (GWP), 80 percent of world trade. To tackle the problems or the address issues that plague the world, the heads of governments of the G20 nations periodically participate in summits. In addition to it, the group also hosts separate meetings of the finance ministers and foreign ministers.
- **The G20** has no permanent staff of its own and its chairmanship rotates annually between nations divided into regional groupings. The first G20 Summit was held in Berlin in December 1999 and was hosted by the finance ministers of Germany and Canada.
- **Objectives:** The Group was formed with an aim of studying, reviewing, and promoting high-level discussion of policy issues pertaining to the promotion of international financial stability. The forum aims to pre-empt balance of payments problems and turmoil on financial markets by improved coordination of monetary, fiscal, and financial policies.
- **The forum** seeks to address issues that go beyond the responsibilities of any one organisation. Member Countries: The members of the G20 consist of 19 individual countries plus the European Union (EU).
- **The 19 member** countries of the forum are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom and the United States. The European Union is represented by the European Commission and by the European Central Bank.
- **Shaktikanta Das**, the former Secretary of the Department of Economic Affairs (DEA), has been appointed as India's G20 Sherpa till December 31, 2018 for the Development Track of the G20 summit. A Sherpa is a personal representative of the leader of a member country at an international Summit meeting such as the G8, G20 or the Nuclear Security Summit and are responsible for thrashing out the details before the meeting of the leaders.

Climate Vulnerable Forum

- **Leaders at the Climate** Vulnerable Forum have called on world's governments to raise the ambition of their climate targets by 2020 in order to save vulnerable nations threatened by warming beyond 1.5 degrees Celsius.
- **What is Climate Vulnerable Forum?** The Climate Vulnerable Forum is an international cooperation group of developing countries tackling global climate change.
- **The CVF** was founded by the Maldives government before the 2009 United Nations Climate Change Conference in Copenhagen, which sought to increase awareness of countries considered vulnerable.
- **United Nations** agencies collaborate in implementing activities linked to the CVF with the UNDP, the lead organization supporting the forum's work.
- **The CVF** was formed to increase the accountability of industrialized nations for the consequences of global climate change. Afghanistan, Nepal and Bhutan are its members, whereas India is one of the observer states.

PSLV-C43 successfully launches earth observation satellites HysIS and 30 foreign satellites.

- **The Indian Space Research Organization's (ISRO)** Polar Satellite Launch Vehicle (PSLV-C43) successfully launched 31 satellites from Satish Dhawan Space Centre (SDSC) in Sriharikota.
- **Hysis:** It is an earth observation satellite built around ISRO's Mini Satellite 2 (IMS-2) bus weighing about 380 kg. The life of the satellite is five years. Satellites from Australia, Columbia, Malaysia, and Spain were flown aboard PSLV for the first time. These foreign satellites launched are part of commercial arrangements between Antrix Corporation Limited and customers.
- **Primary Goal:** It is to study the earth's surface in both the visible, near infrared and shortwave infrared regions of the electromagnetic spectrum. Data from the satellite will be used for various applications including agriculture, forestry, soil/geological environments, coastal zones and inland waters, etc.
- **PSLV:** Polar Satellite Launch Vehicle (PSLV) is the third generation launch vehicle of India. It is the first Indian launch vehicle to be equipped with liquid stages. It is a four stage launch vehicle.
- **A large solid rocket motor** forming the first stage, An earth storable liquid stage as the second stage, A high performance solid rocket motor as third stage, and A liquid stage with engines as fourth stage.
- **The vehicle** successfully launched two spacecraft – Chandrayaan-1 in 2008 and Mars Orbiter Spacecraft in 2013

“8 States achieve 100% household electrification under Saubhagya; total 15 States now have 100% household electrification”.

- **8 States have achieved 100% saturation** in household electrification under Saubhagya namely Madhya Pradesh, Tripura, Bihar, J&K, Mizoram, Sikkim, Telangana and West Bengal.
- **Saubhagya** – ‘Pradhan Mantri Sahaj Bijli Har Ghar Yojana’:
- **Its objective** is to provide access to electricity connections to all the remaining households in the country. Scheme will provide subsidy on equipment such as transformers, wires and meters. Ministry of Power would be the implementing authority.
- **Power connection** will be provided in both rural and urban areas of the country. The scheme was launched on the occasion of the birth centenary of Pandit Deen Dayal Upadhyaya on 25th
- **Award Scheme under Saubhagya:** An award scheme has been instituted with awards of more than Rs. 300 crore to be won by States/Discoms. The first DISCOM/Power Departments who complete 100% household electrifications will be felicitated with cash award of Rs. 50 Lakh for the employees and 100 crore grants for distribution infrastructure. The Government is committed to ensure 24×7 access to electricity for all by 31st March 2019.
- **Benefits to the Citizen:** Electrification has direct positive impact on the quality of all aspects of daily life, especially to the women and children. With deeper penetration, significant improvement is expected in other services like education, health, communication, etc. It gives opportunities for economic activities leading to employment generation, increase in income and poverty alleviation.

‘Heli-Clinics’ for remote areas.

- **Union Minister** has mooted “Heli-Clinics”/Helicopter Clinics for remote areas, which could help to provide specialized medical care to people living in inaccessible hilly terrains of the States like Jammu & Kashmir and Northeast.
- **Central Government's Previous Measures:** In the last four years, which include opening of Dialysis Centres in every district hospital, setting up of Wellness Centres and, launch of “Ayushman Bharat”.
- **The Minister** emphasized the need to incentivize medical practitioners to go to remote rural areas and to provide adequately satisfactory facilities for the government doctors to be able to serve in the rural areas.
- **What is Ayushman Bharat?** Ayushman Bharat is National Health Protection Scheme, which will cover over 10 crore poor and vulnerable families (50 crore beneficiaries) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.

- **Ayushman Bharat** – National Health Protection Mission will subsume the on-going centrally sponsored schemes – Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS).
- **Salient Features:** Benefits of the scheme are portable across the country and a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empaneled hospitals across the country.
- **Ayushman Bharat** will be an entitlement based scheme with entitlement decided on the basis of deprivation criteria in the SECC database. One of the core principles of Ayushman Bharat is to co-operative federalism and flexibility to states.
- **For giving policy** directions and fostering coordination between Centre and States, it is proposed to set up Ayushman Bharat National Health Protection Mission Council (AB-NHPMC) at apex level Chaired by Union Health and Family Welfare Minister.
- **States would need** to have State Health Agency (SHA) to implement the scheme. In partnership with NITI Aayog, a robust, modular, scalable and interoperable IT platform will be made operational which will entail a paperless, cashless transaction.

Konkan 18:

- **Bilateral KONKAN exercise** was started in 2004 and since then has grown in scale. The exercise is aimed at deriving mutual benefit from each other's' experiences and is indicative of continuing cooperation between two countries.

'COPE INDIA 2019':

- **What is it?** It is a bilateral exercise between Indian Air Force (IAF) and US Air Force (USAF) conducted on and over Indian soil. The 2019 edition will be held in West Bengal.
- **The first such exercise** was conducted at IAF air force station in Gwalior from February 2004.